

MULTI: Toolchain Error Messages and Other Diagnostics



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Chapter 1

C and C++ Compiler Diagnostics

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Compiler Diagnostic Message Codes	2
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This chapter lists diagnostic messages that you may encounter when compiling C or C++ code, listed by diagnostic number. For information about how to suppress these messages, see “Set Message to Silent (`--diag_suppress`)” in Chapter 3, “Builder and Driver Options” in the *MULTI: Building Applications* book.

Compiler Diagnostic Message Codes

The following list contains all the C and C++ compiler diagnostic messages:

Diagnostics 1 to 99

1	last_line_incomplete last line of file ends without a newline
2	last_line_backslash last line of file ends with a backslash
3	include_recursion #include file "xxxx" includes itself For more information, see “C++ Implementation Defined Features” in “Green Hills C++” in the <i>MULTI: Building Applications</i> book.
4	out_of_memory out of memory
6	comment_unclosed_at_eof comment unclosed at end of file
7	bad_token unrecognized token
8	unclosed_string missing closing quote

9	<p>nested_comment</p> <p>nested comment is not allowed</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p> <p>You cannot nest comments inside one another. For example, the following line will cause the compiler to issue a warning:</p> <pre>/* this is /*a comment*/ not a comment */</pre> <p>Because the first instance of */ closes the comment, the compiler parses not a comment as C code.</p>
10	<p>bad_use_of_sharp</p> <p>"#" not expected here</p>
11	<p>bad_pp_directive_keyword</p> <p>unrecognized preprocessing directive</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p> <p>The compiler issues this warning when it does not recognize a preprocessing directive. For example:</p> <pre>#foo</pre>
12	<p>end_of_flush</p> <p>parsing restarts here after previous syntax error</p>
13	<p>exp_file_name</p> <p>expected a file name</p>
14	<p>extra_text_in_pp_directive</p> <p>extra text after expected end of preprocessing directive</p>
17	<p>exp_rbracket</p> <p>expected a "]"</p>
18	<p>exp_rparen</p> <p>expected a ")"</p>
19	<p>extra_chars_on_number</p> <p>extra text after expected end of number</p>
20	<p>undefined_identifier</p> <p>identifier "xxxx" is undefined</p>

21	useless_type_qualifiers type qualifiers are meaningless in this declaration
22	bad_hex_digit invalid hexadecimal number
23	integer_too_large integer constant is too large
24	bad_octal_digit invalid octal digit
25	zero_length_string quoted string should contain at least one character
26	too_many_characters too many characters in character constant
27	bad_character_value character value is out of range
28	expr_not_constant expression must have a constant value
29	exp_primary_expr expected an expression
30	bad_float_value floating constant is out of range
31	expr_not_integral expression must have integral type
32	expr_not_arithmetic expression must have arithmetic type
33	exp_line_number expected a line number
34	bad_line_number invalid line number
35	error_directive #error directive: xxxx

36	missing_pp_if the #if for this directive is missing GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
37	missing_endif the #endif for this directive is missing GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
38	pp_else_already_appeared directive is not allowed -- an #else has already appeared
39	divide_by_zero division by zero
40	exp_identifier expected an identifier
41	expr_not_scalar expression must have arithmetic or pointer type
42	incompatible_operands operand types are incompatible ("type" and "type")
44	expr_not_pointer expression must have pointer type
45	cannot_undef_predef_macro #undef may not be used on this predefined name "entity"
46	cannot_redef_predef_macro "entity" is predefined; attempted redefinition ignored
47	bad_macro_redef incompatible redefinition of macro "entity" (declared at line xxxx)
49	duplicate_macro_param_name duplicate macro parameter name
50	paste_cannot_be_first "##" may not be first in a macro definition

51	paste_cannot_be_last "###" may not be last in a macro definition
52	exp_macro_param expected a macro parameter name
53	exp_colon expected a ":"
54	too_few_macro_args too few arguments in invocation of entity-kind "entity" GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
55	too_many_macro_args too many arguments in invocation of entity-kind "entity"
56	sizeof_function operand of sizeof may not be a function
57	bad_constant_operator this operator is not allowed in a constant expression
58	bad_pp_operator this operator is not allowed in a preprocessing expression
59	bad_constant_function_call function call is not allowed in a constant expression
60	bad_integral_operator this operator is not allowed in an integral constant expression
61	integer_overflow integer operation result is out of range
62	negative_shift_count shift count is negative
63	shift_count_too_large shift count is too large GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
64	useless_decl declaration does not declare anything

65	exp_semicolon expected a ";"
66	enum_value_out_of_int_range enumeration value is out of "int" range GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
67	exp_rbrace expected a "}"
68	integer_sign_change integer conversion resulted in a change of sign
69	integer_truncated integer conversion resulted in truncation GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
70	incomplete_type_not_allowed incomplete type is not allowed
71	sizeof_bit_field operand of sizeof may not be a bit field
75	bad_indirection_operand operand of "*" must be a pointer
76	empty_macro_argument argument to macro is empty
77	missing_decl_specifiers this declaration has no storage class or type specifier GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
78	initializer_in_param a parameter declaration may not have an initializer
79	exp_type_specifier expected a type specifier
80	storage_class_not_allowed a storage class may not be specified here

81	mult_storage_classes more than one storage class may not be specified
82	storage_class_not_first storage class is not first
83	dupl_type_qualifier type qualifier specified more than once
84	bad_combination_of_type_specifiers invalid combination of type specifiers
85	bad_param_storage_class invalid storage class for a parameter
86	bad_function_storage_class invalid storage class for a function
87	type_specifier_not_allowed a type specifier may not be used here
88	array_of_function array of functions is not allowed
89	array_of_void array of void is not allowed
90	function_returning_function function returning function is not allowed
91	function_returning_array function returning array is not allowed
92	param_id_list_needs_function_def identifier-list parameters may only be used in a function definition
93	function_type_must_come_from_declarator function type may not come from a typedef
94	array_size_must_be_positive the size of an array must be greater than zero
95	array_size_too_large array is too large

96	empty_translation_unit a translation unit must contain at least one declaration
97	bad_function_return_type a function may not return a value of this type
98	bad_array_element_type an array may not have elements of this type
99	decl_should_be_of_param a declaration here must declare a parameter

Diagnostics 100 to 199

100	dupl_param_name duplicate parameter name
101	id_already_declared "xxxx" has already been declared in the current scope
102	nonstd_forward_decl_enum forward declaration of enum type is nonstandard
103	class_too_large class is too large
104	struct_too_large struct or union is too large
105	bad_bit_field_size invalid size for bit field
106	bad_bit_field_type invalid type for a bit field
107	zero_length_bit_field_must_be_unnamed zero-length bit field must be unnamed
108	signed_one_bit_field signed bit field of length 1 GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.

109	expr_not_ptr_to_function expression preceding parentheses of apparent call must have (pointer-to-) function type
110	exp_definition_of_tag expected either a definition or a tag name
111	code_is_unreachable statement is unreachable This diagnostic may be silenced on a case-by-case basis by placing a special <code>/*NOTREACHED*/</code> comment before the code that is unreachable. Example: <pre>if (1) { return 0; } /*NOTREACHED*/ impossible_condition();</pre> When using this feature, note the following: <ul style="list-style-type: none"> • Comments with <code>NOTREACHED</code> must use the style in the example above (<code>/* ... */</code>). Other commenting styles (such as <code>//</code>) will not work. • <code>NOTREACHED</code> may be optionally prefixed by a single whitespace. If any words follow <code>NOTREACHED</code>, they must be prefixed by at least one whitespace.
112	exp_while expected "while"
114	never_defined entity-kind "entity" was referenced but not defined
115	continue_must_be_in_loop a continue statement may only be used within a loop
116	break_must_be_in_loop_or_switch a break statement may only be used within a loop or switch
117	no_value_returned_in_non_void_function non-void entity-kind "entity" should return a value GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
118	value_returned_in_void_function a void function may not return a value

119	cast_to_bad_type cast to type "type" is not allowed
120	bad_return_value_type return value type does not match the function type
121	case_label_must_be_in_switch a case label may only be used within a switch
122	default_label_must_be_in_switch a default label may only be used within a switch
124	default_label_appears_more_than_once default label has already appeared in this switch at line xxxx
125	exp_lparen expected a "("
126	expr_not_an_lvalue expression must be an lvalue
127	exp_statement expected a statement
128	loop_not_reachable loop is not reachable
129	block_scope_function_must_be_extern a block-scope function may only have extern storage class
130	exp_lbrace expected a "{"
131	expr_not_ptr_to_class expression must have pointer-to-class type
132	expr_not_ptr_to_struct_or_union expression must have pointer-to-struct-or-union type
133	exp_member_name expected a member name
134	exp_field_name expected a field name

135	not_a_member entity-kind "entity" has no member "xxxx"
136	not_a_field entity-kind "entity" has no field "xxxx"
137	expr_not_a_modifiable_lvalue expression must be a modifiable lvalue
138	address_of_register_variable taking the address of a register variable is not allowed
139	address_of_bit_field taking the address of a bit field is not allowed
140	too_many_arguments too many arguments in function call
141	all_proto_params_must_be_named unnamed prototyped parameters not allowed when body is present
142	expr_not_pointer_to_object expression must have pointer-to-object type
143	program_too_large program too large or complicated to compile
144	bad_initializer_type a value of type "type" cannot be used to initialize an entity of type "type"
145	cannot_initialize entity-kind "entity" may not be initialized
146	too_many_initializer_values too many initializer values
147	not_compatible_with_previous_decl declaration is incompatible with entity-kind "entity" (declared at line xxxx)
148	already_initialized entity-kind "entity" has already been initialized
149	bad_file_scope_storage_class a global-scope declaration may not have this storage class

150	type_cannot_be_param_name a type name may not be redeclared as a parameter
151	typedef_cannot_be_param_name a typedef name may not be redeclared as a parameter
152	non_zero_int_conv_to_pointer conversion of nonzero integer to pointer
153	expr_not_class expression must have class type
154	expr_not_struct_or_union expression must have struct or union type
155	old_fashioned_assignment_operator old-fashioned assignment operator
156	old_fashioned_initializer old-fashioned initializer
157	expr_not_integral_constant expression must be an integral constant expression
158	expr_not_an_lvalue_or_function_designator expression must be an lvalue or a function designator
159	decl_incompatible_with_previous_use declaration is incompatible with previous "entity" (declared at line xxxx)
160	external_name_clash external name conflicts with external name of entity-kind "entity" (declared at line xxxx)
161	unrecognized_pragma unrecognized #pragma
163	cannot_open_temp_file_reason could not open temporary file "xxxx": xxxx
164	temp_file_dir_name_too_long name of directory for temporary files is too long ("xxxx")
165	too_few_arguments too few arguments in function call

166	bad_float_constant invalid floating constant
167	incompatible_param argument of type "type" is incompatible with parameter of type "type"
168	function_type_not_allowed a function type is not allowed here
169	exp_declaration expected a declaration
170	pointer_outside_base_object pointer points outside of underlying object
171	bad_cast invalid type conversion
172	linkage_conflict external/internal linkage conflict with previous declaration GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
173	float_to_integer_conversion floating-point value does not fit in required integral type
174	expr_has_no_effect expression has no effect GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
175	subscript_out_of_range subscript out of range
177	declared_but_not_referenced entity-kind "entity" was declared but never referenced
178	pcc_address_of_array "&" applied to an array has no effect
179	mod_by_zero right operand of "%" is zero

180	old_style_incompatible_param argument is incompatible with formal parameter
181	printf_arg_mismatch argument is incompatible with corresponding format string conversion (expected "type", given "type") GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
182	empty_include_search_path could not open source file "xxxx" (no directories in search list)
183	cast_not_integral type of cast must be integral
184	cast_not_scalar type of cast must be arithmetic or pointer
185	initialization_not_reachable dynamic initialization in unreachable code
186	unsigned_compare_with_zero pointless comparison of unsigned integer with zero
187	assign_where_compare_meant use of "=" where "==" may have been intended GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
188	mixed_enum_type enumerated type mixed with another type
189	file_write_error error while writing xxxx file
190	bad_il_file invalid intermediate language file
191	cast_to_qualified_type type qualifier is meaningless on cast type
192	unrecognized_char_escape unrecognized character escape sequence GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.

193	undefined_preproc_id zero used for undefined preprocessing identifier "xxxx"
194	exp_asm_string expected an asm string
195	asm_func_must_be_prototyped an asm function must be prototyped
196	bad_asm_func_ellipsis an asm function may not have an ellipsis

Diagnostics 200 to 299

219	file_delete_error_reason error while deleting file "xxxx": xxxx
220	integer_to_float_conversion integral value does not fit in required floating-point type
221	float_to_float_conversion floating-point value does not fit in required floating-point type
222	bad_float_operation_result floating-point operation result is out of range
223	implicit_func_decl function xxxx declared implicitly GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
224	too_few_printf_args the format string requires additional arguments GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
225	too_many_printf_args the format string ends before this argument GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.

226	bad_printf_format_string invalid format string conversion GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
227	macro_recursion macro recursion
228	nonstd_extra_comma trailing comma is nonstandard
229	enum_bit_field_too_small bit field cannot contain all values of the enumerated type
230	nonstd_bit_field_type nonstandard type for a bit field
231	decl_in_prototype_scope declaration is not visible outside of function
232	decl_of_void_ignored old-fashioned typedef of "void" ignored
233	old_fashioned_field_selection left operand is not a struct or union containing this field
234	old_fashioned_ptr_field_selection pointer does not point to struct or union containing this field
235	var_retained_incomp_type variable "xxxx" was declared with a never-completed type
236	boolean_controlling_expr_is_constant controlling expression is constant
237	switch_selector_expr_is_constant selector expression is constant GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
238	bad_param_specifier invalid specifier on a parameter
239	bad_specifier_outside_class_decl invalid specifier outside a class declaration

240	dupl_decl_specifier duplicate specifier in declaration
241	base_class_not_allowed_for_union a union is not allowed to have a base class
242	access_already_specified multiple access control specifiers are not allowed
243	missing_class_definition class or struct definition is missing
244	name_not_member_of_class_or_base_classes qualified name is not a member of class "type" or its base classes
245	member_ref_requires_object a nonstatic member reference must be relative to a specific object
246	nonstatic_member_def_not_allowed a nonstatic data member may not be defined outside its class
247	already_defined entity-kind "entity" has already been defined
248	pointer_to_reference pointer to reference is not allowed
249	reference_to_reference reference to reference is not allowed
250	reference_to_void reference to void is not allowed
251	array_of_reference array of reference is not allowed
252	missing_initializer_on_reference reference entity-kind "entity" requires an initializer
253	exp_comma expected a ",", "
254	type_identifier_not_allowed type name is not allowed

255	type_definition_not_allowed type definition is not allowed
256	bad_type_name_redeclaration invalid redeclaration of type name "entity" (declared at line xxxx)
257	missing_initializer_on_const const entity-kind "entity" requires an initializer
258	this_used_incorrectly "this" may only be used inside a nonstatic member function
259	constant_value_not_known constant value is not known
260	missing_type_specifier explicit type is missing ("int" assumed) GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
261	missing_access_specifier access control not specified ("xxxx" by default)
262	not_a_class_or_struct_name not a class or struct name
263	dupl_base_class_name duplicate base class name
264	bad_base_class invalid base class
265	no_access_to_name entity-kind "entity" is inaccessible
266	ambiguous_name "entity" is ambiguous
267	old_style_parameter_list old-style parameter list (anachronism)
268	declaration_after_statements declaration may not appear after executable statement in block

269	inaccessible_base_class conversion to inaccessible base class "type" is not allowed
274	improperly_terminated_macro_call improperly terminated macro invocation
276	id_must_be_class_or_namespace_name name followed by "::" must be a class or namespace name
277	bad_friend_decl invalid friend declaration
278	value_returned_in_constructor a constructor or destructor may not return a value
279	bad_destructor_decl invalid destructor declaration
280	class_and_member_name_conflict declaration of a member with the same name as its class
281	global_qualifier_not_allowed global-scope qualifier (leading "::") is not allowed
282	name_not_found_in_file_scope the global scope has no "xxxx"
283	qualified_name_not_allowed qualified name is not allowed
284	null_reference NULL reference is not allowed
285	brace_initialization_not_allowed initialization with "{...}" is not allowed for object of type "type"
286	ambiguous_base_class base class "type" is ambiguous
287	ambiguous_derived_class derived class "type" contains more than one instance of class "type"

288	derived_class_from_virtual_base cannot convert pointer to base class "type" to pointer to derived class "type" -- base class is virtual
289	no_matching_constructor no instance of constructor "entity" matches the argument list
290	ambiguous_copy_constructor copy constructor for class "type" is ambiguous
291	no_default_constructor no default constructor exists for class "type"
292	not_a_field_or_base_class "xxxx" is not a nonstatic data member or base class of class "type"
293	indirect_nonvirtual_base_class_not_allowed indirect nonvirtual base class is not allowed
294	bad_union_field invalid union member -- class "type" has a disallowed member function
296	bad_rvalue_array invalid use of non-lvalue array
297	exp_operator expected an operator
298	inherited_member_not_allowed inherited member is not allowed
299	indeterminate_overloaded_function cannot determine which instance of entity-kind "entity" is intended

Diagnostics 300 to 399

300	bound_function_must_be_called a pointer to a bound function may only be used to call the function
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301	duplicate_typedef typedef name has already been declared (with same type)
302	function_redefinition entity-kind "entity" has already been defined
304	no_matching_function no instance of entity-kind "entity" matches the argument list
305	type_def_not_allowed_in_func_type_decl type definition is not allowed in function return type declaration
306	default_arg_not_at_end default argument not at end of parameter list
307	default_arg_already_defined redefinition of default argument
308	ambiguous_overloaded_function more than one instance of entity-kind "entity" matches the argument list:
309	ambiguous_constructor more than one instance of constructor "entity" matches the argument list:
310	bad_default_arg_type default argument of type "type" is incompatible with parameter of type "type"
311	return_type_cannot_distinguish_functions cannot overload functions distinguished by return type alone
312	no_user_defined_conversion no suitable user-defined conversion from "type" to "type" exists
314	virtual_static_not_allowed only nonstatic member functions may be virtual
315	unqual_function_with_qual_object the object has type qualifiers that are not compatible with the member function
316	too_many_virtual_functions program too large to compile (too many virtual functions)

317	bad_return_type_on_virtual_function_override return type is not identical to nor covariant with return type "type" of overridden virtual function "entity"
318	ambiguous_virtual_function_override override of virtual entity-kind "entity" is ambiguous
319	pure_specifier_on_nonvirtual_function pure specifier ("= 0") allowed only on virtual functions
320	bad_pure_specifier badly-formed pure specifier (only "= 0" is allowed)
321	bad_data_member_initialization data member initializer is not allowed
322	abstract_class_object_not_allowed object of abstract class type "type" is not allowed:
323	function_returning_abstract_class function returning abstract class "type" is not allowed:
324	duplicate_friend_decl duplicate friend declaration
325	inline_and_nonfunction inline specifier allowed on function declarations only
326	inline_not_allowed "inline" is not allowed
327	bad_storage_class_with_inline invalid storage class for an inline function
328	bad_member_storage_class invalid storage class for a class member
329	local_class_function_def_missing local class member entity-kind "entity" requires a definition
330	inaccessible_special_function entity-kind "entity" (declared at line xxxx) is inaccessible
332	missing_const_copy_constructor class "type" has no copy constructor to copy a const object

333	definition_of_implicitly_declared_function defining an implicitly declared member function is not allowed
334	no_suitable_copy_constructor class "type" has no suitable copy constructor
335	linkage_specifier_not_allowed linkage specification is not allowed
336	bad_linkage_specifier unknown external linkage specification
337	incompatible_linkage_specifier linkage specification is incompatible with previous "entity" (declared at line xxxx)
338	overloaded_function_linkage more than one instance of overloaded function "entity" has "C" linkage
339	ambiguous_default_constructor class "type" has more than one default constructor
340	temp_used_for_ref_init value copied to temporary, reference to temporary used
341	nonmember_operator_not_allowed "operatorxxxx" must be a member function
342	static_member_operator_not_allowed operator may not be a static member function
343	too_many_args_for_conversion no arguments allowed on user-defined conversion
344	too_many_args_for_operator too many parameters for this operator function
345	too_few_args_for_operator too few parameters for this operator function
346	no_params_with_class_type nonmember operator requires a parameter with class type
347	default_arg_expr_not_allowed default argument is not allowed

348	ambiguous_user_defined_conversion more than one user-defined conversion from "type" to "type" applies:
349	no_matching_operator_function no operator "xxxx" matches these operands
350	ambiguous_operator_function more than one operator "xxxx" matches these operands:
351	bad_arg_type_for_operator_new first parameter of allocation function must be of type "size_t"
352	bad_return_type_for_op_new allocation function requires "void *" return type
353	bad_return_type_for_op_delete deallocation function requires "void" return type
354	bad_first_arg_type_for_operator_delete first parameter of deallocation function must be of type "void *"
356	type_must_be_object_type type must be an object type
357	base_class_already_initialized base class "type" has already been initialized
358	base_class_init_anachronism base class name required -- "type" assumed (anachronism)
359	member_already_initialized entity-kind "entity" has already been initialized
360	missing_base_class_or_member_name name of member or base class is missing
361	assignment_to_this assignment to "this" (anachronism)
362	overload_anachronism "overload" keyword used (anachronism)
363	anon_union_member_access invalid anonymous union -- nonpublic member is not allowed

364	anon_union_member_function invalid anonymous union -- member function is not allowed
365	anon_union_storage_class anonymous union at global or namespace scope must be declared static
366	missing_initializer_on_fields entity-kind "entity" provides no initializer for:
367	cannot_initialize_fields implicitly generated constructor for class "type" cannot initialize:
368	no_ctor_but_const_or_ref_member entity-kind "entity" defines no constructor to initialize the following:
369	var_with_uninitialized_member entity-kind "entity" has an uninitialized const or reference member
370	var_with_uninitialized_field entity-kind "entity" has an uninitialized const field
371	missing_const_assignment_operator class "type" has no assignment operator to copy a const object
372	no_suitable_assignment_operator class "type" has no suitable assignment operator
373	ambiguous_assignment_operator ambiguous assignment operator for class "type"
375	missing_typedef_name declaration requires a typedef name
377	virtual_not_allowed "virtual" is not allowed
378	static_not_allowed "static" is not allowed
379	bound_function_cast_anachronism cast of bound function to normal function pointer (anachronism)

380	expr_not_ptr_to_member expression must have pointer-to-member type
381	extra_semicolon extra ";" ignored
382	nonstd_const_member in-class initializer for nonstatic member is nonstandard
384	no_matching_new_function no instance of overloaded "entity" matches the argument list
386	no_match_for_addr_of_overloaded_function no instance of entity-kind "entity" matches the required type
387	delete_count_anachronism delete array size expression used (anachronism)
389	cast_to_abstract_class a cast to abstract class "type" is not allowed:
390	bad_use_of_main function "main" may not be called or have its address taken
391	initializer_not_allowed_on_array_new a new-initializer may not be specified for an array
392	member_function_redecl_outside_class member function "entity" may not be redeclared outside its class
393	ptr_to_incomplete_class_type_not_allowed pointer to incomplete class type is not allowed
394	ref_to_nested_function_var reference to local variable of enclosing function is not allowed
395	single_arg_postfix_incr_decr_anachronism single-argument function used for postfix "xxxx" (anachronism)
397	bad_default_assignment implicitly generated assignment operator cannot copy:
398	nonstd_array_cast cast to array type is nonstandard (treated as cast to "type")

399	class_with_op_new_but_no_op_delete entity-kind "entity" has an operator new() but no default operator delete()
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Diagnostics 400 to 499

400	class_with_op_delete_but_no_op_new entity-kind "entity" has a default operator delete() but no operator new()
401	base_class_with_nonvirtual_dtor destructor for base class "entity" (declared at line xxxx) is not virtual
403	member_function_redeclaration entity-kind "entity" has already been declared
404	inline_main function "main" may not be declared inline
405	class_and_member_function_name_conflict member function with the same name as its class must be a constructor
406	nested_class_anachronism using nested entity-kind "entity" (anachronism)
407	too_many_params_for_destructor a destructor may not have parameters
408	bad_constructor_param copy constructor for class "type" may not have a parameter of type "type"
409	incomplete_function_return_type entity-kind "entity" returns incomplete type "type"
410	protected_access_problem protected entity-kind "entity" (declared at line xxxx) is not accessible through a "type" pointer or object
411	param_not_allowed a parameter is not allowed

412	asm_decl_not_allowed an "asm" declaration is not allowed here
413	no_conversion_function no suitable conversion function from "type" to "type" exists
414	delete_of_incomplete_class delete of pointer to incomplete class
415	no_constructor_for_conversion no suitable constructor exists to convert from "type" to "type"
416	ambiguous_constructor_for_conversion more than one constructor applies to convert from "type" to "type":
417	ambiguous_conversion_function more than one conversion function from "type" to "type" applies:
418	ambiguous_conversion_to_builtin more than one conversion function from "type" to a built-in type applies:
424	addr_of_constructor_or_destructor a constructor or destructor may not have its address taken
426	nonconst_ref_init_anachronism temporary used for initial value of reference to non-const (anachronism)
427	qualifier_in_member_declaration qualified name is not allowed in member declaration
428	mixed_enum_type_anachronism enumerated type mixed with another type (anachronism)
429	new_array_size_must_be_nonnegative the size of an array in "new" must be non-negative
430	return_ref_init_requires_temp returning reference to local temporary
432	enum_not_allowed "enum" declaration is not allowed

433	qualifier_dropped_in_ref_init qualifiers dropped in binding reference of type "type" to initializer of type "type"
434	bad_nonconst_ref_init a reference of type "type" (not const-qualified) cannot be initialized with a value of type "type"
435	delete_of_function_pointer a pointer to function may not be deleted
436	bad_conversion_function_decl conversion function must be a nonstatic member function
437	bad_template_declaration_scope a template declaration is not allowed here
438	exp_lt expected a "<"
439	exp_gt expected a ">"
440	missing_template_param template parameter declaration is missing
441	missing_template_arg_list argument list for entity-kind "entity" is missing
442	too_few_template_args too few arguments for entity-kind "entity"
443	too_many_template_args too many arguments for entity-kind "entity"
445	not_used_in_template_function_params entity-kind "entity" is not used in declaring the parameter types of entity-kind "entity"
446	cfront_multiple_nested_types two nested types have the same name: "entity" and "entity" (declared at line xxxx) (cfront compatibility)
447	cfront_global_defined_after_nested_type global "entity" was declared after nested "entity" (declared at line xxxx) (cfront compatibility)

449	ambiguous_ptr_to_overloaded_function more than one instance of entity-kind "entity" matches the required type
450	nonstd_long_long the type "long long" is nonstandard
451	nonstd_friend_decl omission of "xxxx" is nonstandard
452	return_type_on_conversion_function return type may not be specified on a conversion function
456	runaway_recursive_instantiation excessive recursion at instantiation of entity-kind "entity" For more information, see “C++ Implementation Defined Features” in “Green Hills C++” in the <i>MULTI: Building Applications</i> book.
457	bad_template_declaration "xxxx" is not a function or static data member
458	bad_nontype_template_arg argument of type "type" is incompatible with template parameter of type "type"
459	init_needing_temp_not_allowed initialization requiring a temporary or conversion is not allowed
460	decl_hides_function_parameter declaration of "xxxx" hides function parameter GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the <i>MULTI: Building Applications</i> book.
461	nonconst_ref_init_from_rvalue initial value of reference to non-const must be an lvalue
463	template_not_allowed "template" is not allowed
464	not_a_class_template "type" is not a class template
466	function_template_named_main "main" is not a valid name for a function template

467	union_nonunion_mismatch invalid reference to entity-kind "entity" (union/nonunion mismatch)
468	local_type_in_template_arg a template argument may not reference a local type
469	tag_kind_incompatible_with_declaration tag kind of xxxx is incompatible with declaration of entity-kind "entity" (declared at line xxxx)
470	name_not_tag_in_file_scope the global scope has no tag named "xxxx"
471	not_a_tag_member entity-kind "entity" has no tag member named "xxxx"
472	ptr_to_member_typedef member function typedef (allowed for cfront compatibility)
473	bad_use_of_member_function_typedef entity-kind "entity" may be used only in pointer-to-member declaration
475	nonexternal_entity_in_template_arg a template argument may not reference a non-external entity
476	id_must_be_class_or_type_name name followed by "::~" must be a class name or a type name
478	destructor_type_mismatch type used as destructor name does not match type "type"
479	called_function_redeclared_inline entity-kind "entity" redeclared "inline" after being called
481	bad_storage_class_on_template_decl invalid storage class for a template declaration
482	no_access_to_type_cfront_mode entity-kind "entity" (declared at line xxxx) is an inaccessible type (allowed for cfront compatibility)
484	invalid_instantiation_argument invalid explicit instantiation declaration

485	not_instantiatable_entity entity-kind "entity" is not an entity that can be instantiated
486	compiler_generated_function_cannot_be_instantiated compiler generated entity-kind "entity" cannot be explicitly instantiated
487	inline_function_cannot_be_instantiated inline entity-kind "entity" cannot be explicitly instantiated
489	instantiation_requested_no_definition_supplied entity-kind "entity" cannot be instantiated -- no template definition was supplied
490	instantiation_requested_and_specialized entity-kind "entity" cannot be instantiated -- it has been explicitly specialized
493	no_match_for_type_of_overloaded_function no instance of entity-kind "entity" matches the specified type
494	nonstd_void_param_list declaring a void parameter list with a typedef is nonstandard
495	cfront_name_lookup_bug global entity-kind "entity" used instead of entity-kind "entity" (cfront compatibility)
496	redeclaration_of_template_param_name template parameter "xxxx" may not be redeclared in this scope
497	decl_hides_template_parameter declaration of "xxxx" hides template parameter
498	must_be_prototype_instantiation template argument list must match the parameter list

Diagnostics 500 to 599

500	bad_extra_arg_for_postfix_operator extra parameter of postfix "operator++" must be of type "int"
501	function_type_required an operator name must be declared as a function

502	operator_name_not_allowed operator name is not allowed
503	bad_scope_for_specialization entity-kind "entity" cannot be specialized in the current scope
504	nonstd_member_function_address nonstandard form for taking the address of a member function
505	too_few_template_params too few template parameters -- does not match previous declaration (declared at line xxxx)
506	too_many_template_params too many template parameters -- does not match previous declaration (declared at line xxxx)
507	template_operator_delete function template for operator delete(void *) is not allowed
508	class_template_same_name_as_tmpl_param class template and template parameter may not have the same name
510	unnamed_type_in_template_arg a template argument may not reference an unnamed type
511	enum_type_not_allowed this operation on an enumerated type requires an applicable user-defined operator function
512	qualified_reference_type type qualifier on a reference type is not allowed
513	incompatible_assignment_operands a value of type "type" cannot be assigned to an entity of type "type"
514	unsigned_compare_with_negative pointless comparison of unsigned integer with a negative constant
515	converting_to_incomplete_class cannot convert to incomplete class "type"
516	missing_initializer_on_unnamed_const const object requires an initializer

517	unnamed_object_with_uninitialized_field object has an uninitialized const or reference member
518	nonstd_pp_directive nonstandard preprocessing directive
519	unexpected_template_arg_list entity-kind "entity" may not have a template argument list
520	missing_initializer_list initialization with "{...}" expected for aggregate object
521	incompatible_ptr_to_member_selection_operands pointer-to-member selection class types are incompatible ("type" and "type")
522	self_friendship pointless friend declaration
523	period_used_as_qualifier "." used in place of "::" to form a qualified name
524	const_function_anachronism non-const function called for const object (anachronism)
525	dependent_stmt_is_declaration a dependent statement may not be a declaration
526	void_param_not_allowed a parameter may not have void type
529	bad_tmpl_arg_expr_operator this operator is not allowed in a template argument expression
530	missing_handler try block requires at least one handler
531	missing_exception_declaration handler requires an exception declaration
532	masked_by_default_handler handler is masked by default handler
533	masked_by_handler handler is potentially masked by previous handler for type "type"

534	local_type_used_in_exception use of a local type to specify an exception
535	redundant_exception_specification_type redundant type in exception specification
536	incompatible_exception_specification exception specification is incompatible with that of previous entity-kind "entity" (declared at line xxxx)
540	no_exception_support support for exception handling is disabled
541	omitted_exception_specification allowing all exceptions is incompatible with previous entity-kind "entity" (declared at line xxxx)
542	cannot_create_instantiation_request_file could not create instantiation request file "xxxx"
543	non_arith_operation_in_tmpl_arg non-arithmetic operation not allowed in nontype template argument
544	local_type_in_nonlocal_var use of a local type to declare a nonlocal variable
545	local_type_in_function use of a local type to declare a function
546	branch_past_initialization transfer of control bypasses initialization of:
548	branch_into_handler transfer of control into an exception handler
549	used_before_set entity-kind "entity" is used before its value is set GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
550	set_but_not_used entity-kind "entity" was set but never used
551	bad_scope_for_definition entity-kind "entity" cannot be defined in the current scope

552	exception_specification_not_allowed exception specification is not allowed
553	template_and_instance_linkage_conflict external/internal linkage conflict for entity-kind "entity" (declared at line xxxx)
554	conversion_function_not_usable entity-kind "entity" will not be called for implicit or explicit conversions
555	tag_kind_incompatible_with_template_parameter tag kind of xxxx is incompatible with template parameter of type "type"
556	template_operator_new function template for operator new(size_t) is not allowed
558	bad_member_type_in_ptr_to_member pointer to member of type "type" is not allowed
559	ellipsis_on_operator_function ellipsis is not allowed in operator function parameter list
560	unimplemented_keyword "entity" is reserved for future use as a keyword
561	cl_invalid_macro_definition invalid macro definition: xxxx
562	cl_invalid_macro_undefinition invalid macro undefinition: xxxx
565	cl_il_file_must_be_specified IL file name must be specified if input is
570	cl_error_in_debug_option_argument error in debug option argument
571	cl_invalid_option invalid option: xxxx
572	cl_back_end_requires_il_file back end requires name of IL file

573	cl_could_not_open_il_file could not open IL file xxxx
574	cl_invalid_number invalid number: xxxx
575	cl_incorrect_host_id incorrect host CPU id
576	cl_invalid_instantiation_mode invalid instantiation mode: xxxx
578	cl_invalid_error_limit invalid error limit: xxxx
585	cl_vtbl_option_only_in_cplusplus virtual function tables can only be suppressed when compiling C++
586	cl_anachronism_option_only_in_cplusplus anachronism option can be used only when compiling C++
587	cl_instantiation_option_only_in_cplusplus instantiation mode option can be used only when compiling C++
588	cl_auto_instantiation_option_only_in_cplusplus automatic instantiation mode can be used only when compiling C++
589	cl_implicit_inclusion_option_only_in_cplusplus implicit template inclusion mode can be used only when compiling C++
590	cl_exceptions_option_only_in_cplusplus exception handling option can be used only when compiling C++
591	cl_strict_mode_incompatible_with_pcc strict mode is incompatible with K&R mode
592	cl_strict_mode_incompatible_with_cfront strict mode is incompatible with cfront mode
593	cl_missing_source_file_name missing source file name

594	cl_output_file_incompatible_with_multiple_inputs output files may not be specified when compiling several input files
595	cl_too_many_arguments too many arguments on command line
596	cl_no_output_file_needed an output file was specified, but none is needed
597	cl_il_display_requires_il_file_name IL display requires name of IL file
598	void_template_parameter a template parameter may not have void type
599	too_many_unused_instantiations excessive recursive instantiation of entity-kind "entity" due to instantiate-all mode

Diagnostics 600 to 699

600	cl_strict_mode_incompatible_with_anachronisms strict mode is incompatible with allowing anachronisms
601	void_throw a throw expression may not have void type
602	cl_tim_local_conflicts_with_auto_instantiation local instantiation mode is incompatible with automatic instantiation
603	abstract_class_param_type parameter of abstract class type "type" is not allowed:
604	array_of_abstract_class array of abstract class "type" is not allowed:
605	float_template_parameter floating-point template parameter is nonstandard
606	pragma_must_precede_declaration this pragma must immediately precede a declaration

607	pragma_must_precede_statement this pragma must immediately precede a statement
608	pragma_must_precede_decl_or_stmt this pragma must immediately precede a declaration or statement
609	pragma_may_not_be_used_here this kind of pragma may not be used here
611	partial_override overloaded virtual function "entity" is only partially overridden in entity-kind "entity"
612	specialization_of_called_inline_template_function specific definition of inline template function must precede its first use
613	cl_invalid_error_tag invalid error tag in diagnostic control option: xxxx
614	cl_invalid_error_number invalid error number in diagnostic control option: xxxx
617	ptr_to_member_cast_to_ptr_to_function pointer-to-member-function cast to pointer to function
618	no_named_fields struct or union declares no named members
619	nonstd_unnamed_field nonstandard unnamed field GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
620	nonstd_unnamed_member nonstandard unnamed member GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
624	not_a_type_name "xxxx" is not a type name
631	unable_to_get_mapped_memory unable to obtain mapped memory

641	cannot_chdir "xxxx" is not a valid directory
642	cannot_build_temp_file_name cannot build temporary file name
643	restrict_not_allowed "restrict" is not allowed
644	restrict_pointer_to_function a pointer or reference to function type may not be qualified by "restrict"
646	calling_convention_not_allowed a calling convention modifier may not be specified here
647	conflicting_calling_conventions conflicting calling convention modifiers
648	cl_strict_mode_incompatible_with_microsoft strict mode is incompatible with Microsoft mode
649	cl_cfront_incompatible_with_microsoft cfront mode is incompatible with Microsoft mode
650	calling_convention_ignored calling convention specified here is ignored
651	calling_convention_may_not_precede_nested_declarator a calling convention may not be followed by a nested declarator
652	calling_convention_ignored_for_type calling convention is ignored for this type
654	decl_modifiers_incompatible_with_previous_decl declaration modifiers are incompatible with previous declaration
655	decl_modifiers_invalid_for_this_decl the modifier "xxxx" is not allowed on this declaration
656	branch_into_try_block transfer of control into a try block
657	incompatible_inline_specifier_on_specific_decl inline specification is incompatible with previous "entity" (declared at line xxxx)

658	template_missing_closing_brace closing brace of template definition not found
659	cl_wchar_t_option_only_in_cplusplus wchar_t keyword option can be used only when compiling C++
660	bad_pack_alignment invalid packing alignment value
661	exp_int_constant expected an integer constant
662	call_of_pure_virtual call of pure virtual function
663	bad_ident_string invalid source file identifier string
664	template_friend_definition_not_allowed a class template cannot be defined in a friend declaration
665	asm_not_allowed "asm" is not allowed
666	bad_asm_function_def "asm" must be used with a function definition
667	nonstd_asm_function "asm" function is nonstandard
668	nonstd_ellipsis_only_param ellipsis with no explicit parameters is nonstandard
669	nonstd_address_of_ellipsis "&..." is nonstandard
670	bad_address_of_ellipsis invalid use of "&..."
672	const_volatile_ref_init_anachronism temporary used for initial value of reference to const volatile (anachronism)
673	bad_const_volatile_ref_init a reference of type "type" cannot be initialized with a value of type "type"

674	const_volatile_ref_init_from_rvalue initial value of reference to const volatile must be an lvalue
675	cl_SVR4_C_option_only_in_ansi_C SVR4 C compatibility option can be used only when compiling ANSI C
676	using_out_of_scope_declaration using out-of-scope declaration of entity-kind "entity" (declared at line xxxx)
677	cl_strict_mode_incompatible_with_SVR4 strict mode is incompatible with SVR4 C mode
678	cannot_inline_call call of entity-kind "entity" (declared at line xxxx) cannot be inlined
679	cannot_inline entity-kind "entity" cannot be inlined
681	exp_except_or_finally expected __except or __finally
682	leave_must_be_in_try a __leave statement may only be used within a __try
688	not_found_on_pack_alignment_stack "xxxx" not found on pack alignment stack
689	empty_pack_alignment_stack empty pack alignment stack
690	cl_rtti_option_only_in_cplusplus RTTI option can be used only when compiling C++
691	inaccessible_elided_ctor entity-kind "entity" (declared at line xxxx), required for copy that was eliminated, is inaccessible
692	uncallable_elided_ctor entity-kind "entity" (declared at line xxxx), required for copy that was eliminated, is not callable because reference parameter cannot be bound to rvalue

693	typeid_needs_typeinfo <typeinfo> must be included before typeid is used
694	cannot_cast_away_const xxxx cannot cast away const or other type qualifiers
695	bad_dynamic_cast_type the type in a dynamic_cast must be a pointer or reference to a complete class type, or void *
696	bad_ptr_dynamic_cast_operand the operand of a pointer dynamic_cast must be a pointer to a complete class type
697	bad_ref_dynamic_cast_operand the operand of a reference dynamic_cast must be an lvalue of a complete class type
698	dynamic_cast_operand_must_be_polymorphic the operand of a runtime dynamic_cast must have a polymorphic class type
699	cl_bool_option_only_in_cplusplus bool option can be used only when compiling C++

Diagnostics 700 to 799

701	array_type_not_allowed an array type is not allowed here
702	exp_assign expected an "="
704	redeclaration_of_condition_decl_name "xxxx", declared in condition, may not be redeclared in this scope
705	default_template_arg_not_allowed default template arguments are not allowed for function templates
706	exp_comma_or_gt expected a ",", " or ">"

707	missing_template_param_list expected a template parameter list
708	incr_of_bool_deprecated incrementing a bool value is deprecated
709	bool_type_not_allowed bool type is not allowed
710	base_class_offset_too_large offset of base class "entity" within class "entity" is too large
711	expr_not_bool expression must have bool type (or be convertible to bool)
712	cl_array_new_and_delete_option_only_in_cplusplus array new and delete option can be used only when compiling C++
713	based_requires_variable_name entity-kind "entity" is not a variable name
714	based_not_allowed_here __based modifier is not allowed here
715	based_not_followed_by_star __based does not precede a pointer operator, __based ignored
716	based_var_must_be_ptr variable in __based modifier must have pointer type
717	bad_const_cast_type the type in a const_cast must be a pointer, reference, or pointer to member to an object type
718	bad_const_cast a const_cast can only adjust type qualifiers; it cannot change the underlying type
719	mutable_not_allowed mutable is not allowed
720	cannot_change_access redeclaration of entity-kind "entity" is not allowed to alter its access

721	nonstd_printf_format_string nonstandard format string conversion
722	probable_inadvertent_lbracket_digraph use of alternative token "<:" appears to be unintended
723	probable_inadvertent_sharp_digraph use of alternative token "%:" appears to be unintended
724	namespace_def_not_allowed namespace definition is not allowed
725	missing_namespace_name name must be a namespace name
726	namespace_alias_def_not_allowed namespace alias definition is not allowed
727	namespace_qualified_name_required namespace-qualified name is required
728	namespace_name_not_allowed a namespace name is not allowed
729	bad_combination_of_dll_attributes invalid combination of DLL attributes
730	sym_not_a_class_template entity-kind "entity" is not a class template
731	array_of_incomplete_type array with incomplete element type is nonstandard
732	allocation_operator_in_namespace allocation operator may not be declared in a namespace
733	deallocation_operator_in_namespace deallocation operator may not be declared in a namespace
734	conflicts_with_using_decl entity-kind "entity" conflicts with using-declaration of entity-kind "entity"
735	using_decl_conflicts_with_prev_decl using-declaration of entity-kind "entity" conflicts with entity-kind "entity" (declared at line xxxx)

736	cl_namespaces_option_only_in_cplusplus namespaces option can be used only when compiling C++
737	useless_using_declaration using-declaration ignored -- it refers to the current namespace
738	class_qualified_name_required a class-qualified name is required
742	not_an_actual_member entity-kind "entity" has no actual member "xxxx"
744	mem_attrib_incompatible incompatible memory attributes specified
745	mem_attrib_ignored memory attribute ignored
746	mem_attrib_may_not_precede_nested_declarator memory attribute may not be followed by a nested declarator
747	dupl_mem_attrib memory attribute specified more than once
748	dupl_calling_convention calling convention specified more than once
749	type_qualifier_not_allowed a type qualifier is not allowed
750	template_instance_already_used entity-kind "entity" (declared at line xxxx) was used before its template was declared
751	static_nonstatic_with_same_param_types static and nonstatic member functions with same parameter types cannot be overloaded
752	no_prior_declaration no prior declaration of entity-kind "entity"
753	template_id_not_allowed a template-id is not allowed
754	class_qualified_name_not_allowed a class-qualified name is not allowed

755	bad_scope_for_redeclaration entity-kind "entity" may not be redeclared in the current scope
756	qualifier_in_namespace_member_decl qualified name is not allowed in namespace member declaration
757	sym_not_a_type_name entity-kind "entity" is not a type name
758	explicit_instantiation_not_in_namespace_scope explicit instantiation is not allowed in the current scope
759	bad_scope_for_explicit_instantiation entity-kind "entity" cannot be explicitly instantiated in the current scope
760	multiple_explicit_instantiations entity-kind "entity" explicitly instantiated more than once
761	typename_not_in_template typename may only be used within a template
762	cl_special_subscript_cost_option_only_in_cplusplus special_subscript_cost option can be used only when compiling C++
763	cl_typename_option_only_in_cplusplus typename option can be used only when compiling C++
764	cl_implicit_typename_option_only_in_cplusplus implicit typename option can be used only when compiling C++
765	nonstd_character_at_start_of_macro_def nonstandard character at start of object-like macro definition
766	exception_spec_override_incompat exception specification for virtual entity-kind "entity" is incompatible with that of overridden entity-kind "entity"
767	pointer_conversion_loses_bits conversion from pointer to smaller integer
768	generated_exception_spec_override_incompat exception specification for implicitly declared virtual entity-kind "entity" is incompatible with that of overridden entity-kind "entity"

769	<p>implicit_call_of_ambiguous_name</p> <p>"entity", implicitly called from entity-kind "entity", is ambiguous</p>
770	<p>cl_explicit_option_only_in_cplusplus</p> <p>option "explicit" can be used only when compiling C++</p>
771	<p>explicit_not_allowed</p> <p>"explicit" is not allowed</p>
772	<p>conflicts_with_predeclared_type_info</p> <p>declaration conflicts with "xxxx" (reserved class name)</p> <p>The compiler emits this non-discretionary diagnostic whenever it encounters a definition of class <code>std::type_info</code> outside the standard header <code><typeinfo></code>. Instances of this class are created and exposed to the programmer via the C++ language operator <code>typeid</code>; therefore, a program that defines its own, incompatible version of class <code>std::type_info</code> may exhibit undefined behavior.</p> <p>To define your own version of class <code>std::type_info</code>, but suppress this diagnostic, precede the class definition with <code>#pragma define_type_info</code>.</p> <p>A correct definition of this class must preserve the member and vtable layout assumed by the compiler's <code>typeid</code> machinery. The following example is an acceptable definition:</p> <pre>namespace std { #pragma define_type_info class type_info { virtual ~type_info(); }; }</pre> <p>We recommend that you do not attempt to provide your own definition of this class. However, you might see this error if you are using standard C++ libraries other than the ones provided with your Green Hills compiler distribution.</p>
773	<p>array_member_initialization</p> <p>only "()" is allowed as initializer for array entity-kind "entity"</p>
774	<p>virtual_function_template</p> <p>"virtual" is not allowed in a function template declaration</p>
775	<p>anon_union_class_member_template</p> <p>invalid anonymous union -- class member template is not allowed</p>

776	template_depth_mismatch template nesting depth does not match the previous declaration of entity-kind "entity"
777	multiple_template_decls_not_allowed this declaration cannot have multiple "template <...>" clauses
778	cl_old_for_init_option_only_in_cplusplus option to control the for-init scope can be used only when compiling C++
779	redeclaration_of_for_init_decl_name "xxxx", declared in for-loop initialization, may not be redeclared in this scope
780	hidden_by_old_for_init reference is to entity-kind "entity" (declared at line xxxx) -- under old for-init scoping rules it would have been entity-kind "entity" (declared at line xxxx)
781	cl_for_init_diff_warning_option_only_in_cplusplus option to control warnings on for-init differences can be used only when compiling C++
782	unnamed_class_virtual_function_def_missing definition of virtual entity-kind "entity" is required here
783	svr4_token_pasting_comment empty comment interpreted as token-pasting operator "##"
784	storage_class_in_friend_decl a storage class is not allowed in a friend declaration
785	templ_param_list_not_allowed template parameter list for "entity" is not allowed in this declaration
786	bad_member_template_sym entity-kind "entity" is not a valid class member template
787	bad_member_template_decl not a valid member class or function template declaration
788	specialization_follows_param_list a template declaration containing a template parameter list may not be followed by an explicit specialization declaration

789	specialization_of_referenced_template explicit specialization of entity-kind "entity" must precede the first use of entity-kind "entity"
790	explicit_specialization_not_in_namespace_scope explicit specialization is not allowed in the current scope
791	partial_specialization_not_allowed partial specialization of entity-kind "entity" is not allowed
792	entity_cannot_be_specialized entity-kind "entity" is not an entity that can be explicitly specialized
793	specialization_of_referenced_entity_pos explicit specialization of entity-kind "entity" must precede its first use (at line xxxx)
794	template_param_in_elab_type template parameter "xxxx" may not be used in an elaborated type specifier
795	old_specialization_not_allowed specializing entity-kind "entity" requires "template<>" syntax
798	cl_old_specializations_option_only_in_cplusplus option "old_specializations" can be used only when compiling C++
799	nonstd_old_specialization specializing entity-kind "entity" without "template<>" syntax is nonstandard

Diagnostics 800 to 899

800	bad_linkage_for_decl this declaration may not have extern "C" linkage
801	not_a_template_name "xxxx" is not a class or function template name in the current scope
802	nonstd_default_arg_on_function_template_redecl specifying a default argument when redeclaring an unreferenced function template is nonstandard

803	default_arg_on_function_template_not_allowed specifying a default argument when redeclaring an already referenced function template is not allowed
804	pm_derived_class_from_virtual_base cannot convert pointer to member of base class "type" to pointer to member of derived class "type" -- base class is virtual
805	bad_exception_specification_for_specialization exception specification is incompatible with that of entity-kind "entity" (declared at line xxxx):
806	omitted_exception_specification_on_specialization allowing all exceptions is incompatible with entity-kind "entity" (declared at line xxxx)
807	unexpected_end_of_default_arg unexpected end of default argument expression
808	default_init_of_reference default-initialization of reference is not allowed
809	uninitialized_field_with_const_member uninitialized entity-kind "entity" has a const member
810	uninitialized_base_class_with_const_member uninitialized base class "type" has a const member
811	missing_default_constructor_on_const const entity-kind "entity" requires an initializer -- class "type" has no user-provided default constructor
812	missing_default_constructor_on_unnamed_const const object requires an initializer -- class "type" has no user-provided default constructor
813	cl_impl_extern_c_conv_option_only_in_cplusplus option "implicit_extern_c_type_conversion" can be used only when compiling C++
814	cl_strict_mode_incompatible_with_long_preserving strict mode is incompatible with long preserving rules
815	useless_type_qualifier_on_return_type type qualifier on return type is meaningless

816	type_qualifier_on_void_return_type in a function definition a type qualifier on a "void" return type is not allowed
817	static_data_member_not_allowed static data member declaration is not allowed in this class
818	invalid_declaration template instantiation resulted in an invalid function declaration
819	ellipsis_not_allowed "..." is not allowed
820	cl_extern_inline_option_only_in_cplusplus option "extern_inline" can be used only when compiling C++
821	extern_inline_never_defined extern inline entity-kind "entity" was referenced but not defined
822	invalid_destructor_name invalid destructor name for type "type"
824	ambiguous_destructor destructor reference is ambiguous -- both entity-kind "entity" and entity-kind "entity" could be used
825	virtual_inline_never_defined virtual inline entity-kind "entity" was never defined
826	unreferenced_function_param entity-kind "entity" was never referenced
827	union_already_initialized only one member of a union may be specified in a constructor initializer list
828	no_array_new_and_delete_support support for "new[]" and "delete[]" is disabled
829	double_for_long_double "double" used for "long double" in generated C code

830	no_corresponding_delete entity-kind "entity" has no corresponding operator delete (to be called if an exception is thrown during initialization of an allocated object)
831	useless_placement_delete support for placement delete is disabled
832	no_appropriate_delete no appropriate operator delete is visible
833	ptr_or_ref_to_incomplete_type pointer or reference to incomplete type is not allowed
834	bad_partial_specialization invalid partial specialization -- entity-kind "entity" is already fully specialized
835	incompatible_exception_specs incompatible exception specifications
836	returning_ref_to_local_variable returning reference to local variable
837	nonstd_implicit_int omission of explicit type is nonstandard ("int" assumed) GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
838	ambiguous_partial_spec more than one partial specialization matches the template argument list of entity-kind "entity"
840	partial_spec_is_primary_template a template argument list is not allowed in a declaration of a primary template
841	default_not_allowed_on_partial_spec partial specializations may not have default template arguments
842	not_used_in_partial_spec_arg_list entity-kind "entity" is not used in or cannot be deduced from the template argument list of entity-kind "entity"

844	partial_spec_arg_depends_on_tmpl_param the template argument list of the partial specialization includes a nontype argument whose type depends on a template parameter
845	partial_spec_after_instantiation this partial specialization would have been used to instantiate entity-kind "entity"
846	partial_spec_after_instantiation_ambiguous this partial specialization would have made the instantiation of entity-kind "entity" ambiguous
847	expr_not_integral_or_enum expression must have integral or enum type
848	expr_not_arithmetic_or_enum expression must have arithmetic or enum type
849	expr_not_arithmetic_or_enum_or_pointer expression must have arithmetic, enum, or pointer type
850	cast_not_integral_or_enum type of cast must be integral or enum
851	cast_not_arithmetic_or_enum_or_pointer type of cast must be arithmetic, enum, or pointer
852	expr_not_object_pointer expression must be a pointer to a complete object type
854	partial_spec_nontype_expr a partial specialization nontype argument must be the name of a nontype parameter or a constant
855	different_return_type_on_virtual_function_override return type is not identical to return type "type" of overridden virtual function "entity"
856	cl_guiding_decls_option_only_in_cplusplus option "guiding_decls" can be used only when compiling C++
857	member_partial_spec_not_in_namespace a partial specialization of a class template must be declared in the namespace of which it is a member

858	pure_virtual_function entity-kind "entity" is a pure virtual function
859	no_overrider_for_pure_virtual_function pure virtual entity-kind "entity" has no overrider
860	decl_modifiers_ignored __declspec attributes ignored
861	invalid_char invalid character in input line
862	incomplete_return_type function returns incomplete type "type"
863	local_pragma_pack effect of this "#pragma pack" directive is local to entity-kind "entity"
864	not_a_template xxxx is not a template
865	friend_partial_specialization a friend declaration may not declare a partial specialization
866	exception_specification_ignored exception specification ignored
867	unexpected_type_for_size_t declaration of "size_t" does not match the expected type "type"
868	exp_gt_not_shift_right space required between adjacent ">" delimiters of nested template argument lists (">>" is the right shift operator)
869	bad_multibyte_char_locale could not set locale "xxxx" to allow processing of multibyte characters
870	bad_multibyte_char invalid multibyte character sequence
871	bad_type_from_instantiation template instantiation resulted in unexpected function type of "type" (the meaning of a name may have changed since the template declaration -- the type of the template is "type")

872	ambiguous_guiding_decl ambiguous guiding declaration -- more than one function template "entity" matches type "type"
873	non_integral_operation_in_tmpl_arg non-integral operation not allowed in nontype template argument
874	cl_embedded_cplusplus_option_only_in_cplusplus option "embedded_c++" can be used only when compiling C++
875	templates_in_embedded_cplusplus Embedded C++ does not support templates
876	exceptions_in_embedded_cplusplus Embedded C++ does not support exception handling
877	namespaces_in_embedded_cplusplus Embedded C++ does not support namespaces
878	rtti_in_embedded_cplusplus Embedded C++ does not support run-time type information
879	new_cast_in_embedded_cplusplus Embedded C++ does not support the new cast syntax
880	using_decl_in_embedded_cplusplus Embedded C++ does not support using-declarations
881	mutable_in_embedded_cplusplus Embedded C++ does not support "mutable"
882	multiple_inheritance_in_embedded_cplusplus Embedded C++ does not support multiple or virtual inheritance
883	cl_invalid_microsoft_version invalid Microsoft version number: xxxx
884	inheritance_kind_already_set pointer-to-member representation "xxxx" has already been set for entity-kind "entity"
885	bad_constructor_type "type" cannot be used to designate constructor for "type"
886	bad_suffix invalid suffix on integral constant

887	uidof_requires_uid_class_type operand of <code>__uidof</code> must have a class or enum type for which <code>__declspec(uid("..."))</code> has been specified
888	bad_uid_string invalid GUID string in <code>__declspec(uid("..."))</code>
889	cl_vla_option_only_in_C option "vla" can be used only when compiling C
890	vla_with_unspecified_bound_not_allowed variable length array with unspecified bound is not allowed
891	explicit_template_args_not_allowed an explicit template argument list is not allowed on this declaration
892	variably_modified_type_not_allowed an entity with linkage cannot have a type involving a variable length array
893	vla_is_not_auto a variable length array cannot have static storage duration
894	sym_not_a_template entity-kind "entity" is not a template
896	expected_template_arg expected a template argument
898	no_params_with_class_or_enum_type nonmember operator requires a parameter with class or enum type
899	cl_enum_overloading_option_only_in_cplusplus option "enum_overloading" can be used only when compiling C++

Diagnostics 900 to 999

901	destructor_qualifier_type_mismatch qualifier of destructor name "type" does not match type "type"
902	type_qualifier_ignored type qualifier ignored

903	cl_nonstandard_qualifier_deduction_option_only_in_cplusplus option "nonstd_qualifier_deduction" can be used only when compiling C++
904	cannot_define_dllimport_function a function declared "dllimport" may not be defined
905	bad_declspec_property incorrect property specification; correct form is __declspec(property(get=name1,put=name2))
906	dupl_get_or_put property has already been specified
907	declspec_property_not_allowed __declspec(property) is not allowed on this declaration
908	no_get_property member is declared with __declspec(property), but no "get" function was specified
909	get_property_function_missing the __declspec(property) "get" function "xxxx" is missing
910	no_put_property member is declared with __declspec(property), but no "put" function was specified
911	put_property_function_missing the __declspec(property) "put" function "xxxx" is missing
912	dual_lookup_ambiguous_name ambiguous class member reference -- entity-kind "entity" (declared at line xxxx) used in preference to entity-kind "entity" (declared at line xxxx)
916	pm_virtual_base_from_derived_class cannot convert pointer to member of derived class "type" to pointer to member of base class "type" -- base class is virtual
917	cl_invalid_instantiation_directory invalid directory for instantiation files: xxxx
918	cl_one_instantiation_per_object_option_only_in_cplusplus option "one_instantiation_per_object" can be used only when compiling C++

921	cl_ii_file_name_incompatible_with_multiple_inputs an instantiation information file name may not be specified when compiling several input files
922	cl_one_instantiation_per_object_incompatible_with_multiple_inputs option "one_instantiation_per_object" may not be used when compiling several input files
923	cl_ambiguous_option more than one command line option matches the abbreviation "--xxxx":
925	cv_qualified_function_type type qualifiers on function types are ignored
927	cl_late_tiebreaker_option_only_in_cplusplus late/early tiebreaker option can be used only when compiling C++
928	bad_va_start incorrect use of va_start
929	bad_va_arg incorrect use of va_arg
930	bad_va_end incorrect use of va_end
931	cl_pending_instantiations_option_only_in_cplusplus pending instantiations option can be used only when compiling C++
932	cl_invalid_import_directory invalid directory for #import files: xxxx
933	cl_import_only_in_microsoft an import directory can be specified only in Microsoft mode
934	ref_not_allowed_in_union a member with reference type is not allowed in a union
935	typedef_not_allowed "typedef" may not be specified here
936	redecl_changes_access redeclaration of entity-kind "entity" alters its access

937	qualified_name_required a class or namespace qualified name is required
938	implicit_int_on_main return type "int" omitted in declaration of function "main" GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
939	invalid_inheritance_kind_for_class pointer-to-member representation "xxxx" is too restrictive for entity-kind "entity"
940	implicit_return_from_non_void_function missing return statement at end of non-void entity-kind "entity" GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
941	duplicate_using_decl duplicate using-declaration of "entity" ignored
942	unsigned_enum_bit_field_with_signed_enumerator enum bit fields are always unsigned, but enum "type" includes negative enumerator
943	cl_class_name_injection_option_only_in_cplusplus option "class_name_injection" can be used only when compiling C++
944	cl_arg_dependent_lookup_option_only_in_cplusplus option "arg_dep_lookup" can be used only when compiling C++
945	cl_friend_injection_option_only_in_cplusplus option "friend_injection" can be used only when compiling C++
946	invalid_name_after_template name following "template" must be a template
948	local_class_friend_requires_prior_decl nonstandard local-class friend declaration -- no prior declaration in the enclosing scope
949	nonstd_default_arg specifying a default argument on this declaration is nonstandard

950	cl_nonstd_using_decl_option_only_in_cplusplus option "nonstd_using_decl" can be used only when compiling C++
951	bad_return_type_on_main return type of function "main" must be "int"
952	template_parameter_has_class_type a nontype template parameter may not have class type
953	default_arg_on_member_decl a default template argument cannot be specified on the declaration of a member of a class template outside of its class
954	return_from_ctor_function_try_block_handler a return statement is not allowed in a handler of a function try block of a constructor
955	no_ordinary_and_extended_designators ordinary and extended designators cannot be combined in an initializer designation
956	no_negative_designator_range the second subscript must not be smaller than the first
957	cl_designators_option_only_in_C option "designators" can be used only when compiling C
958	cl_extended_designators_option_only_in_C option "extended_designators" can be used only when compiling C
959	extra_bits_ignored declared size for bit field is larger than the size of the bit field type; truncated to xxxx bits
960	constructor_type_mismatch type used as constructor name does not match type "type"
961	type_with_no_linkage_in_var_with_linkage use of a type with no linkage to declare a variable with linkage
962	type_with_no_linkage_in_function use of a type with no linkage to declare a function
963	return_type_on_constructor return type may not be specified on a constructor

964	return_type_on_destructor return type may not be specified on a destructor
965	malformed_universal_character incorrectly formed universal character name
966	invalid_UCN universal character name specifies an invalid character
967	UCN_names_basic_char a universal character name cannot designate a character in the basic character set
968	invalid_identifier_UCN this universal character is not allowed in an identifier
969	VA_ARGS_not_allowed the identifier <code>__VA_ARGS__</code> can only appear in the replacement lists of variadic macros
970	friend_qualification_ignored the qualifier on this friend declaration is ignored
971	no_range_designator_with_dynamic_init array range designators cannot be applied to dynamic initializers
972	property_name_not_allowed property name cannot appear here
973	inline_qualifier_ignored "inline" used as a function qualifier is ignored
974	cl_compound_literals_option_only_in_C option "compound_literals" can be used only when compiling C
975	vla_not_allowed a variable-length array type is not allowed
976	bad_integral_compound_literal a compound literal is not allowed in an integral constant expression
977	bad_compound_literal_type a compound literal of type "type" is not allowed

978	friend_template_in_local_class a template friend declaration cannot be declared in a local class
979	ambiguous_question_operator ambiguous "?" operation: second operand of type "type" can be converted to third operand type "type", and vice versa
980	bad_call_of_class_object call of an object of a class type without appropriate operator() or conversion functions to pointer-to-function type
982	ambiguous_class_call there is more than one way an object of type "type" can be called for the argument list:
983	similar_typedef typedef name has already been declared (with similar type)
984	no_internal_linkage_for_new_or_delete operator new and operator delete cannot be given internal linkage
985	no_mutable_allowed_on_anonymous_union storage class "mutable" is not allowed for anonymous unions
987	abstract_class_catch_type abstract class type "type" is not allowed as catch type:
988	bad_qualified_function_type a qualified function type cannot be used to declare a nonmember function or a static member function
989	bad_qualified_function_type_parameter a qualified function type cannot be used to declare a parameter
990	ptr_or_ref_to_qualified_function_type cannot create a pointer or reference to qualified function type
991	nonstd_braces extra braces are nonstandard GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
992	bad_cmd_line_macro invalid macro definition: xxxx

993	nonstandard_ptr_minus_ptr subtraction of pointer types "type" and "type" is nonstandard
994	empty_template_param_list an empty template parameter list is not allowed in a template parameter declaration
995	exp_class expected "class"
996	struct_not_allowed the "struct" keyword may not be used when declaring a template parameter
997	virtual_function_decl_hidden entity-kind "entity" is hidden by "entity" -- virtual function override intended?
998	no_qualified_friend_definition a qualified name is not allowed for a friend declaration that is a function definition
999	not_compatible_with_tmpl_tmpl_param entity-kind "entity" is not compatible with entity-kind "entity"

Diagnostics 1000 to 1099

1000	storage_class_requires_function_or_variable a storage class may not be specified here
1001	member_using_must_be_visible_in_direct_base class member designated by a using-declaration must be visible in a direct base class
1003	cl_sun_incompatible_with_cfront Sun mode is incompatible with cfront mode
1004	cl_strict_mode_incompatible_with_sun strict mode is incompatible with Sun mode
1005	cl_sun_mode_only_in_cplusplus Sun mode is only allowed when compiling C++

1006	template_template_param_same_name_as_tmpl_param a template template parameter cannot have the same name as one of its template parameters
1007	recursive_def_arg_instantiation recursive instantiation of default argument
1009	bad_template_name entity-kind "entity" is not an entity that can be defined
1010	destructor_name_must_be_qualified destructor name must be qualified
1011	no_typename_in_friend_class_decl friend class name may not be introduced with "typename"
1012	no_ctor_or_dtor_using_declaration a using-declaration may not name a constructor or destructor
1013	friend_is_nonreal_template a qualified friend template declaration must refer to a specific previously declared template
1014	bad_class_template_decl invalid specifier in class template declaration
1015	simple_incompatible_param argument is incompatible with formal parameter
1016	cl_dep_name_option_only_in_cplusplus option "dep_name" can be used only when compiling C++
1017	op_arrow_loop loop in sequence of "operator->" functions starting at class "type"
1018	not_a_member_class entity-kind "entity" has no member class "xxxx"
1019	name_not_class_in_file_scope the global scope has no class named "xxxx"
1020	recursive_inst_of_tmpl_default_arg recursive instantiation of template default argument

1021	no_access_or_using_decl_in_union access declarations and using-declarations cannot appear in unions
1022	not_class_member "entity" is not a class member
1023	nonstd_const_member_decl_not_allowed nonstandard member constant declaration is not allowed
1024	cl_ignore_std_option_only_in_cplusplus option "ignore_std" can be used only when compiling C++
1025	cl_parse_nonclass_templates_option_only_in_cplusplus option "parse_templates" can be used only when compiling C++
1026	cl_dep_name_requires_parse_nonclass_templates option "dep_name" cannot be used with "no_parse_templates"
1027	cl_incompatible_language_modes language modes specified are incompatible
1028	invalid_nested_class_redecl invalid redeclaration of nested class
1029	flexible_array_member_not_allowed type containing an unknown-size array is not allowed
1030	static_variable_in_inline_function a variable with static storage duration cannot be defined within an inline function
1031	bad_linkage_of_ref_within_inline_function an entity with internal linkage cannot be referenced within an inline function with external linkage
1032	type_generic_function_mismatch argument type "type" does not match this type-generic function macro
1034	friend_cannot_add_default_arguments friend declaration cannot add default arguments to previous declaration
1035	cannot_be_declared_in_scope entity-kind "entity" cannot be declared in this scope

1036	id_can_only_appear_in_function the reserved identifier "xxxx" may only be used inside a function
1037	invalid_identifier_start_UCN this universal character cannot begin an identifier
1038	exp_string_literal expected a string literal
1039	unrecognized_std_c_pragma unrecognized STDC pragma
1040	bad_std_c_pragma_arg expected "ON", "OFF", or "DEFAULT"
1041	std_c_pragma_not_allowed_here a STDC pragma may only appear between declarations in the global scope or before any statements or declarations in a block scope
1042	bad_va_copy incorrect use of va_copy
1043	only_applies_to_float_types xxxx can only be used with floating-point types
1044	complex_type_not_allowed complex type is not allowed
1045	invalid_designator_kind invalid designator kind
1046	inexact_fp_conversion floating-point value cannot be represented exactly
1047	bad_complex_operation_result complex floating-point operation result is out of range
1048	real_imaginary_conversion conversion between real and imaginary yields zero
1049	cannot_initialize_flexible_array_member an initializer cannot be specified for a flexible array member
1050	imaginary_times_assign imaginary *= imaginary sets the left-hand operand to zero

1051	undeclared_parameter standard requires that entity-kind "entity" be given a type by a subsequent declaration ("int" assumed)
1052	inline_never_defined a definition is required for inline entity-kind "entity"
1053	conversion_to_pointer_loses_bits conversion from integer to smaller pointer
1054	missing_floating_point_type a floating-point type must be included in the type specifier for a <code>_Complex</code> or <code>_Imaginary</code> type
1055	type_decl_in_anon_union types cannot be declared in anonymous unions
1056	returning_ptr_to_local_variable returning pointer to local variable GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1057	returning_ptr_to_local_temp returning pointer to local temporary
1058	cl_export_template_option_only_in_cplusplus option "export" can be used only when compiling C++
1059	cl_export_template_requires_dep_name option "export" cannot be used with "no_dep_name"
1060	cl_export_template_requires_no_implicit_include option "export" cannot be used with "implicit_include"
1061	corresp_decl_incompatible declaration of entity-kind "entity" is incompatible with a declaration in another translation unit
1062	corresp_decl_at the other declaration is at line xxxx
1065	field_cannot_involve_vla_type a field declaration cannot have a type involving a variable length array

1066	entity_differs_in_other_trans_unit declaration of entity-kind "entity" had a different meaning during compilation of "xxxx"
1067	exp_template expected "template"
1068	export_on_instantiation "export" cannot be used on an explicit instantiation
1069	bad_decl_for_export "export" cannot be used on this declaration
1070	exported_in_unnamed_namespace a member of an unnamed namespace cannot be declared "export"
1071	export_after_definition a template cannot be declared "export" after it has been defined
1072	labeled_declaration a declaration cannot have a label
1073	no_export_support support for exported templates is disabled
1075	entity_defined_in_other_trans_unit entity-kind "entity" already defined during compilation of "xxxx"
1076	entity_defined_twice entity-kind "entity" already defined in another translation unit
1077	based_var_cannot_be_local a nonstatic local variable may not be used in a <code>__based</code> specification
1078	cl_list_make_dependencies_incompatible_with_multiple_trans_units the option to list makefile dependencies may not be specified when compiling more than one translation unit
1080	cl_pp_output_incompatible_with_multiple_trans_units the option to generate preprocessed output may not be specified when compiling more than one translation unit
1081	field_name_conflicts_with_class a field with the same name as its class cannot be declared in a class with a user-declared constructor

1082	cl_implicit_include_incompatible_with_multiple_trans_units "implicit_include" cannot be used when compiling more than one translation unit
1083	corrupted_export_template_file exported template file "xxxx" is corrupted
1084	exported_instantiation_and_specialized entity-kind "entity" cannot be instantiated -- it has been explicitly specialized in the translation unit containing the exported definition
1086	unqual_named_function_with_qual_object the object has type qualifiers that are not compatible with the member entity-kind "entity"
1087	no_matching_function_due_to_selector no instance of entity-kind "entity" matches the argument list and object (the object has type qualifiers that prevent a match)
1088	mode_incompatible_with_type an attribute specifies a mode incompatible with "type"
1089	no_type_of_specified_width there is no type with the width specified
1090	bad_attribute_alignment invalid alignment value specified by attribute
1091	attribute_does_not_apply_to_type invalid attribute for "type"
1092	attribute_does_not_apply invalid attribute for entity-kind "entity"
1094	arguments_provided_for_attribute attribute "xxxx" does not take arguments
1096	exp_attribute_name expected an attribute name
1097	unrecognized_attribute unknown attribute "xxxx"
1098	attribute_not_allowed attributes may not appear here

1099	invalid_argument_to_attribute invalid argument to attribute "xxxx"
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Diagnostics 1100 to 1199

1100	packed_attribute_ignored_in_typedef the "packed" attribute is ignored in this context
1101	assigned_goto_requires_void_ptr in "goto *expr", expr must have type "void *"
1102	nonstd_assigned_goto "goto *expr" is nonstandard
1103	nonstd_address_of_label taking the address of a label is nonstandard
1104	cl_duplicate_file_name file name specified more than once: xxxx
1105	warning_directive #warning directive: xxxx
1107	transparent_type_is_not_union the "transparent_union" attribute only applies to unions, and "type" is not a union
1108	transparent_attribute_ignored the "transparent_union" attribute is ignored on incomplete types
1109	union_cannot_be_transparent_sym "type" cannot be transparent because entity-kind "entity" does not have the same size as the first field
1110	union_cannot_be_transparent "type" cannot be transparent because it has a field of type "type" which is not the same size as the first field
1112	attribute_does_not_apply_to_local_variable attribute "xxxx" does not apply to local variables
1113	attributes_in_rout_defn attributes are not permitted in a function definition

1115	invalid_case_range the second constant in a case range must be larger than the first
1116	asm_name_in_rout_defn an asm name is not permitted in a function definition
1117	asm_name_in_typedef an asm name is ignored in a typedef
1118	bad_reg_name unknown register name "xxxx"
1120	bad_asm_constraint_modifier unknown asm constraint modifier "xxxx"
1121	bad_asm_constraint_letter unknown asm constraint letter "xxxx"
1122	missing_constraint_letter asm operand has no constraint letter
1123	asm_output_must_have_output_mod an asm output operand must have one of the '=' or '+' modifiers
1124	asm_input_must_not_have_output_mod an asm input operand may not have the '=' or '+' modifiers
1127	register_used_twice register "xxxx" used more than once
1128	register_used_and_clobbered register "xxxx" is both used and clobbered
1129	register_clobbered_twice register "xxxx" clobbered more than once
1130	fixed_register_used register "xxxx" has a fixed purpose and may not be used in an asm statement
1131	fixed_register_clobbered register "xxxx" has a fixed purpose and may not be clobbered in an asm statement
1132	empty_clobbers_list an empty clobbers list must be omitted entirely

1133	exp_asm_operand expected an asm operand
1134	exp_asm_clobber expected a register to clobber
1135	format_rout_not_varargs "format" attribute requires an ellipsis parameter
1136	subst_arg_is_not_variable first substitution argument is not the first variable argument
1137	fmt_arg_does_not_exist format argument index is greater than number of parameters
1138	fmt_arg_is_not_string format argument does not have string type
1139	template_not_in_template the "template" keyword used for syntactic disambiguation may only be used within a template
1142	attr_requires_func_type attribute "xxxx" does not apply to non-function type "type"
1143	nonobject_pointer_arithmetic arithmetic on pointer to void or function type
1144	invalid_storage_class_in_for_init storage class must be auto or register
1145	va_arg_would_have_been_promoted "type" would have been promoted to "type" when passed through the ellipsis parameter; use the latter type instead
1146	not_a_base_class_member "xxxx" is not a base class member
1147	super_after_scope __super cannot appear after "::"
1148	super_not_in_class __super may only be used in a class scope
1149	unqualified_super __super must be followed by "::"

1151	mangled_name_too_long mangled name is too long
1152	aliased_name_undeclared declaration aliased to undefined entity "xxxx"
1153	aliased_name_bad_kind declaration does not match its alias entity-kind "entity"
1154	alias_cannot_have_definition entity declared as alias cannot have definition
1155	vla_size_ignored variable-length array field type will be treated as zero-length array field type
1156	gcc_lvalue_cast_ignored nonstandard cast on lvalue ignored
1157	cl_invalid_flag_name unrecognized flag name: xxxx
1158	qualified_void_return_type void return type cannot be qualified
1159	auto_ignored the auto specifier is ignored here (invalid in standard C/C++)
1160	alignment_reduction_ignored a reduction in alignment without the "packed" attribute is ignored
1161	corresp_member_template_is_different_kind a member template corresponding to "entity" is declared as a template of a different kind in another translation unit
1162	excess_initializers_ignored excess initializers are ignored GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1163	va_start_requires_ellipsis_function va_start can appear only in a function with an ellipsis parameter
1164	cl_short_enums_requires_gcc_mode the "short_enums" option is only valid in GNU C and GNU C++ modes

1165	bad_export_info_file invalid export information file "xxxx" at line number xxxx
1166	statement_expression_in_function_only statement expressions are only allowed in block scope
1168	asm_name_on_auto_variable an asm name is ignored on a non-register automatic variable
1170	unrecognized_upc_pragma unrecognized UPC pragma
1171	mismatched_shared_block_size shared block size does not match one previously specified
1172	ambiguous_block_size_spec bracketed expression is assumed to be a block size specification rather than an array dimension
1173	shared_block_size_must_be_positive the block size of a shared array must be greater than zero
1174	multiple_block_sizes multiple block sizes not allowed
1175	nonshared_strict_relaxed strict or relaxed requires shared
1176	threads_constant_not_allowed THREADS not allowed in this context
1177	shared_block_size_too_large block size specified exceeds the maximum value of xxxx
1178	function_returning_shared function returning shared is not allowed
1180	shared_nonthreads_dim one dimension of an array of a shared type must be a multiple of THREADS when the number of threads is nonconstant
1181	shared_inside_struct shared type inside a struct or union is not allowed
1182	shared_parameter parameters may not have shared types

1183	threads_dimension_requires_definite_block_size a dynamic THREADS dimension requires a definite block size
1184	bad_shared_storage_class shared variables must be static or extern
1185	nonshared_blocksizeof argument of upc_blocksizeof is a pointer to a shared type (not shared type itself)
1186	nested_upc_forall affinity expression ignored in nested upc_forall
1187	exit_forall branching into or out of a upc_forall loop is not allowed
1188	bad_affinity affinity expression must have a shared type or point to a shared type
1189	shared_affinity_type affinity has shared type (not pointer to shared)
1190	upc_shared_void_comparison shared void* types can only be compared for equality
1191	cl_upc_requires_ansi_c_dialect UPC mode is incompatible with C++ and K&R modes
1192	null_char_ignored null (zero) character in input line ignored
1193	null_char_in_string null (zero) character in string or character constant
1194	null_char_in_header_name null (zero) character in header name
1195	for_init_hides_declaration declaration in for-initializer hides a declaration in the surrounding scope
1196	for_init_hidden_declaration the hidden declaration is at line xxxx

1197	prototype_lost the prototype declaration of entity-kind "entity" (declared at line xxxx) is ignored after this unprototyped redeclaration
1199	bad_linkage_for_redefine_extname entity-kind "entity" (declared at line xxxx) must have external C linkage

Diagnostics 1200 to 1299

1200	declaration_hides_for_init variable declaration hides declaration in for-initializer
1201	typedef_in_elab_type typedef "xxxx" may not be used in an elaborated type specifier
1202	call_of_zero call of zero constant ignored
1203	handler_redeclares_parameter parameter "xxxx" may not be redeclared in a catch clause of function try block
1204	specialization_out_of_namespace the initial explicit specialization of entity-kind "entity" must be declared in the namespace containing the template
1205	cc_clobber_ignored "cc" clobber ignored
1206	invalid_token_after_template "template" must be followed by an identifier
1207	mythread_constant_not_allowed MYTHREAD not allowed in this context
1208	bad_upc_shared_pointer_layout_qualifier layout qualifier cannot qualify pointer to shared
1209	bad_upc_shared_array_layout_qualifier layout qualifier cannot qualify an incomplete array
1210	decl_hides_catch_parameter declaration of "xxxx" hides handler parameter

1211	nonstd_ignored_array_cast nonstandard cast to array type ignored
1212	invalid_pragma_operator this pragma cannot be used in a <code>_Pragma</code> operator (a <code>#pragma</code> directive must be used)
1213	field_uses_tail_padding field uses tail padding of a base class
1214	gnu_may_use_bit_padding GNU C++ compilers may use bit field padding
1215	deprecated_entity entity-kind "entity" (declared at line xxxx) was declared deprecated
1216	field_with_asm_name_not_allowed an asm name is not allowed on a nonstatic member declaration
1217	unrecognized_format_function_type unrecognized format function type "xxxx" ignored
1218	base_uses_tail_padding base class "entity" uses tail padding of base class "entity"
1219	bad_variable_for_init_priority the "init_priority" attribute can only be used for definitions of static data members and namespace scope variables of class types
1220	init_priority_reserved requested initialization priority is reserved for internal use
1221	hidden_anonymous_union_field this anonymous union/struct field is hidden by entity-kind "entity" (declared at line xxxx)
1222	invalid_error_number invalid error number
1223	invalid_error_tag invalid error tag
1224	exp_error_argument expected an error number or error tag

1225	size_affected_by_tail_padding size of class is affected by tail padding
1226	nonlocal_label_reference labels can be referenced only in function definitions
1227	branch_into_statement_expr transfer of control into a statement expression is not allowed
1229	bad_statement_in_statement_expr this statement is not allowed inside of a statement expression
1230	class_def_in_statement_expr a non-POD class definition is not allowed inside of a statement expression
1232	dyn_local_static_in_statement_expr a dynamically-initialized local static variable is not allowed inside of a statement expression
1233	vla_in_statement_expr a variable-length array is not allowed inside of a statement expression
1234	statement_expr_in_default_arg a statement expression is not allowed inside of a default argument
1235	ptr_func_ptr_data_conv nonstandard conversion between pointer to function and pointer to data
1236	interface_cannot_have_virtual_base interface types cannot have virtual base classes
1237	interface_cannot_have_private_or_protected interface types cannot specify "private" or "protected"
1238	interface_must_derive_from_interface interface types can only derive from other interface types
1239	type_is_interface "type" is an interface type
1240	interface_cannot_have_typedef interface types cannot have typedef members

1241	interface_cannot_have_ctor_or_dtor interface types cannot have user-declared constructors or destructors
1242	interface_cannot_have_operator interface types cannot have user-declared member operators
1243	interface_cannot_be_local interface types cannot be declared in functions
1245	interface_cannot_have_data_member interface types cannot have data members
1246	interface_cannot_have_friend interface types cannot contain friend declarations
1248	interface_cannot_be_nested_class interface types cannot be nested class types
1249	interface_cannot_have_member_templates interface types cannot have member templates
1250	interface_cannot_have_static_members interface types cannot have static member functions
1251	invalid_microsoft_pragma_operator this pragma cannot be used in a <code>__pragma</code> operator (a <code>#pragma</code> directive must be used)
1252	qualifier_must_be_base_class qualifier must be base class of "type"
1253	invalid_selective_overrider_declaration declaration must correspond to a pure virtual member function in the indicated base class

1254	integer_overflow_class_internal integer overflow in internal computation due to size or complexity of "type" The compiler displays this error if you are using multiple or virtual inheritance, and the offset from the beginning of the derived class <i>type</i> to a base class within <i>type</i> exceeds the 32 kilobytes. If you are using multiple inheritance, rearrange the inheritance order by putting smaller classes first. With the new ordering, the offset of larger classes is less likely to exceed this limit. If you are using virtual inheritance, make the derived class members smaller, because the compiler always places members of a derived class before virtual base classes. If you do not need your code to be backwards-compatible with existing code, you can remove this limit by passing the --large_vtbl_offsets option. For more information, see "Virtual Function Table Offset Size" in the chapter "Builder and Driver Options" in <i>MULTI: Building Applications</i> .
1255	integer_overflow_internal integer overflow in internal computation
1256	invalid_type_for_w64 __w64 can only be specified on int, long, and pointer types
1257	ilp64_will_narrow potentially narrowing conversion when compiled in an environment where int, long, or pointer types are 64 bits wide
1258	value_of_pragma_pack_show current value of pragma pack is xxxx
1259	pragma_pack_show_args_ignored arguments for pragma pack(show) are ignored
1262	multiple_declspec_align earlier __declspec(align(...)) ignored
1263	exp_ms_attr_enum_value expected an argument value for the "xxxx" attribute parameter
1264	invalid_ms_attr_enum_value invalid argument value for the "xxxx" attribute parameter
1265	exp_ms_attr_bool_value expected a boolean value for the "xxxx" attribute parameter

1266	positional_after_named a positional argument cannot follow a named argument in an attribute
1267	invalid_ms_attr_name attribute "xxxx" has no parameter named "xxxx"
1268	exp_ms_attr_arg_list expected an argument list for the "xxxx" attribute
1269	exp_comma_or_rbracket expected a ",", or "]"
1270	duplicate_ms_attr_arg attribute argument "xxxx" has already been given a value
1271	cannot_assign_to_ms_attr a value cannot be assigned to the "xxxx" attribute
1272	ptr_incomplete_throw a throw expression may not have pointer-to-incomplete type
1273	alignof_incomplete_type alignment-of operator applied to incomplete type
1274	invalid_use_of_standalone_ms_attr "xxxx" may only be used as a standalone attribute
1275	invalid_use_of_ms_attr "xxxx" attribute cannot be used here
1277	ms_attr_not_allowed attributes are not allowed here
1278	invalid_ms_attr_uuid_value invalid argument value for the "xxxx" attribute parameter
1279	too_many_ms_attr_args too many attribute arguments
1280	conv_from_inaccessible_base_class conversion from inaccessible base class "type" is not allowed
1281	cl_export_template_requires_distinct_tmpl_sigs option "export" requires distinct template signatures

1282	mixed_string_concatenation string literals with different character kinds cannot be concatenated
1283	no_gnu_virtual_base_gap GNU layout bug not emulated because it places virtual base "entity" outside "entity" object boundaries
1284	gnu_virtual_base_gap virtual base "entity" placed outside "entity" object boundaries
1285	nonstd_qualifier_in_namespace_member_decl nonstandard qualified name in namespace member declaration
1286	declspec_align_reduction_ignored reduction in alignment ignored
1287	const_ignored const qualifier ignored
1289	invalid_asm_qualifiers invalid GNU asm qualifiers
1290	non_pod_passed_to_ellipsis non-POD class type passed through ellipsis The compiler issues this remark because it is expected that passing a struct to a variadic function is done by accident more often than it is done intentionally. For example, in many cases it is likely that passing either the address of the struct or one of its fields was intended instead. This remark may be issued on perfectly valid code.
1291	non_pod_va_arg a non-POD class type cannot be fetched by va_arg
1292	nonstd_fixed_point_suffix the 'u' or 'U' suffix must appear before the 'l' or 'L' suffix in a fixed-point literal
1293	cl_fixed_point_option_only_in_C option "fixed_point" can be used only when compiling C
1294	integer_may_not_fit_in_fixed_point_result integer operand may cause fixed-point overflow
1295	bad_fixed_point_value fixed-point constant is out of range

1296	inexact_fxp_conversion fixed-point value cannot be represented exactly
1297	c99_constant_in_unsigned_long_long_range constant is too large for long long; given unsigned long long type (nonstandard)
1298	bad_upc_shared_void_pointer_layout_qualifier layout qualifier cannot qualify pointer to shared void
1299	duplicate_threads_dim duplicate THREADS in multidimensional array type

Diagnostics 1300 to 1399

1300	bad_strong_using_scope a strong using-directive may only appear in a namespace scope
1301	probable_guiding_friend entity-kind "entity" declares a non-template function -- add <> to refer to a template instance
1302	operation_may_not_fit_in_fixed_point_result operation may cause fixed-point overflow
1303	expr_not_integral_or_enum_or_fixed_point expression must have integral, enum, or fixed-point type
1304	expr_not_integral_or_fixed_point expression must have integral or fixed-point type
1305	noreturn_function_does_return function declared with "noreturn" does return
1306	asm_name_conflict asm name ignored because it conflicts with a previous declaration
1307	duplicate_typedef_in_class class member typedef may not be redeclared
1308	taking_address_of_temporary taking the address of a temporary

1309	attribute_ignored_on_incomplete_class_decl attributes are ignored on a class declaration that is not also a definition
1310	implicit_fixed_point_to_floating_point_conversion fixed-point value implicitly converted to floating-point type
1311	no_classification_for_fixed_point_type fixed-point types have no classification
1312	fixed_template_parameter a template parameter may not have fixed-point type
1313	hex_fp_constant hexadecimal floating-point constants are not allowed
1314	cl_named_address_spaces_option_only_in_C option "named_address_spaces" can be used only when compiling C
1315	float_to_fixed_conversion floating-point value does not fit in required fixed-point type
1316	inexact_fixed_conversion value cannot be converted to fixed-point value exactly
1317	fixed_sign_change fixed-point conversion resulted in a change of sign
1318	integer_to_fixed_conversion integer value does not fit in required fixed-point type
1319	bad_fixed_operation_result fixed-point operation result is out of range
1320	multiple_named_address_spaces multiple named address spaces
1321	bad_storage_class_for_named_address_space_variable variable with automatic storage duration cannot be stored in a named address space
1322	type_with_named_address_space_not_allowed type cannot be qualified with named address space
1323	named_address_space_on_function_type function type cannot be qualified with named address space

1324	field_type_cannot_be_qualified_with_named_address_space field type cannot be qualified with named address space
1325	fixed_to_float_conversion fixed-point value does not fit in required floating-point type
1326	fixed_to_integer_conversion fixed-point value does not fit in required integer type
1327	fixed_to_fixed_conversion value does not fit in required fixed-point type
1328	cl_named_registers_option_only_in_C option "named_registers" can be used only when compiling C
1329	named_register_not_allowed a named-register storage class is not allowed here
1330	register_storage_class_conflict entity-kind "entity" (declared at line xxxx) redeclared with incompatible named-register storage class
1331	aliased_variable_cannot_have_register_storage_class named-register storage class cannot be specified for aliased variable
1332	register_in_use named-register storage specifier is already in use
1333	embedded_c_option_incompatible_with_individual_feature_options option "embedded_c" cannot be combined with options to control individual Embedded C features
1334	cl_invalid_edg_base_directory invalid EDG_BASE directory: xxxx
1336	bad_predef_macro_line invalid predefined macro entry at line xxxx: xxxx
1337	bad_macro_mode_name invalid macro mode name "xxxx"
1338	bad_predef_macro_redef incompatible redefinition of predefined macro "xxxx"

1339	missing_named_register_storage_class redeclaration of entity-kind "entity" (declared at line xxxx) is missing a named-register storage class
1340	register_too_small named register is too small for the type of the variable
1341	no_named_register_for_array arrays cannot be declared with named-register storage class
1342	enum_const_cast const_cast to enum type is nonstandard
1343	cl_embedded_c_option_only_in_C option "embedded_c" can be used only when compiling C
1344	named_address_space_not_allowed a named address space qualifier is not allowed here
1345	bad_initializer_for_array_with_unspecified_bound an empty initializer is invalid for an array with unspecified bound
1346	incomplete_class_return_type function returns incomplete class type "type"
1347	out_of_class_initializer_ignored entity-kind "entity" has already been initialized; the out-of-class initializer will be ignored
1348	local_variable_hidden declaration hides entity-kind "entity" (declared at line xxxx)
1349	named_address_space_for_parameter a parameter cannot be allocated in a named address space
1350	bad_float_or_fixed_suffix invalid suffix on fixed-point or floating-point constant
1351	register_in_address_space a register variable cannot be allocated in a named address space
1352	bad_std_c_fx_overflow_pragma_arg expected "SAT" or "DEFAULT"

1353	no_corresponding_member_delete entity-kind "entity" has no corresponding member operator delete (to be called if an exception is thrown during initialization of an allocated object)
1354	dll_thread_conflict a thread-local variable cannot be declared with "dllimport" or "dllexport"
1355	function_returning_named_address_space a function return type cannot be qualified with a named address space
1356	cannot_initialize_destructible_flexible_array an initializer cannot be specified for a flexible array member whose elements have a nontrivial destructor
1357	cannot_initialize_indirect_flexible_array an initializer cannot be specified for an indirect flexible array member
1358	cl_invalid_gnu_version invalid GNU version number: xxxx
1359	attribute_after_parenthesized_initializer variable attributes appearing after a parenthesized initializer are ignored
1360	gcc_use_of_cast_as_lvalue the result of this cast cannot be used as an lvalue
1361	unsigned_fixed_point_negation negation of an unsigned fixed-point value
1362	operator_not_allowed this operator is not allowed at this point; use parentheses
1364	register_name_on_nonregister register names can only be used for register variables
1365	void_named_register named-register variables cannot have void type
1367	parameter_with_link_scope_specifier parameters cannot have link scope specifiers

1368	multiple_link_scope_specifiers multiple link scope specifiers
1369	link_scope_requires_external_linkage link scope specifiers can only appear on functions and variables with external linkage
1370	link_scope_relaxation a redeclaration cannot weaken a link scope
1371	invalid_link_scope link scope specifier not allowed on this declaration
1372	nonstd_qualifier_in_global_scope_decl nonstandard qualified name in global scope declaration
1373	impl_narrowing_64_bit_int implicit conversion of a 64-bit integral type to a smaller integral type (potential portability problem)
1374	expl_narrowing_64_bit_int explicit conversion of a 64-bit integral type to a smaller integral type (potential portability problem)
1375	pointer_conversion_to_same_size_int conversion from pointer to same-sized integral type (potential portability problem)
1376	alias_loop alias creates cycle of aliased entities
1377	pcc_field_ambiguity field name resolves to more than one offset -- see "entity" (declared at line xxxx) and "entity" (declared at line xxxx)
1378	not_a_field_name "xxxx" is not a field name
1379	invalid_symbolic_asm_operand_name invalid symbolic operand name "xxxx"
1380	match_limit_for_symbolic_asm_operand a symbolic match constraint must refer to one of the first ten operands

1381	friend_specifier_ignored friend specifier is not allowed in a class definition; friend specifier is ignored
1382	cannot_use_thread_local_storage only static and extern variables can use thread-local storage
1383	multiple_thread_local_storage_specifiers multiple thread-local storage specifiers
1384	virtual_function_never_defined virtual entity-kind "entity" was not defined (and cannot be defined elsewhere because it is a member of an unnamed namespace)
1385	stray_carriage_return carriage return character in source line outside of comment or character/string literal
1386	expr_not_fixed_point expression must have fixed-point type
1387	invalid_access_specifier invalid use of access specifier is ignored
1388	ptr_conv_to_bool pointer converted to bool
1389	ptr_to_member_conv_to_bool pointer-to-member converted to bool
1390	storage_specifier_ignored storage specifier ignored
1391	dll_interface_ignored_on_class_template dllexport and dllimport are ignored on class templates
1392	base_class_has_different_dll_interface base class dllexport/dllimport specification differs from that of the derived class
1393	redeclaration_adds_dll_interface redeclaration cannot add dllexport/dllimport to "entity" (declared at line xxxx)

1394	dll_interface_conflict_dllexport_assumed dllexport/dllimport conflict with "entity" (declared at line xxxx); dllexport assumed
1395	dllimport_defined cannot define dllimport entity
1396	dll_interface_requires_external_linkage dllexport/dllimport requires external linkage
1397	class_and_member_have_dll_interface a member of a class declared with dllexport/dllimport cannot itself be declared with such a specifier
1398	field_without_dll_interface field of class type without a DLL interface used in a class with a DLL interface
1399	microsoft_parenthesized_member parenthesized member declaration is nonstandard

Diagnostics 1400 to 1499

1400	<p>white_space_inside_splice</p> <p>white space between backslash and newline ignored for GNU compatibility -- may cause unintentional line continuation</p> <p>In most C dialects, the compiler does not parse backslash (\) as a line continuation character if it is followed by a whitespace. In the GNU C dialect, the compiler parses backslash as a line continuation character whether or not it is followed by a whitespace. In versions of the MULTI compiler earlier than 5.2, the GNU C and C++ dialects behaved the same way as other dialects.</p> <p>This diagnostic indicates that your code has a line that contains a backslash followed by a whitespace, and therefore may contain an unintentional line continuation. The following example shows one of these cases (the space is indicated by an underscore, because it does not display in print):</p> <pre>#include <stdio.h> int main(void) { int i = 42; // use space after backslash, as in C:_ i = 0; // ignored in GNU if (i != 0) { printf("i = %d, should be 0\n", i); } }</pre>
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1401	dll_interface_conflict_none_assumed dllexport/dllimport conflict with "entity" (declared at line xxxx); dllimport/dllexport dropped
1402	bad_nonstd_anonymous_union_field invalid member for anonymous member class -- class "type" has a disallowed member function
1403	nonstd_reinterpret_cast nonstandard reinterpret_cast
1404	positional_format_specifier_zero positional format specifier cannot be zero
1405	nonlocal_vla_not_allowed a local class cannot reference a variable-length array type from an enclosing function
1406	class_and_inherited_member_instance_have_dll_interface member entity-kind "entity" (declared at line xxxx) already has an explicit dllexport/dllimport specifier
1407	vla_in_return_type a variable-length array is not allowed in a function return type
1408	ptr_to_member_of_vla_type variable-length array type is not allowed in pointer to member of type "type"
1409	statement_expr_with_vla_type the result of a statement expression cannot have a type involving a variable-length array
1410	trigraph_ignored support for trigraphs is disabled
1411	attribute_requires_external_linkage the "xxxx" attribute can only appear on functions and variables with external linkage
1412	cl_strict_mode_incompatible_with_ignore_std strict mode is incompatible with treating namespace std as an alias for the global namespace
1413	if_exists_not_allowed use of __if_exists is not supported in this context

1414	if_exists_not_closed __if_exists block not closed in the same scope in which it was opened
1415	bad_init_for_thread_local thread-local variable cannot be dynamically initialized
1416	unaligned_qualifier_dropped conversion drops "__unaligned" qualifier
1417	insufficient_enum_range some enumerator values cannot be represented by the integral type underlying the enum type
1418	friend_class_template_default_arg_not_allowed default argument is not allowed on a friend class template declaration
1419	multi_char_literal value of multicharacter character literal is implementation-defined
1420	exp_class_type expected a class, struct, or union type
1421	offsetof_nonfield second operand of offsetof must be a field
1422	offsetof_bit_field second operand of offsetof may not be a bit field
1423	offsetof_virtual_base_member cannot apply offsetof to a member of a virtual base
1424	offset_in_non_POD_nonstandard offsetof applied to non-POD types is nonstandard
1425	default_arg_on_member_friend default arguments are not allowed on a friend declaration of a member function
1426	default_arg_requires_friend_to_be_definition default arguments are not allowed on friend declarations that are not definitions

1427	redeclaration_of_friend_with_default_args redeclaration of entity-kind "entity" (declared at line xxxx) previously declared as a friend with default arguments is not allowed
1428	bad_qualifier_for_nested_class_decl invalid qualifier for "type" (a derived class is not allowed here)
1429	bad_qualifier_for_delayed_class_definition invalid qualifier for definition of class "type"
1430	no_prior_push_macro no prior push_macro for "xxxx"
1431	wide_string_not_allowed wide string literal not allowed
1433	feature_requires_c "xxxx" is only allowed in C
1434	microsoft_ptr_width_must_follow_star __ptr32 and __ptr64 must follow a "*"
1435	microsoft_ptr_width_conflict __ptr32 and __ptr64 cannot both apply
1436	name_must_be_prototype_instantiation template argument list of "xxxx" must match the parameter list
1437	incomplete_class_type an incomplete class type is not allowed
1438	complex_integral_type complex integral types are not supported
1439	real_and_imag_require_complex_argument __real and __imag can only be applied to complex values
1440	real_and_imag_applied_to_real_value __real/__imag applied to real value
1441	deprecated_entity_with_custom_message entity-kind "entity" (declared at line xxxx) was declared deprecated ("xxxx")

1442	redefinition invalid redefinition of entity-kind "entity" (declared at line xxxx)
1443	dll_interface_in_unnamed_namespace dllimport/dllexport applied to a member of an unnamed namespace
1444	thiscall_requires_nonstatic_member __thiscall can only appear on nonstatic member function declarations
1445	vararg_thiscall __thiscall not allowed on function with ellipsis parameter
1446	specialization_of_referenced_entity explicit specialization of entity-kind "entity" must precede its first use
1447	sealed_base_class a sealed class type cannot be used as a base class
1448	duplicate_class_modifier duplicate class modifier
1449	function_modifiers_abstract_and_sealed a member function cannot have both the "abstract" and "sealed" modifiers
1450	pure_specifier_on_sealed_member a sealed member cannot be pure virtual
1451	function_modifier_requires_virtual_function nonvirtual function cannot be declared with "abstract" or "sealed" modifier
1452	override_member_does_not_override member function declared with "override" does not override a base class member
1453	override_of_sealed_function cannot override sealed entity-kind "entity" (declared at line xxxx)
1454	type_is_declared_abstract entity-kind "entity" (declared at line xxxx) was declared with the class modifier "abstract"

1457	enum_base_type_must_be_integral underlying type of enum type must be an integral type
1458	enum_base_type_too_limited some enumerator constants cannot be represented by "type"
1459	feature_not_allowed_in_current_mode "xxxx" not allowed in current mode
1460	cl_type_traits_helpers_option_only_in_cplusplus type traits helpers option can be used only when compiling C++
1461	gnu_sentinel_attribute_requires_ellipsis attribute "sentinel" requires an ellipsis parameter
1462	invalid_gnu_sentinel_argument argument must be a constant null pointer value
1463	no_gnu_sentinel_argument insufficient number of arguments for sentinel value
1464	gnu_sentinel_must_be_ellipsis_argument sentinel argument must correspond to an ellipsis parameter
1465	implementation_key_outside_mapping_region __declspec(implementation_key(...)) can appear only between #pragma start_map_region and #pragma stop_map_region
1466	start_map_region_ignored #pragma start_map_region already active: pragma ignored
1467	stop_map_region_ignored no #pragma start_map_region is currently active: pragma ignored
1468	var_used_as_destructor entity-kind "entity" cannot be used to name a destructor (a type name is required)
1469	empty_wide_character nonstandard empty wide character literal treated as L'\0'
1470	invalid_typename_specifier "typename" may not be specified here

1471	no_default_delete_in_virtual_dtor a non-placement operator delete must be visible in a class with a virtual destructor
1472	name_linkage_mismatch_for_variable name linkage conflicts with previous declaration of entity-kind "entity" (declared at line xxxx)
1474	register_mapped_variable_cannot_have_initializer a variable with static storage duration allocated in a specific register cannot be declared with an initializer
1475	register_mapped_variable_must_be_POD a variable allocated in a specific register must have POD type
1476	predef_macro_redefined predefined meaning of "entity" discarded
1478	designator_for_non_POD designator may not specify a non-POD subobject
1480	nonstandard_anonymous_union_qualifier anonymous union qualifier is nonstandard
1481	anonymous_union_qualifier_ignored anonymous union qualifier is ignored
1483	struct_declspec_ignored_in_C_mode __declspec(xxxx) ignored (it has no meaning for a C struct)
1484	nonstandard_secondary_decl_specifiers specifiers after comma between declarations are nonstandard
1485	secondary_specifier_ignored nonstandard specifier ignored
1486	enum_attribute_ignored attributes are ignored on an enum declaration that is not also a definition
1487	reference_declared_mutable declaring a reference with "mutable" is nonstandard
1488	array_condition_always_true a condition declaration for an array is always true

1489	static_assert static assertion failed with "xxxx"
1490	gnu_visibility_conflict visibility attribute ignored because it conflicts with a previous declaration
1491	member_cannot_have_internal_linkage a member function cannot have internal linkage
1492	builtin_function_hidden declaration hides built-in entity-kind "entity"
1493	builtin_function_overloaded declaration overloads built-in entity-kind "entity"
1494	cl_list_macros_incompatible_with_multiple_trans_units the option to list macro definitions may not be specified when compiling more than one translation unit
1495	lparen_after_function unexpected parenthesis after declaration of entity-kind "entity" (malformed parameter list or invalid initializer?)
1496	nonstandard_parenthesized_string_initializer parentheses around a string initializer are nonstandard
1497	auto_variable_in_own_initializer a variable declared with an auto type specifier cannot appear in its own initializer
1498	cannot_deduce_auto_type cannot deduce "auto" type
1499	auto_brace_initialization_not_allowed initialization with "{...}" is not allowed for "auto" type

Diagnostics 1500 to 1599

1501	bad_align_alignment invalid align value
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1502	local_pragma_align effect of this "#pragma align" directive is local to entity-kind "entity"
1503	nested_pragma_areas pragmas which specify data areas cannot be nested
1504	misplaced_asm_pragma "#pragma asm/endasm" cannot be placed xxxx
1505	ghs_interrupt_and_nonfunction interrupt specifier allowed on function declarations only
1506	ghs_interrupt_and_nonvoid_return interrupt function must return void
1507	ghs_interrupt_and_has_parameters interrupt function may not have parameters
1508	ghs_interrupt_not_supported interrupt functions not supported in this compiler
1509	incompatible_interrupt_specifier_on_specific_decl __interrupt specification is incompatible with previous "entity" (declared at line xxxx)
1510	ghs_pragma_config_unimplement This pragma is not implemented for this configuration The compiler displays this error if you use a #pragma directive that is not implemented for your processor or target operating system, or if you set an option that disables the directive. For more information, see the documentation for the #pragma directive reported in the error.
1511	bad_alignvar_alignment invalid alignvar value
1512	bad_section_pragma incorrect section #pragma: xxxx
1513	unknown_ghs_pragma GHS #pragma with incorrect keyword "xxxx"
1514	invalid_ghs_pragma incorrect GHS #pragma: xxxx

1515	unmatched_ghs_sda_pragma the end data section pragma does not match the start data section pragma
1517	invalid_pp_directive_in_asm_block this preprocessing directive is not permitted within a #pragma asm/endasm block
1518	ghs_safe_ansi_alias_pointer_function a questionable cast from type "type" to type "type" causes ANSI aliasing rules to be turned off for this function This warning indicates that the compiler has detected that two entities of incompatible type might alias each other at function scope, and therefore the compiler will not perform any optimizations whose correctness depends on aliasing information when compiling the current function. This warning is issued only when those optimizations have been enabled. When compiling without optimizations, remark 1798 is issued instead. To disable ANSI aliasing rules and suppress this warning, pass the -no_ansi_alias option.
1519	ghs_safe_ansi_alias_pointer_file a questionable cast from type "type" to type "type" -- please recompile with ANSI aliasing turned off This error indicates that the compiler has detected that two entities of incompatible type might alias each other at file scope, and therefore the compiler cannot perform any optimizations whose correctness depends on aliasing information. This error is issued only when those optimizations have been enabled. When compiling without optimizations, remark 1798 is issued instead. To disable ANSI aliasing rules and suppress this error, pass the -no_ansi_alias option.
1520	unimplemented_gnu_extension unsupported GNU language extension: xxxx
1521	gnu_extension_recognized use -gnu for full GNU support
1522	global_reg_and_initializer global register variable cannot have an initializer
1523	asmsym_macro_commented_out This macro definition will be commented-out in asmsym output files since it may have adverse effects

1524	asmsym_internal_macro_syntax_error Incorrect usage of <code>__ASMSYM_INTERNAL()</code>
1527	no_match_for_intvect_pragma The name specified in the 'intvect' must be a declared interrupt routine
1528	field_not_yet_laid_out An asmsym region ended before the xxxx definition containing field "xxxx" was complete
1529	asm_not_allowed_with_bin_codegen asm statement incompatible with binary code generation. Try command line option <code>-noobj</code> or builder menu File Options->Advanced->Compilation = Assembly
1530	addr_of_builtin this builtin function may not have its address taken
1531	builtin_function_type Builtin function xxxx is not xxxx
1532	decl_overloaded_builtin overloaded builtin function may not be declared
1533	defining_builtin defining builtin function; may be called only via pointer to function
1534	expr_not_constant_or_vector expression must be a vector type or have a constant value
1535	implicit_builtin builtin function may not be implicitly declared
1536	obsolete_feature use of obsolete feature: xxxx
1537	too_few_initializer_values too few initializer values
1538	type_must_be_compat_with_builtin type must be compatible with builtin function
1539	vector_arg_without_prototype vector argument requires a prototype

1540	vector_not_first vector type specifier is not first
1541	ghs_vector_type_required operand of <code>vec_step</code> must be a vector type
1542	no_floating_point_types floating point types have been disabled
1543	no_floating_point_const floating point constants have been disabled
1544	pragma_information_conflict incompatibility associated with redeclaration of entity-kind "entity": xxxx
1545	address_of_packed_struct_member address taken of a packed structure member with insufficient alignment
1546	asm_non_portable asm constructs are non-portable
1547	call_to_nonprototyped_func call is made to a non-prototyped function GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1550	auto_type_in_array_type "auto" type cannot appear in top-level array type
1551	auto_type_in_function_type "auto" type cannot appear in top-level function type
1552	invalid_member_constant_type a member of type "type" cannot have an in-class initializer
1553	member_constant_not_const a member with an in-class initializer must be <code>const</code>
1554	auto_type_requires_initializer cannot deduce "auto" type (initializer required)
1555	inconsistent_deduction_of_auto "auto" type is "type" for this entity, but was previously implied to be "type"

1556	bad_constructor_decl invalid constructor declaration
1557	bad_type_qualifier invalid use of a type qualifier
1558	abstract_or_sealed_on_union a union cannot be abstract or sealed
1559	auto_not_allowed_here "auto" is not allowed here
1560	unfinished_base_class definition of base class type not completed yet
1561	static_extern_template "extern template" cannot refer to a specialization of static entity-kind "entity" (declared at line xxxx)
1562	extern_template_follows_instantiation "extern template" cannot follow explicit instantiation of entity-kind "entity"
1563	bad_declspec_restrict_return __declspec(restrict) requires a function returning a pointer type
1564	cl_report_gnu_extensions_requires_gnu_mode the "report_gnu_extensions" option is only valid in GNU C and GNU C++ modes
1565	vla_is_nonstandard variable-length array types are nonstandard
1566	designator_is_nonstandard designators are nonstandard
1567	extended_designator_is_gnu_extension this designator syntax is a GNU extension
1568	compound_literal_is_nonstandard compound literals are nonstandard
1569	statement_expression_is_gnu_extension statement expressions are a GNU extension

1570	asm_name_after_definition asm name ignored for previously defined entity
1571	attribute_is_gnu_extension attributes are a GNU extension
1572	asm_operand_spec_is_gnu_extension extended asm syntax is a GNU feature
1573	volatile_asm_is_gnu_extension volatile asm declarations are a GNU extension
1574	asm_name_is_gnu_extension asm name specifiers are a GNU extension
1575	gnu_restrict_is_nonstandard the "__restrict" qualifier is nonstandard
1576	typeof_is_gnu_extension "typeof" is a GNU extension
1577	typedef_modification_is_nonstandard modifying the size or signedness of a typedef is nonstandard
1578	zero_length_array_is_gnu_extension zero-length arrays are a GNU extension
1579	flexible_array_is_nonstandard flexible array members are nonstandard
1580	nonnull_on_nonpointer attribute "nonnull" references nonpointer parameter
1581	nonnull_parameter_number_too_large argument for attribute "nonnull" is larger than number of parameters
1582	no_pointer_parameters no parameter has pointer type
1583	null_argument_for_nonnull_parameter null argument provided for parameter marked with attribute "nonnull" This warning is issued in connection with the <code>nonnull</code> attribute.

1584	access_prevents_dtor_generation the destructor for "type" has been suppressed because the destructor for "type" is inaccessible
1585	suppressed_dtor_needed the suppressed destructor for "type" is needed
1586	inline_gnu_noinline_conflict routine is both "inline" and "noinline"
1587	invalid_cleanup_routine invalid cleanup routine
1588	attribute_cleanup_requires_automatic_storage attribute "cleanup" requires automatic storage duration
1589	attribute_cleanup_for_parameter attribute "cleanup" does not apply to parameters
1590	bad_type_for_cleanup_routine cleanup routine has invalid type
1591	nonstandard_conversion_for_cleanup call of cleanup routine requires suspect conversion
1592	microsoft_ptr_signedness_must_follow_star __sptr and __uptr must follow a "*"
1593	microsoft_ptr_signedness_conflict __sptr and __uptr cannot both be specified
1594	microsoft_ptr_sign_extension widening pointer conversion from "type" to "type" extends sign bit
1595	microsoft_ptr_signedness_on_ptr_to_member __sptr and __uptr don't apply to pointer-to-member types
1596	const_mbr_suppresses_copy_asgn_decl the declaration of the copy assignment operator for "type" has been suppressed because entity-kind "entity" is const
1597	ref_mbr_suppresses_copy_asgn_decl the declaration of the copy assignment operator for "type" has been suppressed because entity-kind "entity" has reference type

1598	subobj_copy_asgn_decl_suppressed the declaration of the copy assignment operator for "type" has been suppressed because that of "type" was suppressed
1599	ambig_suppresses_copy_asgn_decl the declaration of the copy assignment operator for "type" has been suppressed because that of "type" is ambiguous

Diagnostics 1600 to 1699

1600	access_suppresses_copy_asgn_decl the declaration of the copy assignment operator for "type" has been suppressed because that of "type" is inaccessible
1601	subobj_copy_ctor_decl_suppressed the declaration of the copy constructor for "type" has been suppressed because that of "type" was suppressed
1602	ambig_suppresses_copy_ctor_decl the declaration of the copy constructor for "type" has been suppressed because that of "type" is ambiguous
1603	access_suppresses_copy_ctor_decl the declaration of the copy constructor for "type" has been suppressed because that of "type" is inaccessible
1604	inaccessible_dtor_not_invoked the destructor for "type" will not be called because it is inaccessible and the destructor for "type" was suppressed
1605	file_ends_with_unterminated_type_definition definition at end of file not followed by a semicolon or a declarator
1606	bad_type_for_gnu_sync_function first argument must be a pointer to integer or enumeration type
1607	invalid_gnu_sync_size synchronized operations are valid only on objects of size 1, 2, 4, or 8
1608	extra_arguments_ignored extra arguments ignored

1609	equals_assumed_in_cmd_line_macro_def '=' assumed following macro name "xxxx" in command-line definition
1610	white_space_required_after_macro_name white space is required between the macro name "xxxx" and its replacement text
1611	call_result_should_be_used result of call is not used
1612	warn_unused_result_with_void_return attribute "warn_unused_result" is ignored for void return type
1614	dll_interface_ignored_on_qualified_declaration dllimport/dllexport is ignored on redeclaration using a qualified name
1615	leading_character_ignored_in_char_literal too many characters in character literal -- extra leading characters ignored
1616	first_inline_after_definition entity-kind "entity" cannot be declared inline after its definition at line xxxx
1619	duplicate_function_modifier duplicate function modifier
1620	no_char16_t_representation invalid character for char16_t literal
1621	lprefix_and_uliteral __LPREFIX cannot be applied to char16_t or char32_t literals
1622	cl_unrecognized_calling_convention unrecognized calling convention xxxx, must be one of:
1623	include_next_in_primary_source_file #include_next cannot be used in the primary source file
1624	bad_template_member_definition "entity" cannot be specified in a template member definition -- "entity" assumed instead

1625	local_function_attribute_ignored attribute "xxxx" is ignored on local function declaration
1626	concat_yields_invalid_token concatenation with "xxxx" in entity-kind "entity" does not create a valid token
1627	ambiguous_injected_template_name "entity" is ambiguous (entity-kind "entity" assumed)
1628	function_qualifier_on_static_member a type qualifier is not allowed on a static member function
1629	function_qualifier_on_ctor_or_dtor a type qualifier is not allowed on a constructor or destructor
1630	function_qualifier_on_new_or_delete a type qualifier is not allowed on operator new or operator delete
1631	function_qualifier_on_nonmember a type qualifier is not allowed on a nonmember function
1632	assume_expression_discarded __assume expression with side effects discarded
1633	gnu_attributes_ignored attributes ignored here
1634	useless_type_qualifiers_in_type_name type qualifiers are meaningless here
1642	no_floating_point_double_type double precision floating point type has been disabled
1643	no_floating_point_double_const double precision floating point constants have been disabled
1657	ghs_unable_to_create_pch unable to create precompiled header file: xxxx
1658	ghs_pch_source_dir_mismatch directory of source file not the same as when precompiled header file "xxxx" was created

1695	ghs_trigraph_not_allowed trigraphs not allowed
1696	ghs_register_not_allowed register storage class not allowed
1697	ghs_va_list_not_allowed variable argument list not allowed
1698	ghs_basic_type_not_allowed basic types may not be used -- use typedef
1699	ghs_unspecified_char_not_allowed char without signed or unsigned specifier not allowed

Diagnosics 1700 to 1799

1700	ghs_inline_not_in_cpp "xxxx" is not allowed in C++ -- use "inline"
1701	ghs_inline_not_allowed "xxxx" is not allowed
1702	ghs_uminus_on_unsigned_expr_not_allowed unary minus may not be applied to an unsigned expression GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1703	ghs_ptr_cast_not_allowed cast from type "type" to type "type" not allowed
1704	ghs_exact_float_test_not_allowed floating point variable may not be tested for exact equality or inequality GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book. This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1705	ghs_goto_not_allowed the goto statement is not allowed

1706	ghs_continue_not_allowed the continue statement is not allowed
1707	ghs_break_only_in_switch the break statement may only be used to terminate the case of a switch statement
1708	ghs_label_not_allowed label not allowed This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1709	ghs_compound_statement_required dependent statement in conditional or loop construct must be enclosed in braces
1710	ghs_else_required final non-trivial else clause required for if, else if construct

1711	<p>ghs_no_fall_thru_on_case</p> <p>previous non-empty case clause must be terminated with a break statement</p> <p>If fall through is intended, a special <code>/*FALLTHROUGH*/</code> comment may be placed immediately before the following case label to suppress this diagnostic.</p> <p>Example:</p> <pre>case 1: do_something(); /*FALLTHROUGH*/ case 2: break; ...</pre> <p>When using this feature, note the following:</p> <ul style="list-style-type: none"> • Comments with <code>FALLTHROUGH</code> must use the style in the example above (<code>/* ... */</code>). Other commenting styles (such as <code>/// ... */</code>) will not work. • <code>FALLTHROUGH</code> may be optionally prefixed by a single whitespace. If any words follow <code>FALLTHROUGH</code>, they must be prefixed by at least one whitespace. • MISRA overrides the <code>/*FALLTHROUGH*/</code> feature. <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p> <p>This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.</p>
1712	<p>ghs_default_required_for_switch</p> <p>switch statement must contain a non-trivial default case</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1713	<p>ghs_case_required_for_switch</p> <p>switch statement must contain at least one case</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1714	<p>ghs_callmode_and_nonfunction</p> <p>call mode specifier allowed on function declarations only</p>
1715	<p>ghs_undef_not_allowed</p> <p><code>#undef</code> may not be used</p>

1716	ghs_multiple_hash_ops_not_allowed only one # or ## operator per macro allowed
1717	ghs_bitfield_signedness_is_unspecified bit-fields should be explicitly "signed" or "unsigned"
1718	ghs_octal_constant_not_allowed octal constant (other than zero) not allowed
1719	ghs_comma_outside_for_not_allowed comma operator only allowed in the control expression of a for loop
1720	ghs_wide_string_not_allowed wide string literal not allowed
1721	ghs_id_shadow_not_allowed identifier shadows entity-kind "entity" (declared at line xxxx) GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1722	ghs_typedef_reuse_not_allowed identifier redefines typedef entity-kind "entity" (declared at line xxxx) This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1723	ghs_separate_name_spaces_not_allowed identifier conflicts with entity-kind "entity" (declared at line xxxx) in separate namespace This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1724	ghs_short_circuit_side_effects_not_allowed right hand operand of && or operator may not contain side effects
1725	ghs_sizeof_side_effects_not_allowed side effects not allowed in operand of sizeof operator GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.

1726	ghs_enumeration_init_first_or_all_only only the first or all members of an enumeration may be explicitly initialized GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1727	ghs_bad_ids_for_func_params identifiers must be given for all of the declared parameters
1728	ghs_empty_param_list_not_allowed function with no parameters must be declared with parameter type void GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1729	ghs_primary_exprs_in_logical_ops_required operands of logical && or must be primary expressions
1730	ghs_bitwise_op_on_signed_ints_not_allowed bitwise operation may not be performed on signed integer types
1731	ghs_block_scope_func_decls_not_allowed function must be declared at file scope GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1732	ghs_define_or_undef_in_block_not_allowed #define and #undef may not be used within a block GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1733	ghs_boolean_switch_not_allowed switch expression may not represent a boolean value GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1734	ghs_multiple_function_exits_not_allowed function must have a single exit point

1735	ghs_unsigned_const_wrap_around_not_allowed constant unsigned integer expression may not wrap around This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1736	ghs_initializer_braces_required initializer must use braces to match structure of object GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1737	ghs_op_precedence_dependence_not_allowed expression may not depend on operator precedence rules This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1738	ghs_assign_op_in_boolean_expr_not_allowed assignment operator not allowed in boolean operation This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1739	ghs_lossy_implicit_conversion_not_allowed implicit conversion may result in loss of information when converting from "type" to "type" This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1740	ghs_redundant_explicit_cast_not_allowed redundant explicit cast not allowed
1741	ghs_deep_pointer_indirection_not_allowed no more than 2 levels of pointer indirection may be used
1742	ghs_anonymous_member_not_allowed all members of structure or union must be named
1743	ghs_macro_parens_required definition and each parameter of function-like macro must be enclosed in parentheses

1744	ghs_long_long the type "long long" is not supported for this configuration
1745	ghs_identical_param_ids_required parameter identifiers in declaration different from prototype entity-kind "entity" (declared at line xxxx)
1746	ghs_isolated_null_statements_required null statement must occur on line by itself
1747	ghs_non_std_file_name_chars_not_allowed non-standard character in header file name not allowed GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1748	ghs_include_after_non_pp_token_not_allowed #include statements may only be preceded by preprocessor directives and comments
1749	ghs_dedicated_asm_procs_required in-line assembly must be embedded in dedicated assembly procedures only
1750	ghs_float_loop_counter_not_allowed floating point expression not allowed in condition expression of loop GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1751	ghs_mixed_precision_arithmetic_not_allowed mixed precision arithmetic must use explicit cast This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1752	ghs_ptr_arith_not_allowed pointer arithmetic not allowed
1753	fixedpt_to_fixedpt_conversion fixed-point value does not fit in required fixed-point type
1754	fixedpt_to_float_conversion fixed-point value does not fit in required floating-point type

1755	fixedpt_to_integer_conversion fixed-point value does not fit in required integer type
1756	float_to_fixedpt_conversion floating-point value does not fit in required fixed-point type
1757	integer_to_fixedpt_conversion integer value does not fit in required fixed-point type
1758	unsupported_fixedpt fixed-point type not supported by this target
1759	bad_fixedpt_value fixed-point value out of range
1760	sat_not_first __sat type specifier is not first
1761	missing_vector_underlying_type __vector requires an underlying element type
1762	bad_vector_underlying_type vector of "type" not allowed
1763	bad_vector_dimension explicit dimension of vector of "type" is too large
1764	vector_subscript_out_of_range vector subscript out of range
1766	bad_pragma_placement badly placed #pragma: xxxx
1767	ghs_call_result_cast_to_void result of call is not used (cast to void)
1768	ghs_unattributed_call_result_should_still_be_used result of call is not used
1770	incorrect_pragma incorrect #pragma: xxxx
1771	ghs_code_commented_out possible occurrence of 'commented out' code

1772	ghs_identifier_truncated identifier too long - truncated to xxxx significant characters This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1773	noinline_not_allowed "__noinline" is not allowed
1774	function_call_needs_parens function address expression - function call without arguments needs "()" as the parameter list
1775	numeric_constant_needs_suffix numeric constant should be suffixed to indicate type
1776	macro_not_a_literal_specifier_or_function macro definition can only be used for symbolic constants, function-like macros, or type and storage class qualifiersxxxx This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1777	non_constant_pointer_to_function detected usage of a non-constant pointer to function
1778	function_pointer_prototype_mismatch function pointer prototypes must be identical This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1779	be_addr_of_pid_is_init_val address of a position independent object cannot be an initial value; detected inside the routine at the given position
1780	address_of_local_used_outside_scope address of an automatic variable potentially used out of scope GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.

1781	cl_error_in_config --config option error:
1782	be_safe_ansi_alias_pointer a questionable cast has been found in a routine at the given position - the ANSI aliasing rules are turned off for that routine
1786	argument_not_u5bit_constant argument must be an integer literal in range [0,31]
1787	argument_not_s5bit_constant argument must be an integer literal in range [-16,15]
1788	intrinsic_call_no_decl call to intrinsic function "xxxx" without a prior declaration
1789	bit_field_type_too_large bit-field base type must not be larger than 32 bits
1790	be_loop_cannot_be_vectorized failed to vectorize the loop: xxxx
1791	call_to_nonprototyped_vararg_func call is made to a non-prototyped function, known to use variable arguments: xxxx GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1792	bad_fixedpt_operation_result fixed-point result out of range
1793	bad_dsp_c_operator operator not allowed on type "type"
1794	bad_target_for_extension extension cannot be used with this target configuration
1795	double_under_in_name C++ symbols with the sequence `__` in their names might not be debuggable
1796	section_incompatible use of section "xxxx" not compatible with its other uses -- explicit section assignment ignored

1797	ghs_single_extern_def external identifier shall have exactly one definition GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1798	ghs_safe_ansi_alias_pointer_warn_but_dont_degrade_optimizations a questionable cast from type "type" to type "type" may indicate illegal references. See diagnostics 1518 and 1519.
1799	noarg_c_function_needs_void function declared without a prototype - consider `void' for the parameter list

Diagnostics 1800 to 1899

1800	nonprototype_function_defined function defined without a prototype
1801	bad_weak_string unexpected character in weak identifier sequence
1803	builtin_va_list_not_supported builtin va_list operators not supported
1804	questionable_conversion implicit conversion from type "type" to type "type"
1805	pack_and_pad_nondefault cannot have `#pragma pack' and `#pragma pad' active at the same time
1806	pragma_align_lowers_alignment `#pragma align' lowers the alignment below alignment specified by type
1807	address_of_register taking the address of a register is not allowed
1808	calling_convention_attribute_not_allowed calling convention specification not allowed here

1809	conflicting_calling_convention conflicting calling convention attribute
1810	no_packed_floating_point_types packed floating point types not allowed
1811	bytereversed_int_or_short_only byte ordering qualifiers only apply to pointer and integral types larger than char, not "type"
1812	ghs_cast_away_string_literal_const implicit const-cast of string literal
1813	argument_not_required_const_range argument must be an integer literal in range xxxx
1814	argument_truncation_range argument will be truncated to range xxxx
1815	dwarf1_multiple_text_sections Dwarf 1 cannot represent functions that are defined in distinct .text sections in the same compile unit
1816	ghs_extern_decl_not_in_header external declaration should be in header file
1817	ghs_linkonce_and_nonfunction linkonce specifier allowed on function declarations only
1818	ghs_fp_divide_by_zero floating point division by zero
1819	ghs_bitfield_used_within_union bit-fields within union probably used to access sub-parts of larger data type
1820	ghs_floating_used_within_union floating point types within union depend on underlying bit representation
1821	ghs_unreachable_code_in_switch_not_allowed unreachable code in switch statement
1822	ghs_multicharacter_literal_used value of multicharacter literal is implementation-defined

1823	ghs_multibyte_char_used multibyte character detected
1824	ghs_array_size_required incomplete array type with external linkage not allowed for entity-kind "entity" (declared at line xxxx)
1825	ghs_comma_not_allowed comma operator not allowed
1826	ghs_if_without_compound_statement compound statement required for if construct
1827	ghs_union_not_allowed union not allowed
1828	ghs_static_nonprototype_function_defined static function defined without a prototype This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1829	ghs_macro_parameter_parens_required parameter of function-like macro must be enclosed in parentheses
1830	ghs_hash_ops_not_allowed # or ## operator not allowed
1831	ghs_no_defined_during_preproc_expansion token "defined" may not be generated during #if or #elif expansion
1832	ghs_func_ptr_cast_not_allowed conversion from type "type" to type "type" not allowed
1833	ghs_obj_ptr_cast_not_allowed conversion from type "type" to type "type" not allowed
1834	ghs_ptr_int_cast_not_allowed cast from type "type" to type "type" not allowed
1835	ghs_ptr_ptr_cast_not_allowed cast from type "type" to type "type" not allowed

1836	<p>ghs_qual_removing_ptr_cast_not_allowed</p> <p>cast from type "type" to type "type" that removes underlying qualifier is not allowed</p>
1837	<p>ghs_default_clause_must_be_final_clause</p> <p>default clause must be final clause of switch statement</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1838	<p>ghs_switch_label_must_be_at_top_level</p> <p>case or default label not scoped in top level compound statement of switch statement</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1839	<p>ghs_macro_mixes_asm_and_c</p> <p>entity-kind "entity" (declared at line xxxx) mixes in-line assembly language and C/C++</p>
1840	<p>ghs_identifier_reuse_not_allowed</p> <p>identifier reused from declaration of entity-kind "entity" (declared at line xxxx)</p> <p>This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.</p>
1841	<p>ghs_typedef_must_be_unique</p> <p>typedef name conflict between entity-kind "entity" (declared at line xxxx) and identifier</p> <p>This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.</p>
1842	<p>ghs_tag_must_be_unique</p> <p>tag name conflict between entity-kind "entity" (declared at line xxxx) and identifier</p> <p>This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.</p>

1843	ghs_static_storage_id_reuse_not_allowed static storage name conflict between entity-kind "entity" (declared at line xxxx) and identifier This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1844	ghs_identical_param_and_return_types_required parameter or return type in declaration different from prototype entity-kind "entity" (declared at line xxxx) GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1845	ghs_too_many_break_statements multiple break statements per iteration statement not allowed
1846	ghs_definition_in_header_file object or function defined in header file
1847	ghs_complex_integer_cast_not_allowed cast of complex integer expression with underlying type "type" to non-integer type "type" not allowed
1848	ghs_complex_float_cast_not_allowed cast of complex floating point expression from type "type" to type "type" not allowed
1849	ghs_bitwise_expr_needs_cast bitwise ~ or << expression must be immediately cast back to underlying type, "type"
1850	ghs_plain_char_for_char_values_only plain char type can only be used for storage of character values This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1851	ghs_non_plain_char_for_numeric_values_only signed or unsigned char type can only be used for storage of numeric values
1852	ghs_plain_char_operand_not_allowed only assignment and equality operators may be used on plain char operand

1853	ghs_boolean_expr_required effectively boolean expression required
1854	ghs_boolean_expr_not_allowed effectively boolean expression not allowed This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1855	ghs_explicit_test_required explicit test against zero required
1856	ghs_inc_or_dec_result_used result of increment or decrement expression may not be used
1857	ghs_boolean_op_is_invariant result of boolean operation is invariant
1858	ghs_subscript_on_array_type_only subscript operator may only be applied to objects declared as an array type
1859	ghs_macro_misuse_not_allowed macro definition can only be used for a braced initializer, constant, parenthesized expression, type qualifier, storage class specifier, or do-while-zero construct This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1860	ghs_macros_must_balance_brackets macro definition must balance all braces, parentheses, and brackets This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1861	ghs_reserved_name_redef_or_undef reserved identifier, macro, or function name "xxxx" cannot be defined, redefined, or undefined
1862	ghs_function_like_macro_not_allowed function-like macro not allowed -- use function instead

1863	ghs_non_integer_implicit_conversion_not_allowed implicit conversion from underlying type, "type", to non-integer underlying type, "type", not allowed This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1864	ghs_narrowing_implicit_conversion_not_allowed implicit conversion from underlying type, "type", to narrower underlying type, "type", not allowed This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1865	ghs_same_width_implicit_conversion_not_allowed implicit conversion from underlying type, "type", to same width underlying type, "type", not allowed This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1866	ghs_signedness_changing_implicit_conversion_not_allowed implicit conversion from underlying type, "type", to underlying type, "type", changes signedness This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1867	ghs_complex_implicit_conversion_not_allowed implicit conversion of complex expression from underlying type, "type", to underlying type, "type", not allowed This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1868	ghs_arg_implicit_conversion_not_allowed implicit conversion of non-constant function argument from underlying type, "type", to underlying type, "type", not allowed This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.

1869	<p>ghs_ret_implicit_conversion_not_allowed</p> <p>implicit conversion of non-constant return expression from underlying type, "type", to underlying type, "type", not allowed</p> <p>This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.</p>
1870	<p>ghs_boolean_implicit_conversion_not_allowed</p> <p>implicit conversion of boolean expression from underlying type, "type", to underlying type, "type", not allowed</p> <p>This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.</p>
1871	<p>ghs_non_float_implicit_float_conversion_not_allowed</p> <p>implicit conversion from floating type, "type", to non-floating type, "type", not allowed</p> <p>This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.</p>
1872	<p>ghs_narrowing_implicit_float_conversion_not_allowed</p> <p>implicit conversion from floating type, "type", to narrower type, "type", not allowed</p> <p>This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.</p>
1873	<p>ghs_complex_implicit_float_conversion_not_allowed</p> <p>implicit conversion of complex floating point expression from type, "type", to type, "type", not allowed</p> <p>This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.</p>
1874	<p>ghs_arg_implicit_float_conversion_not_allowed</p> <p>implicit conversion of function argument from floating type, "type", to type, "type", not allowed</p> <p>This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.</p>

1875	ghs_ret_implicit_float_conversion_not_allowed implicit conversion of return expression from floating type, "type", to type, "type", not allowed This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1876	ghs_end_of_line_comment_not_allowed // style comment not allowed
1877	ghs_null_ptr_cast_not_allowed cast of 0 from type "type" to type "type" not allowed
1878	ghs_widening_complex_integer_cast_not_allowed cast of complex integer expression with underlying type "type" to wider type "type" not allowed
1879	ghs_same_width_complex_integer_cast_not_allowed cast of complex integer expression with underlying type "type" to same width type "type" not allowed
1880	ghs_signedness_changing_complex_integer_cast_not_allowed cast of complex integer expression with underlying type "type" to type "type" changes signedness
1881	ghs_explicit_test_of_constant_required explicit test of constant against zero required
1882	ghs_header_needs_include_guard header file needs guard to prevent multiple inclusion
1883	ghs_call_of_virtual_in_ctor_or_dtor call of virtual function inside constructor or destructor when extract vptrs is used
1884	ghs_break_required previous non-empty case clause doesn't fall through but must be terminated with a break statement This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1885	ghs_underscore_name_redef_or_undef reserved identifier, macro, or function name "xxxx" beginning with an underscore cannot be defined, redefined, or undefined

1886	ghs_cmd_line_macro_misuse_not_allowed command-line macro definition can only be used for a braced initializer, constant, parenthesized expression, type qualifier, storage class specifier, or do-while-zero constructxxxx This diagnostic is only issued when the compiler checks for conformance with an associated MISRA rule. As such, it will not be issued (at any severity) if the associated MISRA rule is not enabled.
1887	ghs_tda_disabled TDA is disabled for this configuration
1888	ghs_keyword_def_or_undef #define or #undef of keyword "xxxx"
1889	ghs_bad_alignfunc_alignment invalid alignfunc value
1890	ghs_init_but_not_modified initialized non-const entity-kind "entity" was used but never modified
1891	ghs_invalid_section_renaming_option invalid section renaming option: xxxx
1892	ghs_bitwise_with_comparison comparison operator has higher precedence than bitwise operator; parentheses recommended GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1893	ghs_wrong_constructor_init_order entity-kind "entity" will be initialized before the previous constructor initializer, entity-kind "entity"
1894	ghs_prototype_restrict_qualifiers_differ "restrict" qualifier in declaration different from prototype entity-kind "entity" (declared at line xxxx)
1895	ghs_bool_to_pointer_conversion implicit conversion from bool to pointer type
1896	ghs_reserved_tracereg_use use of reserved trace register

1897	ghs_invalid_dc_pragma incorrect #pragma double_check xxxx
1898	ghs_if_statement_no_effect if statement does not affect control flow
1899	ghs_gets_unsafe use of gets is unsafe; use fgets instead GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.

Diagnostics 1900 to 1999

1900	ghs_scanf_unsafe use of %s in scanf is unsafe; specify a maximum field width GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1901	ghs_assign_const_addr_to_bool assignment of constant address to bool
1902	ghs_defined_needs_identifier defined must be followed by an identifier
1903	ghs_cannot_be_used_as_macro "xxxx" cannot be used as a macro
1904	ghs_sizeof_array_parameter sizeof pointer parameter yields size of pointer-to-type where size of array-of-type may have been intended
1905	ghs_bitwise_with_shift shift operator has higher precedence than bitwise operator; parentheses suggested
1906	ghs_call_setjmp_or_longjmp call to setjmp() and longjmp() is not allowed GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.

1907	<p>ghs_call_atof_atoi_atol</p> <p>call to <code>atof()</code>, <code>atoi()</code>, <code>atol()</code>, and <code>atoll()</code> is not allowed -- use <code>strtod()</code>, <code>strtol()</code>, or <code>strtoll()</code> instead</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1908	<p>ghs_string_initializer_truncated</p> <p>initialization of array of type "type" discards terminating null character</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1909	<p>ghs_comma_only_in_1st_or_3rd_of_for_loop</p> <p>comma operator only allowed in the first or third expression of a for loop</p>
1910	<p>ghs_part_of_expr_has_no_effect</p> <p>part of expression has no effect</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1911	<p>ghs_invalid_bit_field_initializer</p> <p>this expression cannot be used as the initializer for a bit field</p>
1912	<p>ghs_global_reg_must_have_scalar_type</p> <p>global register variable must have integral or pointer type</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1913	<p>ghs_register_variable_too_wide</p> <p>variable's type is too wide for a single machine register</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1914	<p>ghs_bool_bitfield_remark</p> <p>declared size for boolean bit-field is greater than 1</p>
1915	<p>ghs_cast_involves_incomplete_class_pointer</p> <p>cast involving pointer to incomplete class type "type" will not adjust for inheritance</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>

1916	ghs_alignof_bitfield <code>__alignof__</code> operator cannot be applied to a bit-field
1917	ghs_zero_size_ptrdiff subtraction of pointers to zero-sized type "type"
1918	ghs_too_many_variables out of resources while compiling function "xxxx" (internal variable limit exceeded) The compiler limits the number of variables you can have per function to 65536, which is what causes this error. This limit includes both explicitly declared variables and internal variables the compiler produces. There is no way to increase this limit. One common cause of this error is run-time error checking, which instruments the C code and creates many internal variables. You might want to work around the limitation by selectively disabling run-time error checks.
1922	ghs_string_literal_comparison comparison with string literal has unspecified result
1923	ghs_unusual_pointer_literal_comparison unusual comparison of non-integer literal to pointer
1924	ghs_unusual_pointer_literal_assignment unusual assignment of non-integer literal to pointer
1925	ghs_ufd_type_requires_constructor type "type" must define a default constructor to initialize its members lacking default constructors
1926	ghs_ufd_uninitialized_fields entity-kind "entity" does not initialize the following fields:
1927	ghs_ufd_arg_is_not_modifiable_pointer initialized argument must be a pointer or reference to non-const GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1928	ghs_ufd_arg_does_not_exist argument index is greater than number of parameters
1929	ghs_plain_bitfield_may_overflow bit-field of same width as underlying type should be explicitly "signed" or "unsigned"

1930	<p>ghs_cannot_override_final_member_function</p> <p>member entity-kind "entity" is marked "final" and cannot be overridden</p>
1931	<p>ghs_sizeof_complicated_expression</p> <p>operand of sizeof is not a type, variable, or dereferenced pointer expression</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1932	<p>ghs_variable_format_string</p> <p>format string parameter is not a compile-time constant</p> <p>This diagnostic is suppressed in cases where the diagnostic-triggering format string argument is both a parameter of the enclosing function and specified to be a format string. For example, when the enclosing function is annotated with <code>_attribute__((format(printf,x,y)))</code>.</p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1933	<p>ghs_va_list_passed_to_ellipsis</p> <p>"va_list" passed through ellipsis</p>
1934	<p>ghs_struct_passed_to_ellipsis</p> <p>aggregate type passed through ellipsis</p>

1935	<p>ghs_constructor_should_be_explicit</p> <p>one-argument constructor should be declared "explicit"</p> <p>This remark is issued whenever you declare a one-argument constructor without the <code>explicit</code> keyword. A non-explicit constructor participates in implicit type conversions. For example:</p> <pre>struct Integer { int value; Integer(int v): value(v) {} }; void foo(const Integer &i); int main() { foo(0); } //Implicit conversion to Integer</pre> <p>This program compiles because 0 may be implicitly converted to <code>Integer</code> via the non-explicit constructor. By adding the <code>explicit</code> keyword, you prevent such conversions; to pass 0 to <code>foo()</code>, you would have to write:</p> <pre>struct Integer { int value; explicit Integer(int v): value(v) {} }; void foo(const Integer &i); int main() { foo(Integer(0)); }</pre>
1936	<p>ghs_comparison_of_comparison</p> <p>comparison of comparison where two comparison expressions may have been intended</p>
1937	<p>ghs_dubious_comparison_of_bool</p> <p>possibly unintentional comparison of <code>bool</code> to non-<code>bool</code></p> <p>GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.</p>
1938	<p>ghs_bytereversed_bitfield</p> <p>byte ordering qualifiers do not apply to bit-fields</p>
1939	<p>ghs_bytereversed_parameter</p> <p>byte ordering qualifiers do not apply to parameters</p>
1940	<p>ghs_bytereversed_initializer</p> <p>byte-reversed objects cannot be statically initialized</p>
1941	<p>restrict_qualifier_ignored</p> <p>restrict qualifier is ignored</p>

1942	ghs_attribute_requires_typedef attribute "xxxx" may only be applied to a typedef
1943	ghs_strong_typedef_forbids_implicit_conversion strong typedef rules forbid implicit conversion from type "type" to type "type"
1944	ghs_two_cases_required_for_switch switch statement must contain at least two cases
1945	ghs_attribute_ignored_in_this_context the "xxxx" attribute is ignored in this context
1946	ghs_obsolete_attribute_syntax type attributes should follow the class/struct/union/enum keyword, not the closing brace
1947	ghs_field_not_at_requested_offset struct field is being placed at offset xxxx instead of requested offset This error is issued in connection with the at attribute.
1948	ghs_address_of_member_function_with_calling_convention a member function with a non-default calling convention may not have its address taken
1949	ghs_placement_array_new placement new[] may invoke undefined behavior and should not be used
1950	ghs_multiple_definitions_of_symbol multiple definitions of symbol "xxxx"
1951	ghs_virtual_function_without_virtual_keyword virtual entity-kind "entity" should be declared "virtual"
1952	ghs_addition_inside_shift + or - operator has higher precedence than shift operator; parentheses recommended
1953	ghs_string_concatenation adjacent string literals will be concatenated
1954	ghs_strncmp_argument_mismatch third argument to strncmp does not match the length of the string literal argument

1955	ghs_memset_length_is_zero third argument to memset is zero; second and third arguments may have been swapped accidentally
1956	ghs_length_is_not_multiple_of_target_size sizeof argument xxxx to xxxx does not divide value of argument xxxx
1957	ghs_malloc_of_strlen strlen used in memory allocation; strlen+1 was probably intended
1958	ghs_dubious_boolean_expression implausible operator at top level of boolean expression
1959	ghs_uninitialized_local_variable local entity-kind "entity" not initialized
1960	ghs_dubious_pair_of_comparisons apparently redundant comparisons may indicate a mistake
1961	ghs_relational_comparison_to_null pointer comparison to NULL depends on implementation-defined pointer signedness
1962	ghs_nonstd_case_range case range syntax is non-standard
1963	ghs_right_brace_after_label label not followed by statement is non-standard GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1964	ghs_cl_coding_standard_file_not_found cannot open coding standard file xxxx
1965	ghs_cl_coding_standard_file_error error in coding standard file: xxxx
1966	ghs_cl_tag_not_recognized unused coding standard tag or malformed error number xxxx

1967	ghs_dangerous_trigraph trigraph in source code has possibly unintended effect on semantics GHS Standard Mode enables this diagnostic. For more information about GHS Standard Mode, see the MULTI: Building Applications book.
1968	ghs_uninitialized_local_struct_variable local struct/union entity-kind "entity" not initialized
1969	ghs_lint_columns_dont_match statement begins in column different from first statement in its block
1970	ghs_callt_not_supported call tabled functions not supported in this compiler
1971	ghs_callt_interrupt_not_supported call tabled interrupt functions are not supported
1972	ghs_multiple_noninterface_base_class base specifier list contains more than one "non-interface" class Java and some other object-oriented languages support multiple inheritance of "interfaces", but only single inheritance of "implementation". In C++ terms, an "interface" is a class that contains only pure virtual member functions and static member data (in other words, it does not contain code or non-static data members). This diagnostic is given whenever a class specifies two or more "non-interface" classes in its list of base classes.
1973	ghs_packed_qualifier_dropped conversion drops "__packed" qualifier
1974	ghs_overloaded_and_or_comma overloading the &&, , or comma operators is dangerous
1975	ghs_dyn_initializer dynamic initialization causes code to be executed before main()
1976	ghs_long_constant_needs_suffix "long" or "long long" constant should be suffixed to indicate type
1977	ghs_strong_fptr_forbids_explicit_conversion strong fptr rules forbid explicit conversion from type "type" to type "type"

1978	ghs_strong_fptr_forbids_implicit_conversion strong fptr rules forbid implicit conversion from type "type" to type "type"
1979	ghs_strong_fptr_forbids_union strong fptr rules prohibit type "type" from being a member of a union
1980	ghs_not_enough_initializers not enough initializers; trailing elements will be default-initialized
1981	ghs_empty_initializer_is_nonstandard empty initializer is non-standard
1982	ghs_insufficient_stack_alignment target stack alignment is insufficient to guarantee alignment of xxxx
1983	ghs_char_escape_backslash_e character escape sequence "\e" is non-standard
1984	ghs_char_escape_octal octal character escape sequences are not allowed
1985	ghs_char_escape_hexadecimal hexadecimal character escape sequences are not allowed
1986	ghs_misra_shift_count_too_large shift count is too large for underlying type "type"
1987	ghs_bad_ptr_ref_argument argument of type "type" is incompatible with ptr_ref parameter
1988	ghs_fmt_arg_has_incorrect_type format argument has incorrect type "type"
1989	ghs_mismatched_memcpy_sizes arguments xxxx and xxxx to xxxx have pointer types whose targets differ in size
1990	ghs_memcpy_size_has_no_sizeof argument xxxx to xxxx must be of the form n*sizeof(a)

1991	ghs_length_uses_wrong_sizeof argument xxxx to xxxx has a type inconsistent with the sizeof-expression in argument xxxx
1996	ghs_linkonce_cannot_be_inline a __linkonce function cannot be inline
1997	ghs_linkonce_cannot_be_static a __linkonce function cannot be static
1999	ghs_misra_recursion function "xxxx" contains possible recursion

Diagnostics 2000 to 2099

2000	ghs_attribute_not_implemented attribute "xxxx" is not implemented and will be ignored
2001	ghs_function_like_macro_invocation_not_allowed invocation of function-like macro not allowed
2002	ghs_character_greater_than_127 character greater than 127 not allowed
2003	ghs_pointer_to_larger_alignment alignment of type pointed to by "type" is smaller than the one pointed to by "type", which may lead to a misaligned memory access
2004	ghs_signed_unsigned_promotion operation promotes signed type "type" to unsigned type "type", which may lead to unintended results
2005	ghs_whitespace_after_backslash_not_recommended "\\" followed by white space is not a line splice
2006	ghs_sideeffect_missing_volatile __[no]sideeffect must be preceded by volatile, otherwise it is ignored
2007	ghs_eagle_tag_bad_usage '__ghs_eagle_tag' may only be used as a simple assignment inside of 'if' statement conditional; 'if' statement may not have 'else'

2008	ghs_no_var_init potentially unintended initializer with no named variable
2009	ghs_sideeffect_nosideeffect_mix mixing <code>__sideeffect</code> and <code>__nosideeffect</code> qualifiers not allowed
2010	ghs_strong_fptr_non_fptr_typedef 'strong_fptr' attribute invalid for non-function pointer typedef
2011	ghs_strong_fptr_unnamed_struct 'strong_fptr' attribute invalid for unnamed struct/class
2012	ghs_nonstd_static_assert Use of static assertions is nonstandard
2013	ghs_future_library_name_redef_or_undef identifier "xxxx" reserved for future library use cannot be defined, redefined, or undefined
2014	ghs_expression_in_dependent_typeof an expression is not allowed in a template-dependent <code>typeof</code> specifier
2015	ghs_strong_fptr_with_struct_member_no_sfptr type "type" has non-strong function pointers -- it cannot be a member or base class of strong_fptr type "type"
2016	ghs_sideeffect_qualifier_on_automatic_var non-static local variable may not be qualified by, or contain field qualified by, ' <code>__sideeffect</code> '
2017	ghs_unsequenced_assignments detected potentially undefined behavior resulting from multiple unsequenced assignments to a stored value
2018	ghs_unsequenced_assignment_and_use detected potentially undefined behavior resulting from an unsequenced read of, and assignment to, a stored value
2019	ghs_uninitialized_local_array_variable local array entity-kind "entity" not initialized
2020	ghs_packing_of_non_POD packing ignored on non-POD type "type"

2021	ghs_not_inlining_inline_func not inlining call of inline function "xxxx" because xxxx
2022	ghs_not_inlining_always_inline_func not inlining call of always_inline function "xxxx" because xxxx
2023	ghs_inlining_non_inline_func inlining call of function "xxxx" even though it is not declared as inline
2024	ghs_optimization_attribute_conflict conflicting optimization strategy attribute
2025	ghs_strong_fptr_converted_to_non_strong_type strong fptr type "type" converted to non-strong fptr type "type"
2026	ghs_non_strong_type_converted_to_strong_fptr non-strong fptr type "type" converted to strong fptr type "type"
2027	ghs_split_section_exists_as_user_section section "xxxx" already exists as a user-defined section, not being used as individual section
2028	ghs_user_section_exists_as_split_section user defined section "xxxx" was used as an individual section, potentially undefined behavior
2029	ghs_identifier_on_blacklist identifier "xxxx" is on blacklist
2030	ghs_bool_expr_mcdc_ready boolean expression is not MC/DC ready
2031	ghs_target_does_not_support_thread_local thread local storage is not supported for this target
2032	ghs_array_element_alignment_exceeds_size cannot honor element alignment: size of array element is less than alignment of array element
2033	ghs_unintentional_loss_of_precision arithmetic operation loses precision -- consider adding an explicit cast to one of the operands

2034	ghs_invalid_register_number register is not a globalreg-reserved register The compiler only allows mapping a global variable to a specific register if it is one of the registers available with the use of the -globalreg option. For more information, see “GNU C/C++ Extensions” in the chapter “Green Hills C” in <i>MULTI: Building Applications</i> .
2035	ghs_cannot_allocate_specified_register cannot allocate "xxxx" to specified register The compiler rejects mapping variables to registers that are not general purpose or that are used in instruction sequences implemented using fixed registers. For more information, see “GNU C/C++ Extensions” in the chapter “Green Hills C” in <i>MULTI: Building Applications</i> .
2036	ghs_cannot_allocate_specified_caller_saved_register cannot allocate "xxxx" to specified caller-saved register The compiler rejects mapping variables to caller-saved registers. This is because such registers are potentially overwritten by function calls during the variables' lifetime. For more information, see “GNU C/C++ Extensions” in the chapter “Green Hills C” in <i>MULTI: Building Applications</i> .
2037	ghs_extern_declared_but_not_referenced extern entity-kind "entity" declared but not referenced
2038	ghs_static_routine_may_not_be_weak a function with internal linkage may not be weak
2039	ghs_default_arg_on_block_extern_decl default argument in block scope extern declaration differs from default argument from declaration in enclosing scope; the default argument value from the block scope declaration will be used (even if the enclosing scope's declaration is referenced directly via a qualified name) The compiler rejects valid code in this instance to work around a non-conformance issue in its implementation of C++. For more information, see “Block Scope Declarations Not Ignored by Qualified Lookup” in the chapter “Green Hills C++” in <i>MULTI: Building Applications</i> .
2040	ghs_default_clause_must_be_first_or_final_clause default clause must be first or final clause of switch statement
2041	ghs_void_ptr_arith_cast_not_allowed cast from type "type" to type "type" not allowed

2042	ghs_header_not_allowed use of header file "xxxx" not allowed
2043	ghs_misaligned_field_referenced_early entity-kind "entity" is misaligned and its address was referenced before the class was complete; the resulting pointer will not be implicitly <code>__packed</code>
2044	ghs_pragma_weak_deprecated_with_cxx Using <code>"#pragma weak"</code> with C++ symbols is deprecated and may not work correctly; please use <code>__attribute__((weak))</code> instead
2045	ghs_incomplete_return_type_for_vtable_thunk entity-kind "entity" requires a virtual table thunk but its return type, "type", is incomplete. Please ensure that "type" is defined/instantiated in this translation unit.
2046	ghs_cannot_parse_macro_invocation cannot parse this macro invocation
2047	ghs_float_literal_too_long floating constant is too long.
2048	ghs_loop_vectorized succeeded in vectorizing the loopxxxx
2049	ghs_direct_call_to_constructor calling a constructor directly is not allowed
2050	ghs_lambda_init_capture_default_arg lambda init-capture not allowed in default argument
2051	ghs_auto_func_not_alone function with deduced return type must be only declaration on declarator list
2052	ghs_lambda_init_capture_followed_by_ellipsis A lambda init-capture must not be followed by an ellipsis
2053	ghs_pointer_comparison_linktime_entity_not_accepted pointer comparison of link-time entity is not accepted
2054	ghs_limit_macro_parameter_pasting token concatenation of stringized macro parameter not allowed

2055	ghs_misra_forbidden_macro_expansion expansion of macro xxxx is not allowed
2056	ghs_misra_forbidden_function call to xxxx() is not allowed
2057	ghs_bad_type_for_load_no_speculate_call first argument must be a pointer to integer or a pointer to pointer
2058	ghs_invalid_load_no_speculate_size read object must be of size 1, 2, 4, or 8 bytes
2059	ghs_nonstd_relational_pointer_comparison_to_null relational pointer comparison against a null pointer constant is not allowed
2060	ghs_no_splicing_single_line_comments splicing a single-line comment is forbidden
2061	ghs_no_id_macro_overlap identifiers not distinct from macro names; previously used as entity-kind "entity" (declared at line xxxx)
2062	ghs_defaulted_special_member_cannot_be_constexpr defaulted special member function cannot be constexpr because the corresponding implicitly declared special member function would not be constexpr
2063	ghs_lowercase_l_literal_suffix Lowercase 'l' is not allowed in a literal suffix, use uppercase 'L' instead
2064	ghs_non_static_inline_function inline functions must have static storage class
2065	ghs_if_directive_not_zero_or_one the condition of an #if directive must evaluate to zero or one
2066	ghs_extern_func_defn_without_decl definition of external function without a prior declaration

2067	ghs_extern_object_defn_without_decl definition of external object without a prior declaration
2068	ghs_sym_not_allowed xxxx is not allowed
2069	ghs_terminate_hex_and_octal_escapes all octal or hex escape sequences may only be followed by an escape sequence
2070	ghs_static_in_array_declarator static used in array declarator
2071	ghs_function_return_value_not_used function return value not used
2072	ghs_implicit_enum_values_must_be_unique an enumerator with an implicit value may not have the same value as another enumerator
2073	ghs_no_backwards_gotos backwards gotos are not allowed
2074	ghs_designated_initializer_for_array_with_no_bound designated initializers may not be used for an array without an explicit bound
2075	ghs_object_element_initialized_more_than_once there is more than one initializer for this element
2076	ghs_result_value_of_assignment_is_used the resulting value of this assignment is used
2077	ghs_conv_involving_ptr_to_incomplete_type conversion to or from pointer to incomplete type is not allowed
2078	ghs_function_parameter_modified function parameter modified
2079	ghs_function_parameter_nonconst_addr non-constant pointer to function parameter

2080	ghs_incr_or_decr_with_other_side_effects increment or decrement in full expression with other side effects
2081	ghs_no_strings_in_memcmp string argument may not be passed to memcmp
2082	ghs_match_types_in_memcmp both pointers passed to memcmp, memmove, or memcpy must have compatible types
2083	ghs_memcmp_restricted_type memcmp argument is a forbidden type
2084	ghs_null_pointer_constant_must_be_explicit null pointer constants must be of the form 'NULL' or '(void*)0'
2085	ghs_no_deref_of_stdio_file_type pointers to the C library's FILE type should not be dereferenced
2086	ghs_restricted_cast invalid cast from "type" to "type": essential types do not match
2087	ghs_no_side_effect_in_initializer_list initializer lists shall not contain side effects
2088	ghs_goto_must_be_to_same_or_enclosing_block goto must be to the same or an enclosing block
2089	ghs_array_must_be_fully_initialized array must be fully initialized
2090	ghs_type_could_be_opaque type definition unnecessary in this scope; consider an opaque type
2091	ghs_no_implicit_conversion_on_assignment invalid implicit assignment of underlying type "type" to underlying type "type"

2092	ghs_no_implicit_assignment_widening invalid assignment of underlying type "type" to wider underlying type "type"
2093	ghs_macro_arg_expanded_and_unexpanded mixed usage of argument in macro: it is used in an expandable form and in a non-expandable form (i.e. as an operand of # or ##)
2094	ghs_array_param_not_enough_elements argument passed to array parameter does not have enough elements
2095	ghs_static_array_param_not_enough_elements argument passed to array parameter with static keyword does not have enough elements
2096	ghs_function_defined_with_old_style_params function defined with old-style parameter list
2097	ghs_at_most_one_break_or_goto_out_of_iter_stmt More than one break or goto out iteration statement at line xxxx
2098	ghs_inappropriate_essentially_char_add_sub Inappropriate use of essential char type in additive operator
2099	ghs_inappropriate_essential_type_for_operand Inappropriate essential type used in operand

Diagnostics 2100 to 2199

2100	ghs_different_essential_type_category_for_usual_arithmetic_conversions Usual arithmetic conversions performed on operands with different essential type categories
2101	ghs_language_extensions_not_allowed language extensions are not allowed
2102	ghs_type_declared_in_file_but_not_referenced type "xxxx" was declared but never referenced

2103	ghs_tag_declared_in_file_but_not_referenced tag "xxxx" was declared but never referenced
2104	ghs_macro_declared_in_file_but_not_referenced macro "xxxx" was declared but never referenced
2105	ghs_no_implicit_arithmetic_widening implicit cast of composite expression with essential type "type" to wider type "type" not allowed
2106	ghs_too_many_volatile_reads expression has too many volatile reads
2107	ghs_too_many_volatile_writes expression has too many volatile writes
2108	ghs_no_composite_cast_widening invalid cast from "type" to "type": cannot cast to wider essential type
2109	ghs_alignment_change_yields_non_portable_type xxxx is a struct with an explicit change in alignment -- this may cause the calling convention to be non-portable
2110	ghs_newline_expected_after_pragma_asm newline expected after #pragma asm
2111	ghs_max_template_depth_exceeded maximum template depth exceeded
2112	ghs_max_operator_arrow_depth_exceeded maximum operator arrow depth exceeded
2114	ghs_multiple_matches_in_c11_generic selector type matches multiple associations
2115	ghs_const_inline_static_data_member_without_initializer a const inline static data member declaration requires an in-class initializer
2116	ghs_alias_template_requires_template_arguments entity-kind "entity" (declared at line xxxx) used without template arguments

2117	ghs_cannot_resolve_pack cannot resolve parameter pack
2118	ghs_problematic_attr_alignment_reduction_on_typedef this attribute reduces the alignment of the typedef, and while that will be respected for struct/field layout, the compiler will not generate code to handle misaligned accesses for objects of this type
2119	ghs_strong_fptr_cannot_distinguish_functions cannot overload functions distinguished by a difference in strong function pointer type alone
2120	ghs_strong_fptr_redecl_mismatch this redeclaration has a different strong function pointer type than the original declaration
2121	ghs_pct_n_with_printf_s %n specifier not allowed with printf_s
2122	ghs_bitwise_copy_of_non_trivially_copyable_type this object is not trivially copyable; bitwise copies/writes may invoke undefined behavior
2123	ghs_misaligned_ptr_cast_not_allowed CERT EXP36-C: conversion from type "type" (alignment: n) to type "type" (alignment: n) not allowed
2124	ghs_cyclomatic_complexity_mismatch cyclomatic complexity mismatch: evaluated at n vs expected (limit) n
2125	ghs_cyclomatic_complexity_construct_not_supported cyclomatic complexity checking does not currently support this construct
2126	ghs_comparing_padding_not_allowed CERT EXP42-C: cannot pass type "type" to memcmp: points to a struct/union with n byte(s) + n bit(s) of padding after field "xxxx" (at offset n byte(s) + n bit(s))
2127	ghs_unsafe_ato_conversion_not_allowed CERT ERR34-C: xxxx performs unsafe string-to-number conversion; use xxxx instead

2128	ghs_unsafe_scanf_parse_not_allowed CERT ERR34-C: unsafe string-to-number conversion performed during scanf/fscanf/sscanf parsing; use fgets and a strtol() function instead
2129	ghs_strtol_with_null_not_allowed CERT ERR34-C: cannot call strtol with null as the second argument; unsafe string-to-number conversion
2130	ghs_struct_last_field_no_size_one_array CERT DCL38-C: possible improper declaration of flexible array member detected (last member of multi-element struct cannot be an array of size 1)
2131	ghs_no_passing_padded_struct CERT DCL39-C: cannot pass a padded struct/union into a function: "type" contains n byte(s) + n bit(s) of padding after field "xxxx" (at offset n byte(s) + n bit(s))
2132	ghs_no_calling_va_arg_with_impossible_type CERT EXP47-C: cannot call va_arg with type "type": will never match due to default argument promotion; use type "type" instead
2133	ghs_no_scanf_string_specifier_without_width CERT STR31-C: scanning in an unbounded number of characters can cause a buffer overflow; add a width specifier
2134	ghs_no_sprintf CERT STR31-C: using sprintf is risky and can cause a buffer overflow; use snprintf instead
2135	ghs_must_allocate_flex_array_structs_dynamically CERT MEM33-C: Flex array structs must be allocated dynamically (otherwise no space reserved for the flex array)
2136	ghs_no_dereference_flex_array_struct_ptr CERT MEM33-C: Cannot dereference pointer to flex array struct (can cause copy of incorrect size)
2137	ghs_no_storing_or_modifying_temp_array CERT EXP35-C: Cannot modify a temporary array or access it after the end of the sequence point (undefined behavior)

2138	ghs_fast_eof_msg fasteof: xxxx
2139	ghs_fast_eof_msg2 fasteof: xxxx at line xxxx
2140	ghs_stack_frame_may_overrun_guard_page Stack frame of function "xxxx" has size xxxx bytes, which is large enough to bypass stack overflow guard pages (typically 4095 bytes)
2141	ghs_side_effect_in_unevaluated_alignof_operand unevaluated operand of alignof operator has side effects
2142	ghs_side_effect_in_unevaluated_generic_operand unevaluated operand of _Generic operator has side effects
2143	ghs_ropi_addr_in_static_init address of a position independent object cannot be used in static initialization
2144	ghs_attr_on_unsupported_target this attribute is not supported on this target
2145	ghs_constraint_rule identifier "xxxx" is xxxx in constraint rules: xxxx
2146	ghs_constraint_rule_file_syntax_error syntax error in constraint rules file: xxxx
2148	ghs_pointer_arithmetic_subverts_alignment pointer arithmetic on this type will result in misaligned pointers (type "type" has size n, which is not a multiple of its alignment (n))

Diagnostics 2300 to 2399

2301	type_with_no_linkage_in_template_arg a template argument may not reference a type with no name linkage
2302	virtual_ignored "virtual" is ignored here

2303	vla_type_in_template_arg a template argument may not reference a variable-length array type
2304	UCN_names_surrogate_code_point a universal character name cannot designate a surrogate code point
2305	case_label_conflict case label value has already appeared in this switch at line xxxx
2306	cl_unrecognized_unicode_source_kind unrecognized Unicode source kind (must be one of UTF-8, UTF-16, UTF-16LE, UTF-16BE): xxxx
2307	bad_unicode_char_in_pp_output Unicode character with hex value xxxx not representable in preprocessing output
2308	ctor_dtor_priority_reserved requested constructor/destructor priority is reserved for internal use
2309	unrecognized_gcc_pragma unrecognized GCC pragma
2310	unrecognized_gcc_visibility_pragma unrecognized GCC visibility pragma directive
2311	unrecognized_visibility unrecognized visibility kind
2312	ELF_visibility_pop_mismatch visibility pragma was still active
2313	ELF_visibility_stack_empty no matching visibility push
2314	typeid_of_incomplete_type typeid of incomplete type
2316	array_size_one_assumed array entity-kind "entity" assumed to have one element

2317	vector_size_attribute_requires_integral_floating_or_enum_type vector_size attribute requires an arithmetic or enum type
2318	vector_size_too_large vector size is too large
2319	vector_size_must_be_power_of_two the number of elements in a vector must be a power of two
2320	vector_size_must_be_multiple_of_element_size vector size must be a multiple of the element size
2321	mixed_vector_scalar_operation mixed vector-scalar operation not allowed
2322	vectors_must_have_same_size operation requires two vectors of the same size
2323	dependent_vector_size template-dependent vector size is not allowed
2326	vector_size_attribute_on_complex_type vector_size attribute is not allowed with a complex element type
2328	vector_element_type_mismatch vector operation requires identical element types
2329	vector_operation_requires_integer_vector vector operation does not apply to vector with non-integral type
2330	cannot_open_file cannot open xxxx file "xxxx"
2331	cannot_open_file_reason cannot open xxxx file "xxxx": xxxx
2337	file_write_error_errno error while writing xxxx file: xxxx
2346	il_output IL output
2347	restrict_qualifier_dropped conversion drops "__restrict" qualifier

2348	unable_to_get_mapped_memory_reason unable to obtain mapped memory for "xxxx": xxxx
2349	nonstandard_array_with_flexible_array_element array of elements containing a flexible array member is nonstandard
2350	vector_template_parameter a template parameter may not have a vector type
2351	out_of_order_ctor_init the initialization of entity-kind "entity" will be done before that of entity-kind "entity"
2353	inheritance_kind_ignored_on_enum inheritance kind is ignored on an enum specifier
2355	extended_modifier_ignored_on_enum modifier is ignored on an enum specifier
2356	non_unicode_char_in_ident identifier character cannot be represented in Unicode
2357	non_unicode_char_in_header header name contains characters that cannot be represented in Unicode
2358	invalid_locale "xxxx" is not a valid locale name
2359	nonstd_template_void_param_list declaring a void parameter list with a template parameter is nonstandard
2360	cl_lambdas_option_only_in_cplusplus lambdas option can be used only when compiling C++
2361	capture_mode_matches_default explicit capture matches default
2362	not_a_variable entity-kind "entity" is not a variable
2363	capture_of_static_duration_variable a variable with static storage duration cannot be captured in a lambda

2364	cannot_capture_this_by_reference "this" cannot be captured by reference
2365	this_in_lambda "this" cannot be used inside the body of this lambda
2366	anon_union_ref_in_lambda a member of an outer-scope anonymous union cannot be referenced inside the body of a lambda
2367	not_captured_local_var_in_lambda an enclosing-function local variable cannot be referenced in a lambda body unless it is in the capture list
2368	bad_local_var_in_lambda invalid reference to an outer-scope local variable in a lambda body
2369	captured_local_var_not_in_innermost_function a local variable outside the current function scope cannot be captured
2370	not_captured_this_in_lambda the enclosing-function "this" cannot be referenced in a lambda body unless it is in the capture list
2372	captured_var_type_not_copyable lambda captured variable of type "type" cannot be copied to closure class field of type "type"
2373	cl_invalid_template_directory invalid template directory: xxxx
2374	enum_value_out_of_underlying_range enumeration value is outside the range of its underlying type ("type")
2375	not_a_line_splice "\\" followed by white space is not a line splice
2376	dynamic_cast_without_rtti this dynamic_cast cannot be done without runtime type information, which is disabled
2377	ambiguous_cast_selects_direct_base conversion to "type" is ambiguous; direct base selected

2378	requested_size_too_large an internal buffer would be too large
2379	exception_handler_used C++ exception handler used, but exception handling semantics have not been specified
2380	type_qualifier_ignored_on_constructor type qualifier ignored on constructor
2381	lambda_capture_involves_variable_length_array a variable captured by a lambda cannot have a type involving a variable-length array
2382	incompatible_vectors_conversion conversion between incompatible vector types
2383	missing_lambda_body expected a "{" introducing a lambda body
2384	cl_rvalue_references_option_only_in_cplusplus rvalue references option can be used only when compiling C++
2385	type_qualifier_on_lambda a type qualifier is not allowed on a lambda
2386	more_than_one_capture a name cannot appear more than once in a capture-list
2387	explicit_template_args_ignored explicit template arguments ignored
2388	bad_constant_lambda a lambda is not allowed in a constant expression
2389	class_type_required "type" is not a class type
2390	delete_of_array_type "delete" applied to a pointer-to-array type treated as delete[]
2391	delete_of_array_type_nonstandard "delete" applied to a pointer-to-array type is nonstandard; treated as delete[]

2392	function_does_not_match_arguments entity-kind "entity" cannot be called with the given argument list
2393	rvalue_reference_bound_to_lvalue an rvalue reference cannot be bound to an lvalue
2394	rvalue_ref_template_parameter a nontype template parameter cannot have rvalue reference type
2395	type_qualifiers_ignored_on_reference type qualifiers are ignored (underlying type is a reference)
2396	decl_with_local_type_but_not_defined entity-kind "entity", declared using a local type, must be defined in this translation unit
2397	decl_with_no_linkage_type_but_not_defined entity-kind "entity", declared using a type with no linkage, must be defined in this translation unit
2398	bad_rvalue_ref_dynamic_cast_operand the operand of an rvalue reference dynamic_cast must have a complete class type
2399	invalid_function_to_be_defaulted "= default" can only appear on default constructors, copy/move constructors, copy/move assignment operators, and destructors

Diagnostics 2400 to 2499

2400	deleted_function_definition_must_be_first_declaration "= delete" can only appear on the first declaration of a function
2401	deleted_function entity-kind "entity" (declared at line xxxx) cannot be referenced -- it is a deleted function
2402	bad_unevaluated_lambda a lambda is not allowed in an unevaluated expression
2403	bad_function_for_gnu_va_arg_pack __builtin_va_arg_pack/__builtin_va_arg_pack_len can appear only in an inline function with an ellipsis parameter

2404	function_defaulted_in_friend_decl "= default" cannot be specified on a friend declaration
2405	exp_cpp_keyword expected a C++ keyword
2407	nonconstant_offsetof offset is not constant
2408	unrecognized_microsoft_comment_pragma_type unrecognized #pragma comment type "xxxx"
2409	cl_auto_type_option_only_in_cplusplus option to control whether "auto" is a type specifier can be used only when compiling C++
2410	cl_auto_storage_option_only_in_cplusplus option to control whether "auto" is a storage class can be used only when compiling C++
2411	cl_auto_cannot_be_disabled the type specifier and storage class specifier meanings of "auto" cannot both be disabled
2412	bad_pragma_comment_string invalid string in #pragma comment
2413	deleted_function_overrides_nondeleted_function deleted function overrides nondeleted entity-kind "entity"
2414	nondeleted_function_overrides_deleted_function nondeleted function overrides deleted entity-kind "entity"
2415	deleted_default_constructor the default constructor of "type" cannot be referenced -- it is a deleted function
2416	rvalue_reference_catch_type an rvalue reference is not allowed as a catch type
2417	default_args_incompatible default arguments of entity-kind "entity" is incompatible with a declaration in another translation unit

2418	default_arg_differs_in_other_trans_unit default arguments of entity-kind "entity" were different during compilation of "xxxx"
2420	initializers_incompatible initializer for entity-kind "entity" is different in another translation unit
2421	initializer_differs_in_other_trans_unit initializer for entity-kind "entity" was different during compilation of "xxxx"
2422	designator_for_template_dependent_type a designator into a template-dependent type is not allowed
2423	invalid_pragma_conform_kind unrecognized conformance kind
2424	exp_on_or_off expected "on" or "off"
2425	forScope_stack_empty #pragma conform(forScope) stack is empty
2426	no_matching_forScope_stack_entry no previous #pragma conform(forScope) entry matches "xxxx"
2427	show_pragma_conform_forScope_is_nonstandard forScope behavior is nonstandard
2428	show_pragma_conform_forScope_is_standard forScope behavior is standard
2429	deleted_main function "main" cannot be deleted
2430	invalid_assignment_operator_to_be_defaulted invalid type for defaulted assignment operator
2431	function_template_cannot_be_defaulted function templates cannot be defaulted
2432	invalid_constructor_to_be_defaulted invalid type for defaulted constructor

2433	call_requires_one_argument function call requires one argument
2434	call_requires_floating_point_argument function call requires a real floating-point argument
2435	copy_ctor_with_default_arg_cannot_be_defaulted a copy constructor with a default argument cannot be defaulted
2436	predeclared_function_cannot_be_deleted a predeclared function cannot be deleted
2437	empty_then_statement empty dependent statement in if-statement
2438	empty_else_statement empty dependent statement in "else" clause of if-statement
2439	deleted_elided_ctor entity-kind "entity" (declared at line xxxx), required for copy that was eliminated, cannot be referenced -- it is a deleted function
2440	main_first_param_not_int nonstandard first parameter "type" of "main", expected "int"
2441	main_wrong_num_params nonstandard number of parameters for "main", expected zero or two parameters
2442	main_second_param_wrong_type nonstandard second parameter "type" of "main", expected "char *[]" or "char **"
2443	incl_dir_both_sys_and_nonsys "xxxx" was specified as both a system and non-system include directory -- the non-system entry will be ignored
2444	cl_rvalue_ctor_is_copy_ctor_option_only_in_cplusplus option to control move constructors and move assignment operators can be used only when compiling C++
2447	trailing_return_type_requires_auto a trailing return type requires the "auto" type specifier

2448	trailing_return_type_in_nested_declarator a trailing return type cannot appear in a nested declarator
2449	trailing_return_type_function_without_simple_auto a function declarator with a trailing return type must be preceded by a simple "auto" type specifier
2450	missing_trailing_return_type "auto" function requires a trailing return type
2451	pure_virtual_member_template a member template cannot have a pure specifier
2452	excess_characters_in_literal_ignored string literal too long -- excess characters ignored
2453	cl_nullptr_option_only_in_cplusplus option to control the nullptr keyword can be used only when compiling C++
2454	nullptr_conv_to_bool std::nullptr_t converted to bool
2457	invalid_empty_attribute_arg_list attribute "xxxx" does not allow an empty argument list
2458	attr_twice_in_group attribute appears more than once
2459	wrong_entity_for_attribute attribute "xxxx" does not apply here
2460	attr_disallows_bit_field attribute "xxxx" does not apply to bit fields
2461	attr_requires_bit_field attribute "xxxx" requires a bit field
2462	attr_disallows_member_function attribute "xxxx" does not apply to member functions
2463	attr_requires_member_function attribute "xxxx" requires a member function
2464	attr_disallows_virtual_function attribute "xxxx" does not apply to virtual functions

2465	attr_requires_virtual_function attribute "xxxx" requires a virtual function
2466	attr_disallows_pure_virtual_function attribute "xxxx" does not apply to pure virtual functions
2467	attr_requires_pure_virtual_function attribute "xxxx" requires a pure virtual function
2468	attr_disallows_register_storage attribute "xxxx" does not apply to register variables
2469	attr_requires_register_storage attribute "xxxx" requires a register variable
2470	attr_must_also_appear_in_first_declaration attribute "xxxx" did not appear on original declaration
2471	invalid_attribute_location attributes are not allowed here
2472	attr_must_appear_in_class_definition attribute "xxxx" must appear in a class definition
2473	pure_final_virtual "final" applied to a pure virtual function
2474	override_of_final_function cannot override "final" entity-kind "entity" (declared at line xxxx)
2475	undefined_static_function_treated_as_extern static entity-kind "entity" treated as extern because it was referenced but not defined
2476	cl_gnu_c89_inlining_option_only_in_C option to enable GNU-C89-style inlining can be used only when compiling C
2477	first_decl_not_gnu_inline function was previously declared without the "gnu_inline" attribute
2478	gnu_inline_requires_inline the "gnu_inline" attribute is ignored on non-inline functions

2479	carries_dependency_not_on_first_decl entity-kind "entity" previously declared without the carries_dependency attribute
2480	bad_array_member_initialization invalid initializer for array entity-kind "entity"
2481	cl_must_specify_cpp11_mode must specify C++11 or C++14 mode when building runtime library
2482	attr_disallows_function_type attribute "xxxx" does not apply to function types
2483	attr_requires_function_type attribute "xxxx" requires a function type
2484	attribute_ignored_on_nonstatic_member_function attribute "xxxx" does not apply to nonstatic member functions
2485	attr_disallows_automatic_storage attribute "xxxx" does not apply to automatic variables
2486	attr_requires_automatic_storage attribute "xxxx" requires an automatic variable
2487	attr_disallows_external_linkage attribute "xxxx" does not apply to a variable or function with external linkage
2488	attr_requires_local_variable attribute "xxxx" requires a local variable
2489	attributes_ignored attributes ignored here
2490	unattached_attribute attribute does not apply to any entity
2491	bad_attribute_template_substitution bad attribute argument substitution
2492	bad_tls_model_attr_arg the argument of the "tls_model" attribute must be "global-dynamic", "local-dynamic", "initial-exec", or "local-exec"

2493	inconsistent_tls_model_attr_arg the declaration at line xxxx specified a different "tls_model" argument
2494	attr_disallows_inline attribute "xxxx" does not apply to inline functions
2495	attr_requires_inline attribute "xxxx" requires a inline function
2496	include_kind_mismatch both file names in an include_alias pragma must use the same delimiter characters
2497	signed_unsigned_comparison comparison between signed and unsigned operands
2498	attribute_ignored_on_unnamed_type attribute "xxxx" ignored on unnamed type
2499	attribute_ignored_on_nondefinition attribute "xxxx" ignored because no definition follows

Diagnostics 2500 to 2599

2500	incompatible_thread_locality thread locality is incompatible with a previous declaration of entity-kind "entity" (declared at line xxxx)
2501	no_implicit_capture_on_enclosing_lambda this enclosing-function local variable cannot be referenced in this lambda body because an enclosing lambda does not allow implicit captures
2502	unbalanced_attribute_argument this attribute argument contains unmatched parentheses, brackets, or braces
2503	invalid_builtin_fpclassify_args a call to <code>__builtin_fpclassify</code> requires five integral arguments followed by one floating-point argument

2504	bad_final_builtin_fpclassify_arg the last argument in a call to <code>__builtin_fpclassify</code> must have a real floating-point type
2505	invalid_alignment_reducing_attr alignment cannot be set to less than the default alignment
2506	attribute_on_explicit_instantiation attributes are not allowed on explicit instantiations
2507	attr_disallows_definition attribute "xxxx" does not apply to a definition
2508	attr_requires_definition attribute "xxxx" requires a definition
2509	friend_attribute_requires_definition standard attributes cannot appear on friend declarations that are not definitions
2510	inconsistent_alignment specified alignment (xxxx) is different from alignment (xxxx) specified on a previous declaration
2511	variable_align_attr_not_on_definition alignment attribute must also appear on definition at line xxxx
2512	alias_used_in_type entity-kind "entity" may not be used in the type-id of the alias-declaration
2514	transparent_union_cannot_have_floating_first_field "type" cannot be transparent because its first field has a floating-point type
2515	transparent_union_cannot_have_bit_field_first "type" cannot be transparent because its first field is a bit field
2516	missing_override_attr_in_base_check_class virtual function of a "base_check" class overrides a base class member but lacks the "override" attribute
2517	hiding_attr_on_nonhiding_member "hiding" attribute specified on a declaration that does not hide a base class declaration

2518	hiding_attr_on_unhidden_member "hiding" attribute specified on a declaration referred to by the using-declaration at line xxxx
2519	hiding_attr_required attribute "hiding" is required on a declaration (in a "base_check" class) that hides entity-kind "entity" (declared at line xxxx)
2520	undefined_decl_using_local_type entity-kind "entity" is not defined in this translation unit but depends on a local type
2521	undefined_decl_using_no_linkage_type entity-kind "entity" is not defined in this translation unit but depends on a type with no linkage
2522	missing_attribute_in_other_translation_unit attribute "xxxx" is missing in another translation unit
2523	conflicting_attribute_in_other_translation_unit attribute "xxxx" conflicts with another translation unit
2524	cl_nonstd_gnu_keywords_requires_gnu_mode the "nonstd_gnu_keywords" option is only valid in GNU C and GNU C++ modes
2525	const_var_in_C_const_expr use of a const variable in a constant expression is nonstandard in C
2526	cannot_init_auto_flexible_array_member an initializer cannot be specified for a flexible array member with automatic storage duration
2528	final_base_class a "final" class type cannot be used as a base class
2529	export_removed exported templates are no longer in the standard C++ language
2530	template_dependent_designator a template-dependent designator is not allowed

2531	offsetof_ref_field second operand of offsetof may not be a field with reference type
2532	cl_long_lifetime_temps_incompat_with_newer_features long lifetime temporaries are incompatible with other requested newer language features
2533	wide_deprecation_string wide character string literal will not be quoted in diagnostics
2534	missing_attribute_arguments missing arguments for attribute "xxxx"
2535	sfinae_requires_newer_abi_version options "c++11" and "c++11_sfinae" require a different compiler configuration
2536	template_param_pack_not_at_end template parameter pack not at end of parameter list
2537	parameter_pack_decl_not_allowed a parameter pack declaration is not allowed here
2538	param_pack_cannot_have_default a parameter pack cannot have a default
2539	cl_cppcli_only_in_microsoft_cplusplus C++/CLI can be enabled only in Microsoft C++ mode
2540	reserved_enumerator_name "value_" cannot be used as the name of an enumerator constant (it is a reserved name in this context)
2541	cppcli_enumerator_requires_explicit_value an explicit enumerator value is required in an enumeration type with boolean underlying type
2543	pack_not_expanded parameter pack "xxxx" was referenced but not expanded
2544	expansion_contains_no_packs pack expansion does not make use of any argument packs
2545	pack_length_mismatch pack "xxxx" does not have the same number of elements as "xxxx"

2547	vector_size_attribute_on_enum_type vector_size attribute is not allowed with an enumeration type
2548	virtual_static_property a property cannot be both static and virtual
2549	trivial_indexed_property an indexed property cannot be trivial
2550	invalid_property_accessor_decl this declaration cannot appear in a property definition
2551	qualified_cli_accessor a qualified function type cannot be used to declare an accessor function
2552	ellipsis_cli_accessor an accessor function cannot have an ellipsis parameter
2553	property_get_already_declared a "get" accessor was already declared for this property at line xxxx
2554	property_set_already_declared a "set" accessor was already declared for this property at line xxxx
2555	property_get_cannot_have_parameter a "get" accessor cannot have a parameter
2556	bad_property_get_return return type of "get" accessor does not match property type
2557	bad_property_set_return return type of "set" accessor must be void
2558	empty_property_indices a property cannot declare an empty list of indices
2559	void_property_index_type a property index cannot have type void
2560	property_set_index_type_mismatch index type does not match the corresponding parameter in the "set" accessor

2561	property_get_index_type_mismatch index type does not match the corresponding parameter in the "get" accessor
2562	property_set_index_type_missing index type is missing in the "set" accessor
2563	property_get_index_type_missing index type is missing in the "get" accessor
2564	property_set_missing_value_parameter "set" accessor is missing its value parameter
2565	extra_property_accessor_parameters accessor function has too many parameters
2566	property_set_value_parameter_mismatch the last parameter of the "set" accessor does not match the property type
2567	cppcli_not_enabled "xxxx" requires C++/CLI mode
2568	win32_api_error error in Win32 API "xxxx": xxxx
2569	using_not_at_file_scope #using may only be used at global scope
2571	member_name_reserved_by_property member name "xxxx" is reserved by entity-kind "entity" (declared at line xxxx)
2572	exp_lbracket expected a "["
2573	cl_microsoft_version_insufficient_for_cppcli C++/CLI mode requires microsoft_version >= 1600
2574	static_default_indexed_property a default-indexed property cannot be static
2575	virtual_static_property_accessor a property accessor cannot be both static and virtual

2576	visibility_specifier_on_nested_type a top-level visibility specifier cannot appear on a nested type declaration
2577	visibility_specifier_requires_definition a top-level visibility specifier requires a type definition
2578	trivial_reference_property a trivial property cannot have a reference type
2579	trivial_const_or_volatile_property a trivial property cannot have a const or volatile type
2580	incompatible_enum_kinds entity-kind "entity" (declared at line xxxx) was previously declared as a different kind of enumeration type
2581	lambda_captures_managed_class_type a variable captured by a lambda cannot have a managed class type
2582	covariant_override_in_managed_class virtual function overriding with a covariant return type is not allowed in a managed class
2583	array_of_handle array of handles is not allowed
2584	handle_to_array handle to array is not allowed
2585	handle_to_function handle to function is not allowed
2586	handle_to_void handle to void is not allowed
2587	handle_to_address_type handle to handle, pointer, or reference is not allowed
2588	tracking_reference_to_function tracking reference to function is not allowed
2590	field_cannot_be_tracking_reference a field cannot be a tracking reference

2591	invalid_ref_tracking_ref_combination a tracking reference cannot be combined with an ordinary reference in this way
2592	static_storage_variable_with_ref_class_type a variable with static storage duration cannot have a ref class type
2593	unnamed_cli_managed_class_type a managed class cannot be unnamed
2594	local_cli_managed_class_type a managed class cannot be local
2595	conflicting_cli_class_type_kinds entity-kind "entity" (declared at line xxxx) was previously declared as a different kind of class
2596	conflicting_cli_class_template_kinds entity-kind "entity" (declared at line xxxx) was previously declared as a different kind of class template
2597	literal_requires_managed_class literal data members can only be members of managed classes
2598	literal_without_initializer a literal data member must be initialized
2599	invalid_literal_type a literal data member of type "type" is not allowed

Diagnostics 2600 to 2699

2600	literal_const_has_no_effect const has no effect on a literal data member
2601	initonly_requires_managed_class initonly data members can only be members of managed classes
2602	initonly_const_has_no_effect const has no effect on an initonly data member

2603	cli_get_accessor_missing entity-kind "entity" (declared at line xxxx) has no "get" accessor
2604	cli_set_accessor_missing entity-kind "entity" (declared at line xxxx) has no "set" accessor
2605	static_constructor_with_params a static constructor cannot have parameters
2606	static_constructor_member_template a static constructor cannot be a member template
2607	compound_lvalue_as_asm_operand a compound lvalue is not allowed as an asm output operand
2608	property_requires_managed_class properties can only be members of managed classes
2609	qualifier_not_allowed_on_managed_member_function a type qualifier is not allowed on a member function of a managed class
2610	pointer_to_ref_or_interface_class an ordinary pointer to a C++/CLI ref class or interface class is not allowed
2611	reference_to_ref_or_interface_class an ordinary reference to a C++/CLI ref class or interface class is not allowed
2612	override_name_must_be_a_base_class_member_function override specifier does not name a base class member function
2613	override_name_nonvirtual override specifier designates a nonvirtual member entity-kind "entity" (declared at line xxxx)
2614	multiple_overrides member function overrides entity-kind "entity" (declared at line xxxx) which is already overridden by entity-kind "entity" (declared at line xxxx)
2615	multiple_visibility_specifiers at most one visibility specifier is allowed

2616	invalid_delegate_type type "type" used for delegate definition is not a function type
2617	delegate_requires_managed_class delegate member types can only be members of managed classes
2618	tracking_reference_to_delegate a tracking reference to a delegate type is not allowed
2619	bad_use_of_delegate_type a delegate type is not allowed here
2620	empty_pack_expansion this pack expansion produced an empty list of expressions, and an expression is needed here
2621	virtual_static_event an event cannot be both static and virtual
2622	event_requires_managed_class events can only be members of managed classes
2623	invalid_event_accessor_decl this declaration cannot appear in an event definition
2624	invalid_event_type event type must be a handle-to-delegate type
2625	event_add_already_declared an "add" accessor was already declared for this event at line xxxx
2626	event_remove_already_declared a "remove" accessor was already declared for this event at line xxxx
2627	event_raise_already_declared a "raise" accessor was already declared for this event at line xxxx
2628	virtual_static_event_accessor an event accessor cannot be both static and virtual
2629	bad_event_add_or_remove_return return type of "add" and "remove" accessors must be void

2630	event_accessor_missing_value_parameter event accessor is missing its value parameter
2631	extra_event_accessor_parameters accessor function has too many parameters
2632	event_accessor_value_parameter_mismatch the type "type" of the parameter of the event accessor does not match the event type ("type")
2633	event_raise_type_mismatch the type of the "raise" accessor does not match the event's delegate invocation type
2634	missing_add_or_remove_accessor an event definition must include both "add" and "remove" accessors
2635	static_conversion_function_must_have_one_parameter a static conversion function must accept exactly one argument
2636	bad_parameter_type_for_static_member_operator static operator must have a parameter type T, T&, T%, or T^ with T = "type"
2637	sizeof_operand_not_parameter_pack the operand of sizeof... must be a parameter pack name
2638	sizeof_pack_in_non_variadic_context the sizeof... operator can be used only in a variadic template
2639	event_name_not_allowed event name cannot appear here
2640	handle_to_standard_class_type a handle to a non-managed class is not allowed
2641	handle_to_unscoped_enum_type a handle to an unscoped enum type is not allowed
2642	property_attribute_in_managed_class "property" attribute not allowed in managed class
2643	pure_virtual_definition a pure specifier ("= 0") followed by a definition is nonstandard

2644	managed_nullptr_not_allowed the managed nullptr type cannot be used here
2645	addr_of_ref_class the "&" operator cannot be used to take the address of an object with a ref class type
2646	array_of_managed_class array of managed class is not allowed
2647	static_storage_variable_with_handle_or_tracking_ref_type a variable with static storage duration cannot have a handle or tracking reference type
2648	lambda_captures_handle_or_tracking_ref a variable captured by a lambda cannot be a handle or tracking reference
2649	invalid_param_array_type a C++/CLI parameter array requires a handle to a one-dimensional cli::array type
2650	cannot_import_metadata could not import metadata from file "xxxx"
2651	namespace_cli_cannot_be_extended the cli namespace cannot be extended
2652	cli_array_invalid_element_type the element type of a cli::array must be a handle or value type
2653	cli_array_invalid_number_of_dimensions invalid number of dimensions for cli::array type
2654	invalid_type_pointed_to_for_interior_ptr_or_pin_ptr a cli::interior_ptr/cli::pin_ptr must point to a standard class, a value class, an integer, a handle, or a standard pointer
2655	type_cannot_be_class_member "type" cannot be a class member
2656	pin_ptr_param_not_allowed a parameter of type cli::pin_ptr is not allowed
2657	bad_finalizer_decl invalid finalizer declaration

2658	too_many_params_for_finalizer a finalizer may not have parameters
2659	function_qualifier_on_finalizer a type qualifier is not allowed on a finalizer
2660	return_type_on_finalizer a return type may not be specified on a finalizer
2661	no_finalizer_using_declaration a using-declaration may not name a finalizer
2662	finalizer_name_must_be_qualified a finalizer name must be qualified
2663	finalizer_qualifier_type_mismatch qualifier of finalizer name "type" does not match type "type"
2664	var_used_as_finalizer entity-kind "entity" cannot be used to name a finalizer (a type name is required)
2665	invalid_finalizer_name invalid finalizer name for type "type"
2666	ambiguous_finalizer finalizer reference is ambiguous -- both entity-kind "entity" and entity-kind "entity" could be used
2667	finalizer_requires_reference_type a finalizer can only be a member of a ref class
2669	finalizer_type_mismatch type used as finalizer name does not match type "type"
2670	finalizer_does_not_exist a finalizer does not exist for this type
2671	handle_of_non_managed the "%" operator can be used only on an object with a managed class type
2672	ptr_handle_or_ref_to_interior_ptr a pointer, handle, or reference to a cli::interior_ptr is not allowed

2673	ptr_handle_or_ref_to_pin_ptr a pointer, handle, or reference to a cli::pin_ptr is not allowed
2674	ptr_or_ref_to_cli_array a pointer or reference to a C++/CLI array is not allowed
2675	bad_use_of_cli_array_type a C++/CLI array type is not allowed here
2676	invalid_ref_class_base a C++/CLI ref class can only derive from another ref class or from interface classes
2677	invalid_value_class_base a C++/CLI value class can only derive from interface classes
2678	invalid_interface_class_base a C++/CLI interface class can only derive from interface classes
2679	ref_class_has_multiple_ref_bases a ref class can have at most one direct ref base class ("type" is already such a base)
2680	managed_base_for_standard_class a standard class cannot derive from a managed class
2681	virtual_base_for_managed_class a managed class cannot have a virtual base
2682	managed_class_type_cannot_have_private_or_protected_base a managed class cannot have a "private" or "protected" base
2683	override_requires_virtual the "override" modifier requires a virtual function declaration with an explicit "virtual" keyword
2684	abstract_requires_virtual the "abstract" modifier requires a virtual function declaration with an explicit "virtual" keyword
2685	sealed_requires_virtual the "sealed" modifier requires a virtual function declaration with an explicit "virtual" keyword

2686	named_override_requires_virtual a named override specifier requires a virtual function declaration with an explicit "virtual" keyword
2687	pin_ptr_return_type_not_allowed a cli::pin_ptr return type is not allowed
2688	cppcli_attribute_only attribute "xxxx" applies in C++/CLI mode only
2689	normal_ref_bound_to_gc_lvalue a simple (non-tracking) reference cannot be bound to an entity on the managed heap
2691	cli_entity_not_loaded "xxxx" not loaded from default assemblies
2692	list_initializer_nonstandard_in_current_mode list initialization syntax is a C++11 feature
2693	sizeof_ref_or_interface_class operand of sizeof may not be a ref class type or interface class type
2694	cli_array_invalid_number_of_subscripts invalid number of subscripts for this cli::array type
2695	ptr_to_member_of_managed_class a pointer-to-member is not valid for a managed class
2696	private_virtual_member_function_not_sealed private virtual member function of managed class is not "sealed"
2697	modifier_not_allowed_on_destructor modifier is not allowed on a destructor
2698	modifier_not_allowed_on_finalizer modifier is not allowed on a finalizer
2699	virtual_has_no_effect "virtual" has no effect on a destructor of a managed class

Diagnostics 2700 to 2799

2700	new_or_override_required "new" or "override" is required because this declaration matches entity-kind "entity" (declared at line xxxx)
2701	new_or_virtual_required "new" or "virtual" is required because this declaration matches entity-kind "entity" (declared at line xxxx)
2702	override_for_interface_member "new" or "override" are not valid here because the matching entity-kind "entity" (declared at line xxxx) is a member of an interface
2703	new_requires_matching_base_member "new" modifier without a matching base ref class member
2704	overriding_reduces_accessibility_in_managed_type entity-kind "entity" (declared at line xxxx) overridden with reduced access
2705	bad_tracking_ref_init a reference of type "type" cannot be initialized with a value of type "type"
2706	copy_constructor_in_value_class_type a copy constructor cannot be declared in a value class
2707	default_constructor_in_value_class_type a default constructor cannot be declared in a value class
2708	destructor_in_value_class_type a destructor cannot be declared in a value class
2709	assignment_in_value_class_type an assignment operator cannot be declared in a value class
2710	nonvalue_class_type_cannot_be_value_class_member non-value class "type" cannot be the type of a member of a value class
2711	cppcli_requires_newer_abi_version option "cppcli" requires a different compiler configuration

2712	managed_member_exception_spec exception specifications are not allowed on member functions of managed classes
2713	managed_class_cannot_have_friend a managed class cannot declare a friend
2716	local_class_in_managed_member_function a local class definition is not allowed in a member function of a managed class
2717	local_lambda_in_managed_member_function a local lambda is not allowed in a member function of a managed class
2718	cli_interface_member_function_definition a member function of a C++/CLI interface class type cannot have a definition
2719	missing_get_and_set_accessors a property definition must include at least one accessor ("get" or "set")
2720	subscript_mechanism_conflict default-indexed property conflicts with entity-kind "entity" (declared at line xxxx)
2721	unusable_pack entity-kind "entity" cannot be used because it follows a parameter pack and cannot be deduced from the parameters of entity-kind "entity"
2722	excess_pack_expansion this pack expansion produced more than one expression, and a single expression is needed here
2723	cli_enum_base_has_no_system_counterpart type must correspond to System::Boolean, System::Byte, System::SByte, System::Int16, System::UInt16, System::Int32, System::UInt32, System::Int64, or System::UInt64
2724	bad_call_of_handle call of an object of a handle type without appropriate operator() or conversion functions to pointer-to-function type

2725	abstract_declarator_pack_is_nested an unnamed parameter pack declaration cannot be parenthesized
2726	cl_variadic_templates_only_in_cplusplus variadic templates can be enabled only when compiling C++
2727	conflicting_properties property definition conflicts with entity-kind "entity" (declared at line xxxx)
2730	generic_param_cannot_have_default a generic parameter cannot have a default
2731	bad_param_kind_for_generic a generic can only have type parameters
2732	for_each_missing_function to be used with "for each" statements, type "type" must provide nonstatic member function "xxxx"
2733	for_each_static_function "for each" cannot use member entity-kind "entity" because it is static
2734	for_each_no_matching_overload in this "for each" statement, no instance of "entity" is callable with an empty argument list
2735	for_each_invalid_return_type_for_move_next "for each" cannot use member function "MoveNext" because the return type is invalid
2736	for_each_incompatible_type a "for each" statement cannot operate on an expression of type "type"
2737	for_each_missing_field to be used with "for each" statements, type "type" must provide a non-indexed property "xxxx"
2739	for_each_getenumerator_return_type_invalid in this "for each" statement, "type" is not a valid enumerator (returned by "GetEnumerator" of "type")
2740	exp_in expected "in"

2741	no_suitable_synthesis_assignment_operator class "type" has no suitable assignment operator (after operator synthesis)
2742	not_a_generic_param "xxxx" is not a generic parameter
2743	not_generic_param_of_curr_decl "xxxx" is not a generic parameter of the innermost generic parameter list
2744	invalid_constraint invalid generic constraint
2745	invalid_event_use invalid use of event member (only subscription, unsubscription, and invocation are allowed)
2746	event_without_raise_invoked invoking an event with no "raise" accessor is invalid
2747	bad_event_compound_assignment only "+=" and "-=" are valid for events
2748	typeid_of_managed_type typeid of a managed type is not allowed
2749	cli_typeid_of_managed_pointer typeid of a managed pointer type is not allowed
2750	name_before_typeid_not_type name followed by "::typeid" must be a type name
2751	reserved_dispose a member "xxxx" of this type is reserved within a managed class -- destructor intended?
2752	reserved_finalize a member "xxxx" of this type is reserved within a managed class -- finalizer intended?
2753	invalid_idisposable_dispose System::IDisposable::Dispose is missing or invalid
2754	invalid_object_finalize System::Object::Finalize is missing or invalid

2755	finalize_does_not_override_object_finalize entity-kind "entity" does not override System::Object::Finalize
2756	bad_handle_dynamic_cast_operand the operand of a handle dynamic_cast must be a handle to a complete class type
2757	bad_tracking_ref_dynamic_cast_operand the operand of a tracking-reference dynamic_cast must be an lvalue of a complete class type
2758	bad_cli_dynamic_cast_type the type in a dynamic_cast to a handle or tracking reference type must refer to a complete class
2759	cast_interior_ptr_to_ptr an interior pointer cannot be cast to a native pointer
2760	cppcli_explicit_conversion_only_in_ref_and_value_classes explicit conversion operators can only be declared in ref and value class types
2761	cppcli_explicit_conversion_is_virtual explicit conversion operator cannot be virtual
2762	expr_not_arithmetic_or_unscoped_enum expression must have arithmetic or unscoped enum type
2763	expr_not_arithmetic_or_unscoped_enum_or_pointer expression must have arithmetic, unscoped enum, or pointer type
2764	expr_not_integral_or_unscoped_enum expression must have integral or unscoped enum type
2765	expr_not_integral_or_unscoped_enum_or_fixed_point expression must have integral, unscoped enum, or fixed-point type
2766	scoped_enum_operation_type_mismatch a built-in binary operator applied to a scoped enumeration requires two operands of the same type
2767	invalid_gnew_type gnew cannot allocate an entity of type "type"

2768	gcnew_used_with_placement_syntax placement syntax cannot be used with gcnew
2769	new_used_on_unsuitable_value_type new can only be used with simple value types
2770	new_used_on_managed_class_type new cannot be used on a managed class (gcnew should be used instead)
2771	new_used_on_handle_or_tracking_reference_type new cannot be used on a handle type
2772	cli_array_must_have_new_or_array_init gcnew for a C++/CLI array must have a new initializer or an array initializer
2773	gcnew_bad_type_used_with_array_init an array initializer can only be used to initialize a C++/CLI array type
2774	gcnew_used_with_auto_syntax gcnew does not allow auto
2775	too_many_array_bounds too many array bounds
2776	too_few_array_bounds too few array bounds
2777	too_few_generic_args too few arguments for entity-kind "entity"
2778	too_many_generic_args too many arguments for entity-kind "entity"
2780	no_matching_arity no declaration of entity-kind "entity" accepts the number of generic arguments supplied
2781	bad_function_for_delegate invalid delegate initializer -- must be a function
2782	ambiguous_function_for_delegate invalid delegate initializer -- more than one function matches the delegate type

2783	mismatched_function_for_delegate invalid delegate initializer -- function does not match the delegate type
2784	missing_delegate_object invalid delegate initializer -- an object is needed in addition to a function
2785	nonmanaged_function_for_delegate invalid delegate initializer -- function is not a member of a managed class
2786	superfluous_delegate_object invalid delegate initializer -- object is not needed for the specified function
2787	incompatible_delegate_object invalid delegate initializer -- object has type "type" but type "type" is expected
2788	address_of_managed_member_function taking the address of a member function of a managed class is not allowed
2789	bad_delegate_init_list invalid delegate initializer -- expected either " <code>(<function-address>)</code> " or " <code>(<object-handle>, <member-address>)</code> "
2790	interface_not_implemented class fails to implement interface member entity-kind "entity" (declared at line xxxx)
2791	gnew_of_native_array gnew cannot be used to allocate a native array
2792	cli_interface_cannot_have_assignment a C++/CLI interface class cannot declare an assignment operator
2793	sealed_cli_interface a C++/CLI interface class cannot be sealed
2795	destructor_or_finalizer_with_named_override a destructor or finalizer declaration cannot include a named override specifier

2796	override_name_is_destructor_or_finalizer an override specifier cannot designate a destructor or finalizer
2797	named_override_requires_managed_type a named override specifier is allowed only in a managed class
2798	named_override_type_mismatch no member designated by the named override specifier matches the type of this member
2799	static_constructor_with_named_override a static constructor declaration cannot include a named override specifier

Diagnostics 2800 to 2899

2800	unnamed_scoped_enum a scoped enumeration type must have a name
2801	branch_into_finally transfer of control into a finally block is not allowed
2802	return_from_finally return statement inside a finally block is not allowed
2803	missing_finally try block requires at least one handler or finally clause
2804	managed_object_not_thrown_by_handle a managed object must be thrown by handle
2805	managed_object_not_caught_by_handle a managed object must be caught by handle
2806	break_cannot_be_in_finally_block a break statement cannot be used in a finally block
2807	continue_cannot_be_in_finally_block a continue statement cannot be used in a finally block
2808	no_overloaded_subscript_with_offsetof builtin offsetof cannot be used when subscripting is overloaded
2809	duplicate_constraint duplicate constraint

2810	multiple_class_constraints more than one class constraint: "type" and "type"
2811	multiple_constraint_clauses more than one constraint clause for entity-kind "entity"
2812	initonly_static_data_member_not_initialized initonly static data members must have an initializer or be initialized in a static constructor
2813	gnu_attr_on_template_redecl GNU attributes on a template redeclaration have no effect
2814	gnu_attr_on_template_redecl_but_original_kept GNU attributes on a template redeclaration have no effect (the attributes of the original declaration at line xxxx apply instead)
2815	cli_param_array_must_be_last_parameter a C++/CLI parameter array must be the last parameter
2816	default_arg_used_in_param_array_function a function with a C++/CLI parameter array cannot have default arguments
2817	ellipsis_after_param_array a C++/CLI parameter array cannot be followed by an ellipsis parameter
2818	parameter_array_on_operator_function a C++/CLI parameter array is not allowed in an operator function parameter list
2819	microsoft_inline_not_allowed_here __inline and __forceinline are not allowed here
2820	data_member_with_interface_type a data member cannot have a C++/CLI interface class type
2821	variable_with_interface_type a variable cannot have a C++/CLI interface class type
2822	parameter_with_interface_type a parameter cannot have a C++/CLI interface class type

2823	return_type_is_interface a function return type cannot be a C++/CLI interface class type
2824	array_of_generic_param an array of generic parameter type is not allowed
2825	ptr_handle_or_ref_to_generic_param a pointer, handle, or reference to a generic parameter type is not allowed
2826	ref_class_initonly_field an initonly field cannot have a ref class type
2827	ref_bound_to_initonly_field a reference cannot be bound to an initonly field
2828	address_of_initonly_field taking the address of an initonly field is not allowed
2829	modification_of_initonly_field an initonly field can only be modified by the instance constructor of its containing class
2830	modification_of_static_initonly_field a static initonly field can only be modified by the static constructor of its containing class
2831	member_function_call_on_initonly_field member function will be invoked on a copy of the initonly field
2832	expr_not_pointer_nor_handle expression must have pointer or handle type
2833	move_ctor_or_assign_copy_of_lvalue a move constructor or move assignment operator is used to copy an lvalue here, which may destroy the source object
2834	generic_selection_with_points_to member selection on a C++/CLI generic entity must use the "->" syntax, not "."
2835	invalid_specific_ref_class_base a ref class type cannot derive from "type"

2836	generic_class_must_be_managed a generic class must be managed (i.e., a ref class, a value class, or an interface class)
2837	sealed_constraint a sealed class cannot be used as a constraint
2838	dynamic_cast_to_value_generic the type in a dynamic_cast cannot be a generic type that might be a value type
2839	UCN_names_invalid_code_point a universal character name must designate a valid code point
2840	override_with_constraint_mismatch generic constraints do not match those of entity-kind "entity" (declared at line xxxx)
2841	bad_argument_for_underlying_type __underlying_type only applies to enumeration types
2842	too_many_cast_operands expected only one operand expression for this cast
2843	bad_unicode_char_in_string Unicode character with hex value xxxx not representable in the system default code page
2844	conv_of_pm_to_func_ptr nonstandard conversion of bound pointer-to-member to a function pointer
2845	deprecated_access_specifier access specifier xxxx is deprecated -- use xxxx instead
2846	static_accessor_in_nonstatic_property_or_event a static accessor function is not permitted in a nonstatic property or event definition
2847	both_ref_and_value_constraints "type" has both a value class and ref class constraint
2848	circular_constraints "type" and "type" involve circular naked type constraints

2849	invalid_type_constraint "type" is not a valid type constraint
2850	pch_file_incomplete precompiled header file "xxxx" not used (because it is incomplete)
2851	invalid_generic_arg "type" is not a valid generic argument
2852	bad_assembly_info_attribute assembly_info attribute applied to an invalid type
2853	ref_class_not_satisfied "type" does not satisfy the ref class constraint of generic parameter "type"
2854	value_class_not_satisfied "type" does not satisfy the value class constraint of generic parameter "type"
2855	gnew_and_abstract "type" does not satisfy the gnew constraint of generic parameter "type" because it is abstract
2856	gnew_and_no_ctor "type" does not satisfy the gnew constraint of generic parameter "type" because it does not have a public default constructor
2857	gnew_and_no_gnew generic parameter "type" does not satisfy the gnew constraint of generic parameter "type" because it does not have the gnew constraint
2858	type_not_satisfied "type" does not satisfy the "type" type constraint of generic parameter "type"
2859	constraint_mismatch constraint on generic parameter "type" differs from previous declaration (at line xxxx)
2860	standard_array_member_in_managed_class a member of a managed class cannot be a standard array

2861	handle_member_in_standard_class a member of a non-managed class cannot be a handle
2862	tracking_reference_member_in_standard_class a member of a non-managed class cannot be a tracking reference
2863	reinterpret_cast_of_handle unsafe reinterpret_cast of handle
2864	generic_type_in_template_arg a template argument may not reference a generic type parameter
2865	comma_operator_in_cli_subscript an expression list is not allowed in this subscript operation (use parentheses around a top-level comma operator)
2866	expr_not_pointer_or_array_handle expression must have pointer-to-object or handle-to-C++/CLI-array type
2867	unrecognized_ms_attr unrecognized attribute
2868	standard_class_member_in_managed_class a member of a managed class cannot be of a non-managed class type
2869	ref_or_interface_class_member_in_standard_class a member of a non-managed class cannot have a ref class type or interface class type
2871	template_delegate a delegate may not be declared as a template
2872	invalid_generic_specialization a generic cannot be explicitly specialized
2873	generic_in_template a generic cannot be declared in a class template
2874	template_in_generic a template cannot be declared in a generic class
2875	static_literal_field a literal field cannot be declared "static"

2876	nonstandard_long_float "long float" is a nonstandard extension -- use "double" instead
2877	standard_class_nested_in_managed_class a standard class cannot be nested in a managed class
2878	clrcall_requires_cppcli __clrcall is valid only in C++/CLI mode
2879	vararg_clrcall __clrcall not allowed on function with ellipsis parameter
2880	bad_use_of_function_modifier "xxxx" is not allowed here
2881	override_with_trivial_property_or_event a trivial property or event cannot be used to override entity-kind "entity" (declared at line xxxx)
2882	exp_id_in_for_each_decl expected an iterator variable name
2883	missing_notequal_on_for_each_type the iterator type in this "for each" statement is "type", which is not a pointer type or an iterator-like class type
2884	missing_incr_on_for_each_type the iterator type in this "for each" statement is "type", which is not a pointer type or an iterator-like class type
2885	missing_indirect_on_for_each_type the iterator type in this "for each" statement is "type", which is not a pointer type or an iterator-like class type
2886	no_packing_of_non_POD_field packing attribute on the parent type is ignored for this field of non-POD type "type"
2887	nonpublic_implicit_interface_match entity-kind "entity" (declared at line xxxx) not implemented because this declaration is not public and has no named override specifier
2888	missing_gnu_inline_attr_on_redeclaration this declaration is missing the gnu_inline attribute specified in the previous declaration at line xxxx

2889	managed_member_function_cannot_have_ellipsis_parameter a member function of a managed class cannot have an ellipsis parameter
2890	invalid_prev_decl_iterator previously-declared entity-kind "entity" invalid as iterator of "for each" statement
2891	generic_parameter_requires_clrcall calling convention ignored because the function type involves a generic parameter; <code>__clrcall</code> used instead
2892	generic_parameter_does_not_permit_varargs a function type involving a generic parameter cannot have an ellipsis parameter
2893	virtual_required_for_base_override "virtual" is required to override the matching entity-kind "entity" (declared at line xxxx)
2894	virtual_required_for_interface_implementation "virtual" is required to implement the matching entity-kind "entity" (declared at line xxxx)
2895	initonly_volatile_not_allowed an initonly data member cannot be volatile
2896	member_name_reserved_by_cli_operator a member "xxxx" of this type is reserved within a managed class -- C++/CLI operators must be declared using the keyword "operator"
2897	tracking_ref_to_constant a tracking reference to non-const cannot be bound to a constant
2898	attributes_with_no_decl attributes ignored here because they do not apply to a declared entity
2899	tracking_reference_to_system_string a tracking reference to <code>System::String</code> is not allowed

Diagnostics 2900 to 2999

2900	use_of_generic_class_with_pending_constraint invalid use of a generic class "type" with pending constraints (probably caused by an invalid metadata file)
2901	invalid_entity_for_pending_constraint a pending constraint clause is only allowed for generic class declarations (but not generic class definitions)
2902	invalid_empty_initializer_list empty initializer list not allowed here
2903	template_in_managed_class a template cannot be declared in a managed class
2904	bad_generic_declaration_scope a generic declaration is not allowed here
2905	interface_cannot_have_member_generics interface types cannot have member generics
2906	character_not_latin_1 Unicode character not Latin-1, truncated to low-order byte
2907	range_based_for_missing_function to be used with range-based "for" statements, type "type" must provide function "xxxx"
2908	missing_notequal_on_range_based_for_type the iterator type in this range-based "for" statement is "type", which is not a pointer type or an iterator-like class type
2909	missing_incr_on_range_based_for_type the iterator type in this range-based "for" statement is "type", which is not a pointer type or an iterator-like class type
2910	missing_indirect_on_range_based_for_type the iterator type in this range-based "for" statement is "type", which is not a pointer type or an iterator-like class type
2911	range_based_for_incomplete_array_type a range-based "for" statement cannot operate on an array of unknown size or incomplete type "type"

2912	begin_end_type_mismatch_in_range_based_for return types for "begin" and "end" functions used in a range-based "for" statement must be the same ("begin" return type is "type", "end" return type is "type")
2913	inaccessible_elided_dtor entity-kind "entity" (declared at line xxxx), required to destroy temporary that was eliminated, is inaccessible
2914	range_based_for_no_matching_overload in this range-based "for" statement, no instance of "entity" matches the argument list
2915	range_based_for_undefined_identifier this range-based "for" statement requires a suitable "xxxx" function and none was found
2916	for_each_undefined_identifier this "for each" statement requires a suitable "xxxx" function and none was found
2917	class_metadata_not_representable "type" has a metadata representation not representable using C++/CLI
2918	exp_ellipsis expected "..."
2919	implements_requires_interface "type" in __implements list is not an interface
2920	implements_must_precede_virtual_functions an __implements list must precede virtual function declarations
2921	missing_implements_list "type" specified "__implements ..." in its list of bases, but is missing a matching __implements list
2922	unused_dereference_of_ref_class the result of dereferencing a handle to a ref or interface class type must be used
2924	exp_rparen_and_pragma_ignored expected a ")"; pragma ignored

2925	using_or_access_declaration_in_managed_class a using-declaration or access declaration cannot appear in a managed class
2926	skipped_inaccessible_function Note: entity-kind "entity" (declared at line xxxx) could have been called but was not considered because it is inaccessible
2927	cli_abstract_member_function_definition an abstract member function of a C++/CLI managed class cannot have a definition
2928	nonstatic_addressof_operator_in_managed_class declaring this unary "operator*" can change the meaning of dereferencing a handle (use static member operators to explicitly indicate applicable types)
2943	interface_nonstatic_data_member an interface class cannot contain a nonstatic data member
2944	pragma_gcc_system_header_in_primary_file #pragma GCC system_header cannot be used in the primary source file
2945	too_large_to_inline entity-kind "entity" is too large to be inlined
2947	cl_gen_move_operations_option_only_in_cplusplus option to control move operations can be used only when compiling C++
2948	cl_gen_move_operations_and_rvalue_ctor_is_copy_ctor move operations cannot be generated when rvalue constructors are copy constructors
2949	cl_move_operations_require_rvalue_references option to control move operations cannot be used when rvalue references are disabled
2950	final_managed_class "final" cannot be used for managed classes (use "sealed" instead)
2951	cast_to_cli_interface_class a cast to CLI interface class "type" is not allowed -- cast to handle intended?

2952	new_of_cli_interface_class cannot create an object of a CLI interface class
2953	enum_type_replacement this declaration hides the nonstandard declaration of entity-kind "entity" (declared at line xxxx) because the underlying types are incompatible
2954	known_comparison_with_null pointer comparison result is constant, because operand can never be null
2955	value_init_of_incomplete an object of the incomplete type "type" cannot be value-initialized
2956	value_init_of_reference a reference cannot be value-initialized
2957	exp_lparen_or_brace expected a "(" or a "{"
2958	explicit_ctor_in_copy_list_init copy-list-initialization cannot use a constructor marked "explicit"
2959	ptr_to_member_of_type_void pointer to member of type void is not allowed
2960	ptr_to_member_of_reference_type pointer to member of reference type is not allowed
2961	ptr_to_member_of_handle_type pointer to member of handle type is not allowed
2962	braced_init_list_not_allowed a brace-enclosed list is not allowed here
2963	arrow_star_operator_in_managed_class an operator->* member is not allowed in a managed class
2964	bad_assembly_index assembly metadata refers to non-existent assembly
2965	attribute_conflict attribute "xxxx" conflicts with earlier attribute "xxxx"

2966	incompatible_enum_base_types entity-kind "entity" (declared at line xxxx) was previously declared with a different base type
2967	invalid_scoped_enum_elaboration "enum class" and "enum struct" cannot be used here (use plain "enum" instead)
2968	extra_braces_on_simple_init only one level of braces is allowed on an initializer for an object of type "type"
2969	not_an_enum_type_name entity-kind "entity" (declared at line xxxx) cannot be used as an enumeration type name
2971	auto_new_with_braced_init a braced-initializer cannot be used with "new auto"
2972	missing_initializer_list_ctor the definition of <code>std::initializer_list</code> does not contain the expected constructor
2973	variable_hides_entity declaration hides entity-kind "entity" (declared at line xxxx)
2974	invalid_std_initializer_list_parameter_list invalid template parameter list for <code>std::initializer_list</code> (it should be one ordinary type parameter with no default)
2975	braced_list_passed_to_ellipsis a brace-enclosed list cannot be passed for an ellipsis parameter
2976	initializer_list_not_included an <code>#include <initializer_list></code> is needed prior to a use of <code>std::initializer_list</code> , including an implicit use
2977	inline_on_alias the "inline" keyword cannot be used on a namespace alias declaration
2978	prev_ns_not_inline the previous declaration of entity-kind "entity" was not declared inline

2979	prev_ns_inline a redeclaration of inline entity-kind "entity" must be declared inline
2980	first_arg_must_be_integer_constant the first argument must be an integer constant
2981	designator_requires_aggregate_type a designator cannot be used with a non-aggregate type "type"
2982	indirect_anon_union_designator a designator for an anonymous union member can only appear within braces corresponding to that anonymous union
2983	cl_func_prototype_tags_option_only_in_C function prototype tags can only be enabled when compiling C
2984	cannot_elide_braces braces cannot be omitted for this subobject initializer
2985	narrowing_conversion invalid narrowing conversion from "type" to "type"
2986	constant_narrowing_conversion invalid narrowing conversion from "type" to "type": constant value does not fit in destination type
2987	cast_to_incomplete_array_type cast to incomplete array type "type" is not allowed
2988	constant_narrowing_conversion_to_float invalid narrowing conversion from "type" to "type": constant value cannot be represented exactly in destination type
2989	braced_init_in_paren_init a parenthesized initializer for a non-class entity must be an expression, not a brace-enclosed list
2990	braced_list_for_implicit_lambda_type a brace-enclosed list does not provide a return type for this lambda
2991	invalid_explicit_exception_specification the declared exception specification is incompatible with the generated one

2992	scoped_enum_nonstandard_in_current_mode scoped enumeration types are a C++11 feature
2993	value_init_of_function a function type cannot be value-initialized
2994	list_init_of_incomplete list-initialization of an object type "type" is not allowed because the type is incomplete
2995	std_initializer_list_has_dtor std::initializer_list has a destructor, and is not supposed to -- library is misconfigured
2996	explicit_enum_base_nonstandard_in_current_mode explicit enum base types are a C++11 feature
2997	unconvertible_con_expr this constant expression has type "type" instead of the required "type" type
2998	new_of_initializer_list a "new" of an std::initializer_list object is unlikely to work as expected because the underlying array will be destroyed at the end of the full expression

Diagnosics 3000 to 3099

3001	defined_always_false "defined" is always false in a macro expansion in Microsoft mode
3002	init_list_element_type_not_complete_object "type" cannot be the element type of an initializer list because it is not a complete object type
3003	invalid_default_arg mismatched delimiters in default argument expression
3004	conv_of_unbound_pm_to_func_ptr nonstandard conversion of pointer-to-member to a function pointer
3005	dynamic_exception_specifications_deprecated dynamic exception specifications are deprecated

3006	bad_scope_for_partial_spec entity-kind "entity" cannot be partially specialized in the current scope
3007	previous_constexpr_decl_conflict entity-kind "entity" (declared at line xxxx) was previously declared constexpr
3008	previous_nonconstexpr_decl_conflict entity-kind "entity" (declared at line xxxx) was previously not declared constexpr
3009	constexpr_variable_decl_must_be_definition missing initializer for constexpr variable
3010	invalid_constexpr "constexpr" is not valid here
3011	invalid_constexpr_body a constexpr function must contain exactly one return statement
3012	invalid_statement_in_constexpr_function statement may not appear in a constexpr function
3013	invalid_statement_in_constexpr_constructor statement may not appear in a constexpr constructor
3014	constexpr_virtual_combination a function cannot be both constexpr and virtual
3015	nonliteral_return_type_in_constexpr_function a constexpr function cannot have a nonliteral return type "type"
3016	nonliteral_param_type_in_constexpr_function a constexpr function cannot have a parameter of nonliteral type "type"
3017	unsequenced_use_of_variable unsequenced uses of entity-kind "entity" in expression may produce undefined results
3018	3rd_arg_of_assume_aligned_must_be_integral the optional third argument of a call to <code>__builtin_assumed_aligned</code> must have integral type

3019	constexpr_destructor a destructor cannot be constexpr
3020	invalid_mmap_address address supplied for mmap must be aligned on a page boundary: xxxx
3021	constexpr_constructor_with_function_try_block the body of a constexpr constructor cannot be a function try block
3022	missing_initializer_on_fields_with_constexpr_ctor constexpr entity-kind "entity" provides no initializer for:
3024	default_ctor_call_not_constant calling the default constructor for "type" does not produce a constant value
3025	default_ctor_not_constexpr the default constructor for "type" is not constexpr
3026	constexpr_variable_must_have_literal_type a constexpr variable must have a literal type or a reference type
3027	constexpr_ctor_with_virtual_base a constructor for a class with virtual bases cannot be constexpr
3028	bad_cpp11_constant_function_call function call must have a constant value in a constant expression
3029	constexpr_main function "main" may not be declared constexpr
3031	tag_defined_in_constexpr_body a class or enumeration type definition cannot appear in a constexpr function or constructor body
3032	only_gnu_attributes_here only GNU-style attributes are permitted here
3033	auto_used_two_ways nonstandard use of "auto" to both deduce the type from an initializer and to announce a trailing return type

3034	nonstd_qualified_void_param_list declaring a void parameter list with a qualified void type is nonstandard
3035	qualifier_ignored_on_local_declaration the qualifier on this local declaration is ignored
3036	bad_conv_constant_expr_type this constant expression has type "type" instead of the required xxxx type
3037	bad_argument_for_bases an instantiation of <code>__bases</code> or <code>__direct_bases</code> requires a class type
3038	bad_prototype_argument_for_bases the argument of <code>__bases</code> and <code>__direct_bases</code> must be a type template parameter
3039	bases_not_in_template xxxx can only be used in template contexts
3040	constexpr_return_not_constant constexpr function return is non-constant
3041	nonconstexpr_call_in_mem_initializer constexpr constructor calls non-constexpr entity-kind "entity"
3042	nonconstant_field_initializer_in_mem_initializer constructor cannot be constexpr because the initializer of entity-kind "entity" is not a constant expression
3043	nonconstant_mem_init_for_constexpr_ctor non-constant initializer for constexpr constructor
3044	generated_default_constructor_used_in_field_initializer the generated default constructor for "type" cannot be used in an initializer for its own data member
3045	recursive_initializer_instantiation instantiation of initializer of entity-kind "entity" depends on its own value

3046	defaulted_default_ctor_cannot_be_constexpr defaulted default constructor cannot be constexpr because the corresponding implicitly declared default constructor would not be constexpr
3048	bad_binary_digit invalid binary number
3049	multiple_union_field_initializers a union can have at most one field initializer -- entity-kind "entity" (declared at line xxxx) also has an initializer
3051	union_constexpr_constructor_initializes_no_field constexpr constructor of a union must initialize one of its fields
3052	constexpr_constructor_initializes_no_variant_field constexpr constructor fails to initialize an anonymous union (defined at line xxxx)
3053	constexpr_static_data_member_without_initializer a constexpr static data member declaration requires an in-class initializer
3054	cl_max_constexpr_option_only_in_cplusplus maximum constexpr depth/count options can be used only when compiling C++
3055	excessive_constexpr_complexity expression not folded to a constant due to excessive constexpr function call complexity
3056	cl_unrestricted_unions_option_only_in_cplusplus unrestricted union options can be used only when compiling C++
3057	constexpr_ctor_does_not_initialize_base constexpr constructor must initialize direct base class "type"
3058	field_initializer_list creation of an <code>std::initializer_list</code> object in a field initializer is unlikely to work as expected because the underlying array will be destroyed at the end of the full expression
3059	this_not_constant "this" cannot be used in a constant expression

3060	ambiguous_union_value_init an empty initializer is not valid for this union type (which member should be initialized is ambiguous)
3061	constexpr_explicit_instantiation "constexpr" is not allowed on an explicit instantiation directive
3062	generated_default_ctor_exception_spec_circularity cannot determine the exception specification of the default constructor due to a circular dependency
3063	anon_union_at_decl_position anonymous union defined at line xxxx
3064	unbounded_constexpr_ctor_init_recursion this constructor uses the initializer of entity-kind "entity" (declared at line xxxx), which would result in unbounded recursion
3065	cannot_default_initialize_anon_union anonymous union defined at line xxxx cannot be default-initialized because it has a deleted default constructor or destructor
3066	block_extern_initializer_not_allowed an initializer is not allowed on a local declaration of an extern variable
3067	local_named_register_initializer_not_allowed an initializer is not allowed on a local declaration of a named register variable
3069	cl_unrestricted_unions_in_microsoft_mode unrestricted unions cannot be enabled in Microsoft mode
3070	delegation_loop constructor delegates directly or indirectly to itself
3071	delegation_init_and_mem_init a delegating constructor cannot have other mem-initializers
3072	ref_qualifier_not_allowed a ref-qualifier is not allowed here

3073	same_param_types_with_and_without_ref_qualifiers overloading two member functions with the same parameter types requires that they both have ref-qualifiers or both lack ref-qualifiers
3074	bad_raw_string_delim_char invalid character in raw string delimiter
3075	missing_raw_string_delim_lparen parenthesis terminating raw string delimiter not found after 16 characters -- raw string indicator ignored
3076	missing_raw_string_delimiter ending delimiter for raw string not found
3077	pack_not_last_arg a parameter pack must be the final template argument in a partial specialization
3078	pm_call_obj_not_lvalue a pointer-to-member function with type "type" can only be used with an lvalue object
3079	pm_call_obj_not_rvalue a pointer-to-member function with type "type" can only be used with an rvalue object
3080	defaulted_copy_ctor_cannot_have_const_parameter the parameter of this defaulted copy-constructor cannot be const because a base or member copy constructor parameter is non-const
3081	defaulted_assignment_cannot_have_const_parameter the parameter of this defaulted assignment operator cannot be const because a base or member copy assignment parameter is non-const
3082	empty_anonymous_union an anonymous union must contain at least one nonstatic data member
3083	delegating_constructor_requires_newer_abi_version option "delegating_constructors" requires a different compiler configuration
3084	alignment_reduction_unconditionally_ignored a reduction in alignment is ignored

3085	bad_rvalue_ref_const_cast_operand the operand of a <code>const_cast</code> to an rvalue reference type cannot be a non-class prvalue
3086	expr_not_a_glvalue expression must be an lvalue or xvalue
3087	lossy_conversion conversion may change the value
3088	deprecated_string_conv conversion from a string literal to <code>"char *"</code> is deprecated
3089	deprecated_string_conv_gen conversion from a string literal to pointer-to-character (non-const) is deprecated
3090	override_and_final_is_cpp11 <code>"override"</code> and <code>"final"</code> are C++11 features
3091	rvalue_reference_in_exception_specification rvalue references are not allowed as exception specification types
3092	attr_disallows_handler_param attribute <code>"xxxx"</code> does not apply to handler parameters
3093	attr_requires_handler_param attribute <code>"xxxx"</code> requires a handler parameter
3094	wrong_entity_for_alignas <code>alignas</code> does not apply here
3095	std_alignof_with_expr_arg the standard <code>"alignof"</code> operator does not accept an expression argument (use a type instead)
3096	bad_qualifier_for_member_enum_decl invalid qualifier for <code>"type"</code> (a derived class is not allowed here)
3097	always_inline_requires_inline the <code>"always_inline"</code> attribute is ignored on non-inline functions

3098	inheriting_ctor_not_from_direct_base inheriting constructors must be inherited from a direct base class
3099	inheriting_ctor_conflict entity-kind "entity" already inherited from "type"

Diagnostics 3100 to 3199

3100	exp_asm_label expected a label
3101	missing_label_operand_number expected an operand number after "%l"
3102	label_operand_number_out_of_range operand number for "%l" doesn't refer to a valid label argument
3103	wide_string_invalid_in_asm a wide string is invalid in an "asm" statement
3104	attribute_is_nonstandard attribute is nonstandard
3105	decltype_is_not_base_class not a base class of class "type"
3106	bad_user_defined_suffix non-identifier character in user-defined literal suffix
3107	multichar_ud_lit a multicharacter literal cannot be part of a user-defined literal
3108	ud_string_suffix_mismatch user-defined literal suffix does not match the earlier "xxxx"
3109	invalid_literal_operator_id invalid literal operator name
3110	literal_operator_not_found user-defined literal operator not found

3111	ambig_literal_operator ambiguous literal operators and/or literal operator template:
3112	udl_cannot_be_class_member a literal operator cannot be a member of a class
3113	extern_c_literal_operator a literal operator cannot have extern "C" name linkage
3114	no_parameter_for_literal_operator at least one parameter expected for a literal operator
3115	too_many_parameters_for_literal_operator too many parameters for this literal operator
3116	invalid_parameter_type_for_literal_operator invalid parameter type "type" for literal operator
3117	invalid_integer_parameter_for_literal_operator invalid integer parameter type ("type") for literal operator; expected char, wchar_t, char16_t, char32_t, or unsigned long long
3118	invalid_float_parameter_for_literal_operator invalid floating-point parameter type ("type") for literal operator; expected long double
3119	pointer_to_nonconst_for_literal_operator invalid first parameter type ("type") for literal operator; pointer to non-const type is not allowed
3120	invalid_second_parameter_type_for_literal_operator invalid second parameter type ("type") for literal operator; must be size_t
3121	invalid_pointer_parameter_for_literal_operator invalid pointer parameter type ("type") for literal operator; expected char const*, wchar_t const*, char16_t const*, or char32_t const*
3122	ellipsis_parameter_for_literal_operator a literal operator cannot have an ellipsis parameter
3123	invalid_parameter_for_literal_operator_template a literal operator template cannot have any parameters

3124	invalid_template_parameter_for_literal_operator_template a literal operator template must have a template parameter list equivalent to "<char ...>"
3125	thread_local_not_allowed thread-local storage class is not valid here
3126	thread_local_follows_non_thread_local thread-local declaration follows non-thread-local declaration (declared at line xxxx)
3127	non_thread_local_follows_thread_local non-thread-local declaration follows thread-local declaration (declared at line xxxx)
3128	default_arg_for_literal_operator a literal operator cannot have default arguments
3129	attribute_ignored_for_thread_local attribute is ignored for thread-local variables
3130	lit_suffix_no_underscore a user-provided literal suffix must begin with "_"
3131	rvalue_references_is_cpp11 rvalue references are a C++11 feature
3132	lambdas_is_cpp11 lambda expressions are a C++11 feature
3133	std_attributes_is_cpp11 standard attribute syntax is a C++11 feature
3134	delegating_constructor_is_cpp11 delegating constructors are a C++11 feature
3135	inheriting_constructor_is_cpp11 inheriting constructors are a C++11 feature
3136	field_initializers_is_cpp11 field initializers are a C++11 feature
3137	deleted_functions_is_cpp11 deleted functions are a C++11 feature

3138	defaulted_functions_is_cpp11 defaulted functions are a C++11 feature
3139	storage_class_not_allowed_in_specialization a storage class is not allowed in an explicit specialization
3140	not_class_or_enum "type" is not a class or scoped enumeration
3141	specialization_of_unscoped_enum an unscoped enumeration must be opaque in order to be specialized
3142	nonmember_enum_template an enumeration template declaration must refer to a previously declared member of a class template
3143	operand_must_be_vector expected a vector operand
3144	incompatible_shuffle_source_operands shuffle source operands have incompatible types "type" and "type"
3145	nonintegral_shuffle_mask shuffle mask (type "type") is not a vector of integers
3146	incompatible_shuffle_mask shuffle mask (type "type") has a length different from the source operand (type "type")
3147	bad_size_for_static_address_init static initialization with an address value requires a destination of the same size as the address
3148	feature_test_macro_req_id the argument to a feature-test macro must be a simple identifier
3149	has_include_next_in_primary_source_file __has_include_next cannot be used in the primary source file
3150	absolute_file_name_in_has_include_next absolute file name used in __has_include_next
3151	attr_not_applied_to_function_type attribute "xxxx" must be applied to a function type

3153	bad_c11_noreturn _Noreturn is not allowed here
3154	operand_must_be_real_floating_value expected an operand of real floating-point type (not "type")
3155	incompatible_builtin_complex_types __builtin_complex requires operands of compatible types (unlike "type" and "type")
3156	default_association_appears_more_than_once a default association already appeared in this _Generic selection
3157	variably_modified_type_not_allowed_here a type involving a variable length array is not allowed here
3158	duplicate_type_in_c11_generic duplicate association type ("type") in _Generic selection
3159	no_match_in_c11_generic no association matches the selector type "type"
3160	incompatible_ifunc_resolver_type the type of entity-kind "entity" ("type") is incompatible with an ifunc resolver type
3161	ifunc_cant_be_alias a function cannot have both ifunc and alias attributes
3162	ifunc_cant_be_weak a function cannot have both ifunc and weak attributes
3163	call_requires_string_literal call requires a string literal operand
3164	duplicate_inheriting_constructor duplicate inheriting constructor declaration (previous at line xxxx)
3165	modified_decltype_auto_type "decltype(auto)" must be a placeholder for the complete type of the variable (not for a component of that type)
3166	decltype_auto_not_allowed_here decltype(auto) is not allowed here

3167	decltype_auto_type_requires_initializer cannot deduce "decltype(auto)" (initializer required)
3168	cannot_deduce_decltype_auto_type cannot deduce "decltype(auto)" type
3169	thread_local_must_include_static_or_extern a block-scope thread-local declaration must include static or extern
3170	deduced_return_type_conflict deduced return type "type" conflicts with previously deduced type "type"
3171	use_of_undefined_function_with_deduced_return_type cannot deduce the return type of entity-kind "entity" (declared at line xxxx); it has not been defined
3172	virtual_function_cannot_have_deduced_return_type a virtual function cannot have a deduced return type
3173	keyword_dropped entity-kind "entity" will be treated as a context-sensitive keyword from this point
3174	global_ns_has_no_actual_member the global namespace has no actual member "xxxx"
3175	different_enum_comparison comparison between two different enum types ("type" and "type")
3176	unrecognized_target_attribute target attribute not recognized
3177	gnu_mv_default_missing missing "default" target function
3178	gnu_mv_only_one_arch only one arch= target may be specified
3179	generic_class_cannot_be_custom_attribute a generic class cannot be a custom attribute
3180	invalid_ms_attribute_target invalid attribute target "xxxx"

3181	ambiguous_ms_attribute ambiguous attribute -- both "type" and "type" could be used
3182	cli_attribute_inaccessible_field a named attribute argument can only reference a public nonstatic read/write field or scalar property
3183	cli_attribute_invalid_field a named attribute argument can only reference a nonstatic field or scalar property of an attribute parameter type
3184	cli_attribute_invalid_argument invalid attribute argument -- expression must be a constant of an attribute parameter type
3185	cli_typeid_of_generic_param_in_attribute an attribute argument cannot use generic type parameters
3186	invalid_use_of_standalone_custom_ms_attr "type" may only be used as a standalone attribute
3187	field_target_on_nontrivial_property_or_event the 'field' attribute target cannot be used on a non-trivial property/event
3188	invalid_attribute_target_for_standalone_ms_attr invalid attribute target for a standalone attribute
3189	invalid_attribute_target_for_ms_attr invalid attribute target for this context
3190	invalid_use_of_custom_ms_attr "type" attribute cannot be used here
3191	cli_param_array_attribute_deprecated "type" is deprecated; use '...' to specify a parameter array
3192	namespace_default_cannot_be_extended the default namespace cannot be extended
3193	cppcx_box_invalid_type the boxed type must be a value class or enum
3194	tracking_reference_to_value_class tracking reference to value class is not allowed

3195	handle_to_value_class handle to value class is not allowed
3196	tracking_reference_to_enum tracking reference to enum is not allowed
3197	handle_to_enum handle to enum is not allowed
3198	cppcx_public_native_type a public native type is not allowed
3199	public_nested_type_in_cppcx_type a public nested type is not allowed

Diagnostics 3200 to 3299

3200	cppcx_generic_type_not_allowed generic types are not permitted in C++/CX
3201	cppcx_generic_method_not_allowed generic methods are not permitted in C++/CX
3202	cppcx_generic_constraints_not_allowed generic constraints are not allowed
3203	nonpublic_data_member_in_public_cppcx_value_type non-public data members are not allowed in public C++/CX value types
3204	public_nondata_member_in_public_cppcx_value_type public non-data members are not allowed in public C++/CX value types
3205	cppcx_public_value_class_constructor constructors are not allowed in public C++/CX value types
3206	bad_cppcx_event_add_return the return type of the "add" accessor must be Windows::Foundation::EventRegistrationToken
3207	bad_cppcx_event_remove_return the return type of the "remove" accessor must be void

3208	bad_cppcx_event_remove_parameter the parameter type of the "remove" accessor must be <code>Windows::Foundation::EventRegistrationToken</code>
3209	cppcx_handle_or_ref_to_generic_param a handle or reference to a generic parameter type is not allowed
3210	public_data_member_in_public_non_value_type public data members are not allowed in non-value types
3211	cl_cppcx_only_in_microsoft_cplusplus C++/CX can be enabled only in Microsoft C++ mode
3212	cl_cppcx_and_cppcli C++/CLI and C++/CX modes cannot be combined
3213	cppcx_not_enabled "xxxx" requires C++/CX mode
3214	cl_microsoft_version_insufficient_for_cppcx C++/CX mode requires <code>microsoft_version >= 1600</code>
3215	literal_fields_disallowed_in_cppcx_mode Literal fields are not allowed in C++/CX
3216	normal_ref_bound_to_cppcx_lvalue a standard reference cannot be bound to a C++/CX type
3217	cppcx_enum_base_has_no_platform_counterpart type must correspond to <code>Platform::Boolean</code> , <code>default::uint8</code> , <code>default::int8</code> , <code>default::int16</code> , <code>default::uint16</code> , <code>default::int32</code> , <code>default::uint32</code> , <code>default::int64</code> , or <code>default::uint64</code>
3218	event_in_cppcx_value_type a C++/CX value type cannot have events
3219	bad_cppcx_dynamic_cast_type a <code>dynamic_cast</code> to a handle type must refer to a complete class type
3220	cppcx_array_only_one_dimension_allowed <code>Platform::Array</code> can only be one-dimensional
3221	cppcx_tracking_reference_on_standard_class_type tracking reference to standard class type is not allowed

3222	cppcx_value_type_deriving_from_interface a C++/CX value type cannot inherit from an interface
3223	cppcx_value_type_contains_virtual_function a C++/CX value type cannot contain virtual functions
3224	partial_class_incorrect_type_or_location "partial" can only be applied to "ref class" or "ref struct" at global scope or namespace scope
3225	cppcx_invalid_array_property_set_value_parameter the parameter of the "set" accessor must be of type "const Platform::Array<T>^"
3226	cppcx_public_global_type the definition of a public C++/CX type is not allowed at global scope
3227	cppcx_public_indexed_property an indexed property with a public "get" or "set" accessor is not allowed
3228	cppcx_public_nested_delegate a public nested delegate type is not allowed
3229	cppcx_bad_delegate_init_list invalid delegate initializer -- expected either " <code>(<function-address or functor-object> [, Platform::CallbackContext])</code> " or " <code>(<object handle>, <member-address> [, Platform::CallbackContext [, bool]])</code> "
3230	cppcx_invalid_delegate_object invalid delegate initializer -- object must be a handle to a managed class
3231	cppcx_non_const_array_parameter C++/CX does not support 'in/out' arrays -- use "const Platform::Array<T>^" for 'in' and "Platform::WriteOnlyArray<T>^" or "Platform::Array<T>^*" for 'out' on public APIs
3232	missing_target_attribute missing "target" attribute for entity-kind "entity" (declared at line xxxx)

3233	no_matching_target_attribute no declared member function matches "target" attributes for entity-kind "entity"
3234	invalid_base_for_ms_attributes Microsoft attributes in this location are only permitted for interface types
3235	resolver_routine_required GNU function multiversion resolver routine required
3236	enum_in_managed_class_missing_definition an enum type declared in a managed class must include a definition
3237	decltype_qualified_declared_name a decltype-qualified name is nonstandard in this declaration context
3238	final_modifier_requires_virtual_function nonvirtual function cannot be declared with "final" modifier
3239	target_on_special_function "target" attribute on special function is not supported
3240	target_string_must_be_narrow must be a narrow string literal
3241	target_unmatched_parens unmatched parentheses
3242	gcc_pragma_nothing_to_pop no corresponding "push_options"
3243	pragma_inside_function this pragma is not allowed inside a function
3244	inline_new_or_delete_operator declaring a new or delete operator "inline" is nonstandard
3245	pack_expansion_for_field_mem_init a mem-initializer for a data member cannot be a pack expansion
3246	generic_lambda_cannot_capture generic lambda expressions cannot have capture defaults in this mode

3247	friend_with_def_arg_must_be_definition a default template argument in a friend declaration may only be specified in a definition
3248	friend_with_def_arg_must_be_only_decl a friend template declaration with a default template argument must be the only declaration (first declared at line xxxx)
3249	non_autonomous_opaque_enum_decl an opaque enum declaration cannot be part of another declaration
3250	nonstd_opaque_enum_decl_in_type_id an opaque enum declaration is nonstandard in this context
3251	extended_friends_is_cpp11 extended friend syntax is a C++11 feature
3252	digit_separators_not_enabled digit separators not enabled, apostrophe begins a character literal
3253	bad_digit_separator_pos digit separator cannot appear here
3254	constexpr_ignored_on_microsoft_nonstatic_member "constexpr" is ignored here in Microsoft mode
3255	bad_gnu_stmt_return invalid expression for statement expression result
3256	macro_not_udl_suffix identifier is a macro and not a literal suffix
3257	cannot_call_named_member_on_lvalue entity-kind "entity" (declared at line xxxx) cannot be called on an lvalue
3258	cannot_call_named_member_on_rvalue entity-kind "entity" (declared at line xxxx) cannot be called on an rvalue
3259	cannot_call_member_on_lvalue member function cannot be called on an lvalue
3260	cannot_call_member_on_rvalue member function cannot be called on an rvalue

3261	templ_param_list_too_long the template parameter list is too long
3262	bad_alias_tmpl_redecl alias template type "type" is incompatible with the previous type of "type" in the redeclaration of entity-kind "entity" (declared at line xxxx)
3263	field_initializer_is_not_constant the field initializer for entity-kind "entity" (declared at line xxxx) is not a constant expression
3264	constraint_number_mismatch the number of operand constraints must be the same in each constraint string
3265	too_many_constraints the constraint string contains too many alternative constraints; not all constraints were checked
3266	call_through_incomplete_class_type call through incomplete class "type" will always produce an error when instantiated
3267	decltype_auto_cannot_be_qualified decltype(auto) cannot have added type qualifiers
3268	bad_init_capture_capture init-capture "entity" (declared at line xxxx) cannot be captured here
3269	invalid_nontype_template_argument invalid nontype template argument of type "type"
3270	abi_tag_ignored_in_C_mode the abi_tag attribute is ignored (it has no meaning in C mode)
3271	abi_tag_redefinition redeclaration adds abi_tag attribute "xxxx"
3272	abi_tag_ignored abi_tag attribute is ignored (superseded by later abi_tag attribute)

3273	no_abi_tag_on_declaration previous declaration of entity-kind "entity" (declared at line xxxx) had no abi_tag attribute
3275	abi_tag_ignored_on_specialization abi_tag attribute is ignored on specialization
3276	decltype_auto_return_must_be_standalone decltype(auto) cannot appear under a pointer, reference, or pointer-to-member construct
3277	exp_class_or_typename expected "class" or "typename"
3278	placement_new_refers_to_non_placement_delete placement "new" expression refers to non-placement entity-kind "entity" (declared at line xxxx)
3279	cl_must_specify_cpp14_mode must specify C++14 mode when building runtime library
3283	constexpr_not_const constexpr non-static member function will not be implicitly 'const' in C++14
3284	nonliteral_var_in_constexpr_function variable type "type" in constexpr function is not a literal type
3285	nonautomatic_var_in_constexpr_function variable in constexpr function does not have automatic storage duration
3286	uninitialized_var_in_constexpr_function variable in constexpr function is uninitialized
3287	auto_direct_list_init_requires_singleton braced initialization of a variable declared with a placeholder type but without `=` requires exactly one element inside the braces
3288	cl_invalid_target no "xxxx" --target configuration exists
3289	attribute_not_supported_in_x86_64 attribute is not supported in 64-bit x86 configurations

3290	cl_missing_argument "xxxx" requires an argument
3291	special_member_coroutine a constructor or destructor cannot be a coroutine
3292	main_coroutine entity-kind "entity" cannot be a coroutine
3293	yield_in_catch co_yield expressions are not permitted in a catch clause
3294	yield_in_constexpr_function co_yield expressions are not permitted in a constexpr functions
3295	await_no_matching_overload in this co_await expression, no instance of "entity" matches the argument list
3296	await_undefined_identifier this co_await expression requires a suitable "xxxx" function and none was found
3297	await_no_eventual_value co_await expression is not allowed here because promise type "type" has no member function "return_value" or "return_void"
3298	special_class_template_not_found class template "xxxx" not found
3299	typename_needed use the "typename" keyword to treat entity-kind "entity" as a type in a dependent context

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3300	shufflevector_index_out_of_range argument value must be less than the sum of the vector elements
3301	not_a_type_member "type" has no member "xxxx"
3302	braced_list_for_implicit_return_type a brace-enclosed list does not provide a return type

3303	await_not_allowed_outside_function_scope a <code>co_await</code> expression must appear in a function scope
3304	await_not_allowed_in_catch_clause a <code>co_await</code> expression is not allowed inside a catch clause
3305	coroutine_with_ellipsis_parameter a coroutine cannot have an ellipsis parameter
3306	cl_relaxed_constexpr_requires_bool enabling C++14-style <code>constexpr</code> requires support for "bool"
3307	constexpr_function_undefined <code>constexpr</code> function entity-kind "entity" (declared at line xxxx) is not defined
3308	constexpr_call_not_interpretable this call cannot be evaluated because the target function entity-kind "entity" (declared at line xxxx) is not <code>constexpr</code> or not completely defined yet
3311	anon_union_alias_member_template invalid anonymous union -- alias member template is not allowed
3312	utf8_char_lit_too_long a UTF-8 character literal value cannot occupy more than one code unit
3313	variable_not_constant_valued the value of entity-kind "entity" (declared at line xxxx) cannot be used as a constant
3314	variable_not_constant_addressed a pointer or reference to entity-kind "entity" (declared at line xxxx) cannot be used as a constant
3315	constexpr_non_array_subscript nonzero subscript for non-array object
3316	constexpr_out_of_bounds_array_access cannot access position <code>n</code> in array of <code>n</code> elements

3317	constexpr_called_from called from:
3318	constexpr_union_field_inactive invalid access to inactive entity-kind "entity" of union (entity-kind "entity" is active)
3319	constexpr_goto 'goto' cannot be executed in constexpr contexts
3320	constexpr_missing_return_value missing return value
3321	constexpr_null_callee callee is null
3322	constexpr_null_dereference attempt to dereference a null pointer
3323	constexpr_access_one_past_array_end attempt to access storage one position past the end of an array of n elements
3324	constexpr_access_to_expired_storage attempt to access expired storage
3325	constexpr_access_to_runtime_storage attempt to access run-time storage
3326	constexpr_try_block cannot execute a try-block
3327	constexpr_call_to_nonconstexpr_function cannot call non-constexpr entity-kind "entity" (declared at line xxxx)
3328	constexpr_vla cannot use variable-length array during constexpr evaluation
3329	constexpr_negative_shift cannot perform a negative shift
3330	constexpr_shift_excess shift amount (n) too large

3331	constexpr_integer_overflow value exceeds range of "type"
3332	constexpr_fp_error floating-point error
3333	constexpr_null_ptr_to_member_data attempt to dereference a null pointer-to-member (data member)
3334	comparison_of_pointers_to_void_and_function comparing a pointer to void and a pointer to a function is nonstandard
3335	ms_metadata_init_failed metadata initialization failed
3336	constexpr_bad_derived_class_cast invalid base-to-derived cast (complete class type is "type")
3337	constexpr_invalid_pm_access invalid access to entity-kind "entity" in object of complete type "type"
3338	bad_gnu_auto_type "__auto_type" not allowed here
3339	gnu_auto_type_with_secondary_declarator "__auto_type" does not permit multiple declarators
3340	auto_type_brace_initialization_not_allowed initialization with "{...}" is not allowed for "__auto_type"
3341	modified_auto_type "__auto_type" must be a placeholder for the complete type of the variable (not for a component of that type)
3342	gnu_auto_type_without_initializer a variable declared with "__auto_type" requires an initializer
3343	constant_must_be_positive integer constant must be greater than or equal to zero
3344	type_must_be_integral type must be an integral type

3345	constexpr_expression_cannot_be_interpreted expression cannot be interpreted
3346	constexpr_statement_cannot_be_interpreted statement cannot be interpreted
3347	constexpr_interpreter_address invalid use of address of interpreter storage
3348	constexpr_invalid_constant_kind invalid constant kind for constant-expression
3349	constexpr_type_too_large type "type" too large for constant-expression evaluation
3350	constexpr_type_invalid invalid type "type" for constant-expression evaluation
3351	constexpr_invalid_type_conversion conversion from "type" to "type" is invalid in constant-expression evaluation
3352	constexpr_fp_conversion_failed floating-point conversion failed
3354	deduced_return_types_is_cpp14 deduced return types are a C++14 feature
3355	constexpr_ctor_with_dtor cannot evaluate a constructor with an associated destructor
3356	constexpr_missing_initializer_for_field entity-kind "entity" not initialized during constexpr evaluation
3357	constexpr_invalid_ptrdiff invalid pointer difference in constexpr evaluation
3358	constexpr_non_array_pointer_arithmetic invalid arithmetic on non-array pointer
3359	constexpr_pointer_ahead_of_array cannot set pointer before the first array element
3360	coroutine_with_deduced_return_type a coroutine with a deduced return type is invalid

3361	await_in_unevaluated_operand expression not allowed in unevaluated context
3362	invalid_yield_value_type yield_value produces void type
3363	nonvoid_yield_value_type yield_value produces value (of type "type"), which is not permitted in a coroutine with a deduced return type
3364	return_in_coroutine "return" is not permitted in a coroutine (use "co_return" instead)
3365	invalid_co_return "co_return" is only allowed in coroutines
3366	constexpr_fp_values_not_comparable floating-point values cannot be compared
3367	constexpr_pointers_not_comparable pointer values cannot be compared because they do not point into the same complete object or they point to subobjects with different accessibility
3368	ignoring_attribute_on_non_inline_namespace ignoring abi_tag attribute on non-inline namespace
3369	ignoring_attribute_on_anonymous_namespace ignoring abi_tag attribute on anonymous namespace
3370	complex_template_parameter complex or imaginary template parameter type is nonstandard
3371	yield_outside_of_function co_yield expression is not permitted outside a function scope
3372	thread_local_ignored ignoring thread-local indication on anonymous union
3373	cannot_deduce_coroutine_return_type cannot deduce return type from a coroutine with no co_yield or co_await construct
3375	object_not_initialized access to uninitialized object

3376	constexpr_volatile_fetch attempt to read from volatile storage
3377	constexpr_no_active_union_field invalid access to inactive entity-kind "entity" of union (no field is active)
3378	label_in_constexpr_function label definitions cannot appear in constexpr functions
3379	constexpr_equality_past_the_end_address cannot compare a pointer past the end of an array with a pointer to another complete object
3380	variable_tmpl_function_type function type "type" is an invalid type for a variable template instantiation
3381	incomplete_var_type variable cannot have incomplete type "type"
3382	field_subobject_not_initialized access to uninitialized subobject (entity-kind "entity")
3383	base_subobject_not_initialized access to uninitialized subobject (base class "type")
3384	constexpr_vacuous_dtor_call vacuous destructor call
3385	constexpr_modifying_const_storage attempt to modify const storage
3387	constexpr_bad_address address constant cannot be folded for evaluation of constexpr function
3388	constexpr_access_past_object attempt to access storage one position past an object treated as an array of one element
3389	constexpr_reinterpret_cast cannot use reinterpret_cast in constant-expression evaluation
3390	constexpr_invalid_null_ptr_operation operation not allowed on null pointer

3391	star_this_not_constant_valued the value of <code>*this</code> cannot be used as a constant
3392	inline_on_nested_namespace the "inline" keyword cannot be used on a nested namespace declaration
3393	carries_dependency_ignored the "carries_dependency" attribute is ignored
3394	event_interface_cannot_have_definition an " <code>__event __interface</code> " cannot have a definition here
3395	invalid_event_handler_type an event handler must have a void or integral return type
3396	event_interface_must_be_previously_defined an " <code>__event __interface</code> " must have been previously defined
3397	too_many_template_arguments too many template arguments for entity-kind "entity"
3398	enumerator_already_declared enumerator already declared (see entity-kind "entity" (declared at line xxxx))
3399	microsoft_version_doesnt_support_cpp14_mode the version of Microsoft being emulated must be at least 1903 to use " <code>--ms_c++14</code> "

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3400	microsoft_version_doesnt_support_cpplatest_mode the version of Microsoft being emulated must be at least 1903 to use " <code>--ms_c++latest</code> "
3401	c11_atomic_array_or_function_type type "type" cannot be <code>_Atomic</code> because it is an array or function type
3402	c11_atomic_specifier_with_qualified_type the <code>_Atomic(...)</code> specifier cannot be applied to qualified type "type"

3403	access_to_member_of_c11_atomic_object access to member of <code>_Atomic</code> object
3404	c11_atomic_bit_field a bit field cannot have an <code>_Atomic</code> type
3405	c11_atomic_class_types_disabled <code>_Atomic</code> class types are disabled
3406	nonconstexpr_mem_init_ctor_for_constexpr_ctor constexpr constructor calls non-constexpr constructor for subobject initialization
3407	terse_static_assert_not_enabled expected a comma (the one-argument version of <code>static_assert</code> is not enabled in this mode)
3408	terse_static_assert static assertion failed
3409	conflicting_nullability at most one of the qualifiers <code>_Nullable</code> , <code>_Nonnull</code> , and <code>_Null_unspecified</code> can modify a type
3410	invalid_type_for_nullability nullability qualifiers are only permitted on pointer and pointer-to-member types
3411	vector_length_too_large vector length is too large
3412	invalid_vector_element_type vector element type must be integral, enum, or real floating-point type
3413	builtin_needs_128_bit_integers builtin function is not available because 128-bit integers are not supported
3414	builtin_needs_vector_types builtin function is not available because vector types are not supported
3415	must_introduce_attribute two consecutive left square brackets can only introduce an attribute list

3416	invalid_target_attribute unrecognized "target" attribute disqualifies this routine from being used by resolver routine
3417	vector_type_required "type" is not a vector type
3418	vector_types_differ_in_length vector types "type" and "type" must have the same length
3419	member_special_after_class_definition added default arguments cannot result in declaring a default or copy constructor
3420	template_arg_cannot_point_to_subobject a nontype template argument of reference type must bind to a function or to a complete object
3421	type_not_allowed_here "type" not allowed here
3422	register_keyword_disallowed use of the "register" storage class specifier is not allowed
3423	register_keyword_deprecated use of the "register" storage class specifier is deprecated
3424	incr_of_bool_not_allowed incrementing a bool value is not allowed
3425	redeclaration_of_range_iterator "xxxx", declared as iterator of range-based "for" statement, may not be redeclared in this scope
3426	namespace_not_allowed an attribute namespace may not be used here (because a "using" prefix was specified)
3427	attribute_namespace_unrecognized attribute namespace "xxxx" is unrecognized
3428	default_member_init_for_value_class a default member initializer is not permitted in a value class
3429	cl_implicit_noexcept_requires_noexcept_support "--implicit_noexcept" requires a mode that enables noexcept

3430	constexpr_virtual_base cannot fold operation involving virtual base class ("type")
3432	constexpr_incomplete_type cannot evaluate value of incomplete "type"
3433	nodiscard_routine ignoring return value from routine declared with "nodiscard" attribute
3434	nodiscard_return_type ignoring return value type with "nodiscard" attribute
3435	nodiscard_doesnt_apply the "nodiscard" attribute doesn't apply to constructors, destructors, or routines with void return type
3436	fallthrough_applies_to_null_statement the "fallthrough" attribute only applies to null statements
3437	fallthrough_not_in_switch the "fallthrough" attribute may only appear in an enclosing switch statement
3438	fallthrough_must_precede_switch_case fallthrough statement must precede switch case label or default
3439	constexpr_expiring_temporary reference or pointer to temporary with limited lifetime
3440	address_of_nontrue_enable_if_function cannot take the address of a function with an "enable_if" attribute whose condition is not unconditionally true
3441	nonconstant_enable_if_attr "enable_if" attributes with conditions that are not constant values are not currently supported
3442	attribute_declared_here attribute was declared here
3443	has_include_not_in_if __has_include cannot appear outside #if
3444	coclass_base_requirements_not_met could not add CComCoClass base class

3445	constexpr_string_not_null_terminated not a null-terminated string
3446	non_scalar_vacuous_dtor_call non-scalar type "type" cannot be used in a vacuous destructor call
3447	constexpr_weak_address address of "weak" entity-kind "entity" is not constant
3448	excessive_rescan_depth too many recursive substitutions of function template signatures
3449	invalid_struct_binding_specifier invalid specifier for structured binding declaration
3450	invalid_struct_binding_syntax invalid structured binding syntax
3451	missing_initializer missing initializer
3452	invalid_struct_binding_type type "type" has no components to bind to
3453	too_many_struct_bindings too many identifiers
3454	missing_bindings there are more elements than there are binding names
3455	missing_std_tuple_element "std::tuple_element" not defined
3456	missing_std_tuple_element_instance cannot instantiate "std::tuple_element" for <xxxx, "type">
3457	failed_tuple_container_member_get cannot call member function "get<xxxx>()" for type "type"
3458	tuple_get_no_matching_overload no instance of "entity" matches the argument list
3459	struct_binding_undefined_identifier this structured binding requires a suitable "xxxx" function and none was found

3460	struct_binding_inline a structured binding cannot be declared "inline"
3461	struct_binding_constexpr a structured binding cannot be declared "constexpr"
3462	struct_binding_storage_class a structured binding cannot declare an explicit storage class
3463	invalid_tuple_size std::tuple_size<"type">::value is not a valid integral constant-expression
3464	condition_does_not_declare_a_variable a condition declaration must declare a variable
3465	condition_decl_must_have_initializer a condition declaration must include an initializer
3466	parenthesized_init_not_allowed a parenthesized initializer is not permitted for a condition declaration
3467	condition_with_multiple_declarators a condition declaration can only declare one variable
3468	struct_binding_lambda structured binding cannot bind to closure type
3469	struct_binding_private_member cannot bind to non-public entity-kind "entity"
3470	struct_binding_incomplete_type cannot bind to incomplete type "type"
3471	invalid_init_statement this declaration is not valid here
3472	constexpr_function_with_function_try_block the body of a constexpr function cannot be a function try block
3473	branch_into_constexpr_if transfer of control into a constexpr if block is not allowed
3474	lambda_capture_structured_binding structured binding cannot be captured

3475	microsoft_version_doesnt_support_cpp17_mode the version of Microsoft being emulated must be at least 1911 to use "--ms_c++17"
3476	attempt_to_read_past_end_of_object attempt to read past the end of the object
3477	constexpr_lambdas_not_enabled constexpr lambdas are not enabled in this mode
3478	lambda_not_constant_expr a constant expression cannot contain a lambda expression
3479	template_argument_index_out_of_bounds value exceeds number of template arguments
3480	fold_expression_operator_mismatch second operator in binary fold expression does not match first
3481	invalid_fold_expression_operator invalid fold expression operator
3482	two_packs_in_fold_expression a binary fold expression cannot apply to two parameter packs
3483	invalid_empty_fold_expression empty expansion not valid for this fold expression
3484	inline_nonstatic_data_mem a nonstatic data member cannot be declared as inline
3485	no_pack_in_fold_expression fold expression does not refer to a parameter pack
3486	same_param_types_with_different_exception_specifications two functions with the same parameter types but different exception specifications cannot be overloaded
3487	dynamic_exc_spec_not_permitted dynamic exception specifications are not permitted in this mode
3489	invalid_noexcept_specifier_operand invalid operand for noexcept specifier

3490	lambda_in_noexcept_specifier lambda expression cannot appear in noexcept specifier of a template
3491	inaccessible_rvalue_dtor entity-kind "entity" (declared at line xxxx) is inaccessible
3492	bad_enum_template_decl invalid specifier in enum template declaration
3493	no_float80 80-bit floating-point types are not supported in this configuration
3494	no_float128 128-bit floating-point types are not supported in this configuration
3495	invalid_enumerator_value invalid enumerator value
3496	must_be_atomic_qualified_type must be an <code>_Atomic</code> qualified type
3497	element_type_incomplete type of array element must be complete
3498	always_inline_suppressed the <code>always_inline</code> attribute has been suppressed for this function
3499	negative_value a negative value is not permitted here

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3500	integer_pack_element_for_type an integer pack element cannot match entity-kind "entity"
3501	integer_pack_element_for_template an integer pack element cannot match entity-kind "entity"
3502	unexpected_designator unexpected designator

3503	cannot_evaluate_builtin_offsetof cannot evaluate <code>__builtin_offsetof</code>
3504	deduction_guide_def deduction guide "type" cannot be defined
3505	bad_deduction_guide_scope deduction guide must be declared in the same scope as entity-kind "entity"
3506	invalid_specifier_for_deduction_guide invalid specifier for deduction guide declaration (only "explicit" is permitted)
3507	constexpr_mutable_field_load mutable entity-kind "entity" of a constant cannot be accessed in a constant expression
3508	member_function_modifier_on_static_member function modifier does not apply to static member declaration
3509	overloadable_attribute_requires_prototype the "overloadable" attribute requires a prototyped function declaration
3510	cannot_deduce_auto_templ_param cannot deduce "auto" template parameter type "type" from "type"
3511	modified_class_template_placeholder class template name must be a placeholder for the complete type being initialized (not for a component of that type)
3512	alias_declaration_is_cpp11 alias declarations are a C++11 feature
3513	alias_template_is_cpp11 alias templates are a C++11 feature
3514	bad_deduction_guide_return_type the return type must directly designate a specialization of the associated class template
3515	explicit_deduction_guide_in_copy_list_init copy-list-initialization cannot use "explicit" entity-kind "entity"

3517	invalid_udl_value Invalid value for user-defined literal operator
3518	has_cpp_attr_not_in_if __has_cpp_attribute cannot appear outside of #if or #elif
3519	bad_deduction_guide_access deduction guide must be declared with the same accessibility as entity-kind "entity"
3520	lambda_not_allowed_here a lambda is not permitted in this context
3521	align_not_equivalent specified alignment is not equivalent to previous declaration
3522	no_alignment_on_definition no alignment specified on definition; previous declaration had specified an alignment
3523	builtin_needs_128_bit_floats builtin function is not available because 128-bit floating-point types are not supported
3524	constexpr_shift_negative_value left-shifting a negative value has undefined behavior
3525	no_array_designators_in_cpp_mode array designators are nonstandard in C++
3526	no_chained_designators_in_cpp_mode chained designators are nonstandard in C++
3527	no_mixed_init_in_cpp_mode mixing designated and non-designated initializers is nonstandard in C++
3528	no_out_of_order_init_in_cpp_mode out-of-order initializers are nonstandard in C++
3529	invalid_string_literal_operator_template a string literal operator template must have a template parameter list equivalent to "<typename T, T ...>"
3530	duplicate_designator duplicate designator is not allowed

3531	likely_unlikely_conflict attribute conflicts with previous likely/unlikely attribute
3532	implicit_copy_this_capture_deprecated the implicit by-copy capture of "this" is deprecated
3533	empty_lambda_template_param_list an empty template parameter list is not allowed in a lambda expression
3534	microsoft_version_doesnt_support_cpp20_mode the version of Microsoft being emulated must be at least 1920 to use "--ms_c++20"
3535	bad_stdc_pragma_arg_for_mode STDC pragma argument not accepted in this mode
3536	if_constexpr_is_cpp17 constexpr if statements are a C++17 feature
3537	no_pack_expansion_in_designator pack expansion is not allowed in a designated initializer list
3538	no_designator_value field designator has no value
3539	multiple_union_field_initializers_empty a union can have at most one field initializer
3540	bad_ordering_type no valid std::xxxx type found (<compare> must be included)
3541	invalid_spaceship_types invalid types ("type" and "type") for built-in operator<=>
3542	fold_expressions_nonstandard fold expressions are nonstandard in this mode
3543	selection_initializer_nonstandard C++17-style initializer is nonstandard in this mode
3544	star_this_capture_nonstandard capturing *this is nonstandard in this mode
3545	using_attribute_nonstandard C++17-style "using" attribute prefix is nonstandard in this mode

3546	nested_namespace_nonstandard C++17-style nested namespaces are nonstandard in this mode
3547	constexpr_and_consteval_specifiers "constexpr" and "consteval" cannot both appear on a declaration
3548	consteval_virtual_combination a function cannot be both consteval and virtual in this mode
3549	consteval_explicit_instantiation "consteval" is not allowed on an explicit instantiation directive
3550	invalid_consteval "consteval" is not valid here
3551	consteval_destructor a destructor cannot be consteval
3552	consteval_ctor_with_virtual_base a constructor for a class with virtual bases cannot be consteval
3553	consteval_variable "consteval" is not permitted on the declaration of a variable or static data member
3554	previous_consteval_decl_conflict entity-kind "entity" (declared at line xxxx) was previously declared consteval
3555	previous_nonconsteval_decl_conflict entity-kind "entity" (declared at line xxxx) was previously not declared consteval
3556	consteval_main function "main" may not be declared consteval
3557	consteval_call_nonconstant call to consteval entity-kind "entity" did not produce a valid constant expression
3558	address_of_consteval_function address of consteval entity-kind "entity" in constant expression result

3559	consteval_overrides_nonconsteval consteval member cannot override non-consteval entity-kind "entity"
3560	nonconsteval_overrides_consteval non-consteval member cannot override consteval entity-kind "entity"
3562	constexpr_invalid_dynamic_cast dynamic_cast to subobject of type "type" is invalid (most-derived type is "type")
3563	VA_OPT_not_allowed the identifier <code>__VA_OPT__</code> can only appear in the replacement lists of variadic macros
3564	nested_VA_OPT <code>__VA_OPT__</code> cannot appear in a <code>__VA_OPT__</code> operand
3565	unclosed_VA_OPT missing closing parenthesis for <code>__VA_OPT__</code>
3566	missing_VA_OPT_paren <code>__VA_OPT__</code> must be followed by "("
3567	paste_cannot_be_first_in_VA_OPT "##" may not be first in a <code>__VA_OPT__</code> operand
3568	paste_cannot_be_last_in_VA_OPT "##" may not be last in a <code>__VA_OPT__</code> operand
3569	nested_inline_namespace_nonstandard C++20-style nested inline namespaces are nonstandard in this mode
3570	derived_class_too_far cannot convert pointer to base class "type" to pointer to derived class "type" -- attempt to point beyond the most-derived object
3572	invalid_variable_main "main" cannot be used as a global variable name or given C language linkage
3573	linkage_main function "main" cannot be declared in a linkage-specification

3574	struct_binding_in_condition structured binding is not allowed in a condition
3575	missing_attr_namespace an attribute namespace identifier is required before "::"
3576	multiple_attr_namespaces only one attribute namespace is allowed
3577	bad_return "return" not allowed here
3578	struct_binding_with_multiple_declarators a structured binding cannot be combined with other declarators
3579	branch_out_of_constant cannot branch out of a constant-evaluation context
3580	struct_binding_template structured binding templates are not permitted
3581	braced_init_in_parens a parenthesized initializer must be an expression, not a brace-enclosed list
3582	cannot_deduce_class_template_arguments cannot deduce class template arguments
3583	consteval_new_or_delete_operator a new or delete operator cannot be declared "consteval"
3584	address_of_consteval_function_leaked the address of a consteval function cannot be used here
3585	alignof_function_type the alignment of a function type ("type") is nonstandard
3586	alignof_incomplete_array the alignment of an array of unspecified bound is nonstandard in C
3587	cannot_be_common_internal_linkage a variable cannot have both "common" and "internal_linkage" attributes

3588	internal_linkage_not_on_prior_declaration the "internal_linkage" attribute did not appear on a prior declaration
3589	no_class_template_guide no viable template argument deduction candidate found for entity-kind "entity"
3590	fully_qualified_constructor_call a fully qualified constructor call is not allowed
3591	bad_scope_for_defaulted_comparison a comparison operator can only be defaulted in a class definition
3592	bad_param_type_for_defaulted_comparison bad type "type" for parameter of defaulted comparison operator (must be "reference to const X" where X is the enclosing class type)
3593	return_type_of_default_comparison_must_be_bool return type of defaulted comparison operator must be "bool"
3594	nonconst_defaulted_member_comparison a defaulted member comparison operator must be "const"
3595	duplicate_defaulted_spaceship more than one defaulted spaceship operator defined in this class
3596	no_return_value_and_return_void a coroutine's promise type "type" cannot have both "return_void" and "return_value" set
3597	return_value_at "return_value" declared at line xxxx
3598	return_void_at "return_void" declared at line xxxx
3599	implicit_co_return_with_no_return_void missing co_return statement while "type" has no "return_void" at end of entity-kind "entity"

Diagnostics 3600 to 3699

3600	no_nothrow_global_new_for_coroutine no nothrow variant of the global "operator new" found for coroutine state allocation
3601	no_viable_delete_for_coroutine no viable "operator delete" found for coroutine state deallocation
3602	no_constexpr_coroutine a constexpr function cannot be a coroutine
3603	await_operand_not_a_class the operand to this xxxx expression resolves to non-class "type"
3604	await_not_allowed_in_static_initializer a co_await expression is not allowed in a static initializer
3605	final_suspend_cannot_throw the co_await expression calling entity-kind "entity" must be non-throwing
3606	excessive_comparison_rewrites too many recursive comparison rewrite operations
3607	invalid_placeholder_for_defaulted_spaceship_return a deducible return type for a default operator<=> must be "auto"
3608	constexpr_implied_source_nonconstant implicit copy of non-constant source
3609	struct_binding_restricted_storage_class a structured binding cannot declare an explicit storage class other than static or thread_local
3610	defaulted_comparison_for_property defaulted comparison operators are not supported for nontrivial Microsoft property fields
3611	invalid_std_comparison_type standard comparison type ("type") must be a class type with a single nonstatic data member of integral type
3612	invalid_std_comparison_value no constexpr static data member "xxxx" found in "type"

3613	constexpr_alloc_too_large number of elements (n) too large for dynamic allocation
3614	constexpr_allocation_too_large constexpr dynamic allocation request too large
3615	constexpr_bad_deallocation deallocation of storage that was not dynamically allocated
3616	constexpr_bad_deallocation_size deallocation size (n) does not correspond to size allocated (n)
3617	constexpr_allocation_pos allocation occurred here
3618	constexpr_bad_deallocation_type deallocation type ("type") does not correspond to allocation type ("type")
3619	constexpr_leftover_allocations some dynamic allocations (total number = n) were not deallocated
3620	constexpr_invalid_intrinsic_signature intrinsic entity-kind "entity" declared with unexpected signature (type "type")
3621	constexpr_begin_report >> output from std::__report_constexpr_value
3622	constexpr_end_report >> end output from std::__report_constexpr_value
3623	constexpr_dependent_array_size cannot use array with dependent array size in constexpr evaluation
3624	nodiscard_routine_with_reason ignoring return value from routine declared with "nodiscard" attribute ("xxxx")
3625	nodiscard_return_type_with_reason ignoring return value type with "nodiscard" attribute ("xxxx")
3626	nodiscard_constructor constructor used to create discarded object has "nodiscard" attribute

3627	nodiscard_constructor_with_reason constructor used to create discarded object has "nodiscard" attribute ("xxxx")
3628	nodiscard_object_type type of discarded object has "nodiscard" attribute
3629	nodiscard_object_type_with_reason type of discarded object has "nodiscard" attribute ("xxxx")
3630	vacuous_destructor_not_called a pseudo-destructor reference can only be used for a pseudo-destructor call
3631	constexpr_explicit_dtor_call an explicit destructor call is not permitted in a constant-expression
3632	comma_operator_in_array_subscript_deprecated an unparenthesized comma operator in an array subscript expression is deprecated
3633	constexpr_alloc_too_small number of dynamically-allocated elements (n) too small for initializer
3634	volatile_inc_dec_deprecated a volatile operand to xxxx expression is deprecated
3635	volatile_ass_deprecated use of the result of an assignment to a volatile scalar object is deprecated
3636	volatile_op_ass_deprecated a volatile destination type for a compound assignment expression is deprecated
3637	volatile_func_param_deprecated a volatile function parameter is deprecated
3638	volatile_return_type_deprecated a volatile return type is deprecated
3639	volatile_str_bind_deprecated use of a volatile qualifier on a structured binding is deprecated

3640	ext_vector_type_invalid_size the "ext_vector_type" argument must be between 1 and 2047
3641	ext_vector_type_not_in_typedef the "ext_vector_type" attribute may appear only in a typedef
3642	ext_vector_type_requires_integral_floating_type the "ext_vector_type" attribute applies only to integer or floating-point types
3643	feature_test_macro_ignored this feature-test macro is ignored (and returns 0) in the current compilation mode
3644	constexpr_multiple_union_initializers cannot evaluate an aggregate initializer with multiple elements for a union
3645	cmp_operator_does_not_return_bool entity-kind "entity" (declared at line xxxx) selected for operator rewrite does not return type bool
3646	constexpr_class_specific_new a new-expression calling a class-specific allocation function cannot be constant-evaluated
3647	constexpr_placement_new a placement new-expression cannot be constant-evaluated
3648	constexpr_nonvirtual_subobject_delete deleting through a subobject pointer requires a virtual destructor
3650	invalid_intaddr_address operand of <code>__INTADDR__</code> must be offset from null pointer
3651	ambiguous_c11_generic <code>_Generic</code> construct matches multiple types
3652	ambiguous_c11_generic_previous_match the other match is "type"

Diagnostics 100000 to 100099

100001	Fatal Error Illegal type for field
100002	Fatal Error Character constant expression expected
100003	Fatal Error Type expected
100004	Fatal Error More than 7 dimensions not allowed
100005	Fatal Error Length of INTEGER must be 1, 2, or 4 (or sometimes 8)
100006	Fatal Error Type not defined
100007	Fatal Error Scalar value expected
100008	Fatal Error Incompatible scalar values
100010	Fatal Error Allocation failed
100011	Fatal Error Array, variable or Common block name expected
100012	Fatal Error Array size exceeds implementation limit
100013	Fatal Error Incorrect label on END DO statement
100014	Fatal Error Illegal Label
100015	Fatal Error Illegal terminal statement of DO-loop
100016	Fatal Error Empty Statement with Label is illegal

100017	Fatal Error A null reference is prohibited
100018	Fatal Error ENTRY Statement illegal in main program
100019	Fatal Error ENTRY Statement illegal
100020	Fatal Error Implicit statement illegal
100021	Fatal Error Must be a record
100022	Fatal Error Illegal END DO statement
100023	Fatal Error Parameter name already defined:
100024	Fatal Error Illegal to take the address of this object
100025	Fatal Error Illegal use of typedef
100026	Fatal Error Unrecognized Statement
100027	Fatal Error This object has no defined size
100028	Fatal Error Multiple definition of identifier:
100029	Fatal Error Operand must be an lvalue
100030	Fatal Error REAL operand not allowed here
100031	Fatal Error Pointer to void not legal here

100032	Fatal Error Indexing not allowed, this object must be an lvalue
100033	Fatal Error Type mismatch
100034	Fatal Error Machine code insertions are illegal with binary code generation; use -noobj
100035	Fatal Error Can only index arrays
100036	Fatal Error Multiple definition of statement label
100037	Fatal Error Illegal operation
100038	Fatal Error Duplicate specifier
100039	Fatal Error Pointer to procedure not legal here
100040	Fatal Error Illegal function
100041	Fatal Error Character function length undefined
100042	Fatal Error Illegal type for function
100043	Fatal Error Illegal argument to xxxx
100044	Fatal Error Integer expression required
100045	Fatal Error INTEGER/REAL/DOUBLE PRECISION value required
100046	Fatal Error Empty Statement illegal in Logical IF

100047	Fatal Error Format statement must have a label
100048	Fatal Error Illegal statement in logical IF
100049	Fatal Error Illegal Format Statement
100050	Fatal Error Statement function parameter must be constant size
100051	Fatal Error Illegal digit in hex or octal constant
100052	Fatal Error Arithmetic constant too large for type
100053	Fatal Error Illegal specifier
100054	Fatal Error Character expression expected
100055	Fatal Error Logical*4 variable expected
100056	Fatal Error Asm statement incompatible with binary code generation. Try command line option -noobj, or builder menu File Options->Advanced->Compilation = Assembly
100057	Fatal Error Unit identifier expected
100058	Fatal Error INQUIRE may not specify both UNIT and FILE
100059	Fatal Error Constant expression expected
100060	Fatal Error End of line found in hollerith data
100061	Fatal Error Illegal Radix-50 character

100062	Fatal Error Cannot have REC= in list directed I/O
100063	Fatal Error Line longer than 132000 characters
100064	Fatal Error Format identifier expected
100065	Fatal Error Illegal use of a private or protected field:
100066	Fatal Error END= not allowed in WRITE or REWRITE statement
100067	Fatal Error Illegal character
100068	Fatal Error End of line found in string
100069	Fatal Error Direct or unformatted I/O illegal
100070	Fatal Error Cannot recover from previous error
100071	Fatal Error Cannot open file:
100072	Fatal Error Redeclaration of array with different dimension:
100073	Fatal Error Concatenate operand must be a character expression
100074	Fatal Error File name too long
100076	Fatal Error Do not know how to do list I/O on this type
100077	Fatal Error Repetition count must be greater than zero

100078	Fatal Error Use of a non-prototype function:
100080	Fatal Error Constant expected
100081	Fatal Error No overloaded function matches these arguments:
100082	Fatal Error Illegal EQUIVALENCE item
100083	Fatal Error Illegal data-implied-do-list
100084	Fatal Error Integer constant expression expected
100085	Fatal Error Low bound must be less than high bound
100086	Fatal Error Not enough constants specified
100087	Fatal Error Too many constants specified
100088	Fatal Error Multiple initialization
100089	Fatal Error Cannot use this type with xxxx
100090	Fatal Error Illegal variable or expression
100091	Fatal Error Must have logical unit number
100092	Fatal Error Illegal DATA item
100093	Fatal Error REAL or COMPLEX operand not allowed here

100094	Fatal Error Scalar reference or array reference expected
100095	Fatal Error Expression not legal in constant
100096	Fatal Error Only one equivalence item specified
100097	Fatal Error Too many arguments passed to function:
100098	Fatal Error Illegal to equivalence two common entities
100099	Fatal Error Too few arguments passed to function:

Diagnostics 100100 to 100199

100100	Fatal Error Label used inconsistently
100101	Fatal Error Illegal length specification
100102	Fatal Error I/O error on read
100103	Fatal Error Radix-50 constant too long (limited to 12 characters)
100104	Fatal Error Only the last dimension can be an asterisk
100105	Fatal Error End of line found in Radix-50 constant
100106	Fatal Error Label expected
100107	Fatal Error Too many subscripts for

100108	Fatal Error END Statement expected
100109	Fatal Error Identifier cannot contain a period
100110	Fatal Error Asm statement illegal under current options
100111	Fatal Error Cannot index string constants
100112	Fatal Error Invalid type coercion
100113	Fatal Error A constant may not be assigned a new value
100114	Fatal Error END statement missing
100115	Fatal Error No matching if statement above
100116	Fatal Error Substring of parameter not allowed
100117	Fatal Error Illegal substring of
100118	Fatal Error Illegal substring operation
100119	Fatal Error Type error in intrinsic
100120	Fatal Error Illegal continuation card
100121	Fatal Error Multiple definition of FORMAT statement
100122	Fatal Error Illegal initialization

100123	Fatal Error Type size exceeds implementation limit
100124	Fatal Error USEROPEN value must be EXTERNAL SUBROUTINE
100125	Fatal Error Type error in statement function
100126	Fatal Error Statement function type must be constant size
100127	Fatal Error It is illegal to jump to a FORMAT statement
100128	Fatal Error Illegal concatenation of indeterminate length
100129	Fatal Error Integer*4 variable expected
100130	Fatal Error Internal Compiler Error
100131	Fatal Error Redeclaration of array with different base type:
100132	Fatal Error Array index out of bounds
100133	Fatal Error Integer variable expected
100134	Fatal Error Structure-name required at outermost level
100135	Fatal Error No constructor matches this initialization
100136	Fatal Error xxxx expected
100137	Fatal Error NAMELIST group-name expected

100138	Fatal Error Illegal type of object in NAMELIST
100139	Fatal Error I/O list not permitted for NAMELIST I/O
100140	Fatal Error Same control variable used for inner and outer DO loop
100141	Fatal Error A function may not return an incomplete type
100142	Fatal Error This use of an incomplete type is illegal
100143	Fatal Error Unmatched left parenthesis
100144	Fatal Error Illegal to use KEY on internal file
100145	Fatal Error Illegal to mix direct I/O and indexed I/O
100146	Fatal Error Error on line
100147	Fatal Error Cannot assign to this object
100148	Fatal Error Illegal type for key
100149	Fatal Error Could not disambiguate overloaded procedure name:
100150	Fatal Error due to alignment rules
100151	Fatal Error No storage mode specification line matched
100152	Fatal Error Internal Compiler Consistency Error

100154	Fatal Error Initial value cannot be the address of a position independent object
100155	Fatal Error Fatal error in reading library file:
100157	Fatal Error Variable expected
100158	Fatal Error Internal Program Error
100159	Fatal Error Too many errors during compilation

Diagnostics 100200 to 100299

100201	Fatal Error Label not defined
100202	Fatal Error Type conflict for:
100203	Fatal Error Not constant size:
100204	Fatal Error No return type specified for FUNCTION:
100205	Fatal Error Illegal type for:
100206	Fatal Error No such intrinsic:
100207	Fatal Error Period missing after

100208	Fatal Error Illegal goto into loop to label:
100209	Fatal Error Undefined STRUCTURE name:
100210	Fatal Error No such field in STRUCTURE:
100211	Fatal Error Undefined name:
100212	Fatal Error NAMELIST name not a constant size:
100213	Fatal Error Incompatible definition of function type:
100214	Fatal Error Entry parameter declared after use:
100215	Fatal Error No return type specified for ENTRY:
100230	Fatal Error Old fashioned class member declaration
100246	Fatal Error Global register cannot be initialized
100268	Fatal Error old-fashioned assignment operator
100278	Fatal Error The routine main() may not be declared static or inline.
100287	Fatal Error Unnecessary comma in declaration

100290	Fatal Error Size for field is larger than base type:
100292	Fatal Error All linkage specifications for a name must agree:
100293	Fatal Error Interrupt function may not have parameters:
100294	Fatal Error Interrupt function may not return a value:
100297	Fatal Error Global register must be struct, union or integer type
100299	Fatal Error Typedef redeclared as a variable of same type:

Diagnostics 100300 to 100399

100302	Fatal Error Ambiguous type conversions
100305	Fatal Error Coercion of a const pointer to a pointer
100306	Fatal Error Invalid pointer coercion

100310	Fatal Error Parameter should not initialize a reference in a constructor:
100314	Fatal Error No variables may be declared with an abstract type:
100316	Fatal Error Redeclaration of:
100321	Fatal Error Illegal use of non-static member (in static context):
100322	Fatal Error Illegal context in which to use this variable:
100325	Fatal Error Expression involves a reference to an ambiguous base class:
100330	Fatal Error Ambiguous member reference
100332	Fatal Error Braced expression must be inside a routine
100338	Fatal Error Invalid coercion: the routine is not a (non-static) class member
100339	Fatal Error Invalid coercion: the routine is a class member
100347	Fatal Error This copy constructor cannot initialize from a constant object:
100349	Fatal Error main() may not be called, nor may its address be taken
100356	Fatal Error Zero length bit fields must be unnamed:
100364	Fatal Error Virtual may only be used inside a class
100366	Fatal Error Illegal combination of enum and integer

100374	Fatal Error An array of voids is illegal
100375	Fatal Error Negative or zero array size
100376	Fatal Error An array of functions is illegal
100380	Fatal Error An array of references is illegal
100385	Fatal Error Cannot create a temporary, no copy constructor for constant objects of type
100389	Fatal Error Illegal to create a temporary for a reference to a non-constant
100390	Fatal Error A value must be returned by a non-void function:
100391	Fatal Error A value is returned from a void function:
100393	Fatal Error This block does not return a value
100394	Fatal Error A block containing a label may not return a value
100395	Fatal Error Missing comma in initializer
100396	Fatal Error An array initializer must be enclosed in braces
100398	Fatal Error Case or switch statement exceeds 16-bit limit. Try -bigswitch.
100399	Fatal Error Scopes nested too deeply. Cannot recover.

Diagnostics 100400 to 100499

100400	Fatal Error Implicit coercion from a void pointer is not legal
100402	Fatal Error Cannot cast an object to a function type
100405	Fatal Error Bad argument to reserved <code>__builtin_va_arg_incr</code>
100407	Fatal Error This compilation does not support floating point
100424	Fatal Error Interrupt functions may not be inlined
100425	Fatal Error Inconsistent version in inliner intermediate code files (.inf files). Clean your project and rebuild.
100427	Fatal Error This limited-functionality version of the software cannot compile code this large. Contact Green Hills Software, Inc. for a full-functionality version of the software.
100428	Fatal Error Nameless parameter in function definition
100429	Fatal Error Undefined static function used:
100434	Fatal Error An integer value is required for
100448	Fatal Error Illegal to call a member function of an undefined class:
100449	Fatal Error Illegal use of void type
100450	Fatal Error Neither const nor volatile may be used here
100459	Fatal Error Backslash x must be followed by a hex digit

100461	Fatal Error No digits in hex number
100462	Fatal Error No name given for typedef
100467	Fatal Error No statics with file scope may be referenced within a template:
100468	Fatal Error Array size cannot exceed 32767 in this mode
100470	Fatal Error PIC/PID illegal in Ada compiler
100489	Fatal Error This structure has no named fields
100490	Fatal Error Definition of a non-prototype function:
100492	Fatal Error Forward references to enums are not allowed
100493	Fatal Error Indexing not allowed on objects with this type:
100494	Fatal Error Cannot generate Altivec instructions with this combination of compiler and cpu setting

Diagnostics 100500 to 100599

100506	Fatal Error No TDA accesses allowed:
100507	Fatal Error Attempt to access variable in wrong TDA section:
100508	Fatal Error Bad argument to reserved <code>__mac3()</code> , etc.
100509	Fatal Error Bad argument to reserved <code>__ghs_FR20_va_arg</code>

100514	Fatal Error Function prototypes may not have dummy variable names in this mode
100515	Fatal Error Unrecognized va_argnum parameter
100516	Fatal Error Function already defined - ignoring new prototype
100531	Fatal Error Too many -YI options
100532	Fatal Error Too many -I- options
100533	Fatal Error Too many -I options
100534	Fatal Error Cannot redirect stderr to
100535	Fatal Error Illegal option:
100538	Fatal Error Required switch:
100539	Fatal Error Unsupported switch:
100566	Fatal Error A questionable cast was encountered at the file scope level which may result in incorrect output when ANSI aliasing based optimizations are applied. Please recompile with ANSI aliasing switched off.
100568	Fatal Error Bad entry for the ISR.
100570	Fatal Error Taking the address of a packed structure member
100573	Fatal Error Interrupt service routine not allowed in current processor mode.

100575	Fatal Error Asm macro must be defined:
100580	Fatal Error Option -ga is not allowed for interrupt service routines.

Diagnostics 100600 to 100699

100600	Fatal Error Must be a structure
100601	Fatal Error Illegal operation:
100602	Fatal Error Braces nested too deeply. Cannot recover.
100603	Fatal Error Length of LOGICAL must be 1, 2, or 4 (or sometimes 8)
100604	Fatal Error Length of REAL must be 4 or 8
100605	Fatal Error Length of COMPLEX must be 8 or 16
100606	Fatal Error EQUIVALENCE entity extends before common block
100608	Fatal Error Illegal to initialize a Non-constant address
100609	Fatal Error Multiple definition of name:
100610	Fatal Error Common block name expected

100611	Fatal Error Redeclaration of character variable with different dimension:
100612	Fatal Error Redeclaration of variable as an array:
100613	Fatal Error Letter expected
100614	Fatal Error Error in complex constant
100615	Fatal Error Illegal built-in function name
100616	Fatal Error Procedure name expected
100617	Fatal Error Alternate return specifier only in CALL statement
100619	Fatal Error A FUNCTION may not return a STRUCTURE
100620	Fatal Error Illegal OPTIONS statement
100621	Fatal Error Non-digit in statement number field
100622	Fatal Error Attempt to read off end of line
100623	Fatal Error UNIT must be specified
100624	Fatal Error INTEGER*4 variable expected
100625	Fatal Error Illegal specification in REWRITE statement
100626	Fatal Error KEYID specified but no KEY value specified

100627	Fatal Error Illegal statement number
100628	Fatal Error Illegal statement in DO range
100629	Fatal Error INTEGER/REAL/DOUBLE PRECISION variable expected
100630	Fatal Error Alternate return not allowed from function
100631	Fatal Error Only 5 digits allowed
100632	Fatal Error Integer or string constant expected
100633	Fatal Error Illegal placement of PROGRAM statement
100634	Fatal Error Illegal placement of OPTIONS statement
100635	Fatal Error Specification Statement Illegal
100636	Fatal Error END Statement expected at end of file
100637	Fatal Error Illegal type
100638	Fatal Error A structure, union, or enum must have at least one member
100639	Fatal Error A type or a storage class must be specified in a declaration
100640	Fatal Error Storage class illegal here
100641	Fatal Error Nothing declared in a declaration

100642	Fatal Error Function illegal in structure or union
100643	Fatal Error Illegal type for bit field
100644	Fatal Error Illegal negative size for field:
100645	Fatal Error Void type for
100646	Fatal Error Illegal type for member
100647	Fatal Error Semicolon missing in struct definition
100648	Fatal Error Field larger than int not supported in this compiler:
100649	Fatal Error This type has no constructor:
100650	Fatal Error Declaration not legal here
100651	Fatal Error Only one use of
100652	Fatal Error Illegal use of
100653	Fatal Error Incompatible type-specifiers
100654	Fatal Error Semicolon omitted after declaration

100657	Fatal Error Only non-static class members may be const or volatile:
100658	Fatal Error Argument must have a default value (since a previous arg did):
100659	Fatal Error Array size must be constant
100660	Fatal Error Null dimension
100661	Fatal Error No arguments may be specified after ...
100662	Fatal Error Reference to void illegal
100663	Fatal Error A reference to a reference is illegal.
100664	Fatal Error Pointers to references are illegal
100665	Fatal Error Initialized extern variable within a function
100666	Fatal Error This variable must be initialized
100667	Fatal Error Globalvalue initializer must be constant
100668	Fatal Error The size of this variable is not defined
100669	Fatal Error Initializer too large
100670	Fatal Error Illegal initial value
100671	Fatal Error A braced initializer must contain a value

100674	Fatal Error A prototype parameter list must be specified here
100676	Fatal Error Inline may be applied only to a function
100677	Fatal Error Static function declaration only allowed at file scope:
100679	Fatal Error No name given in declaration
100680	Fatal Error Illegal storage class
100681	Fatal Error This class has no destructor:
100682	Fatal Error Undefined member:
100683	Fatal Error Illegal member use:
100684	Fatal Error Undefined function:
100685	Fatal Error Implicit function declaration:
100686	Fatal Error Undefined symbol:
100687	Fatal Error This is not an lvalue
100688	Fatal Error Illegal member use
100689	Fatal Error Bit field not legal as operand of sizeof
100690	Fatal Error Must have at least one stack argument

100691	Fatal Error Redeclaration of prototype parameters
100692	Fatal Error Two declarations of:
100693	Fatal Error Void type argument illegal
100694	Fatal Error Unknown size for parameter
100695	Fatal Error Not a parameter name:
100696	Fatal Error A function must be declared by specifying parens
100697	Fatal Error No name given for declaration
100698	Fatal Error A file (translation unit) must contain at least one declaration/definition
100699	Fatal Error passed to function

Diagnostics 100700 to 100799

100700	Fatal Error Label not defined:
100701	Fatal Error Illegal octal digit
100702	Fatal Error Illegal symbol
100703	Fatal Error Illegal floating constant
100704	Fatal Error Empty character constant illegal

100705	Fatal Error Character constant too long
100706	Fatal Error Unexpected end of file
100707	Fatal Error End of line found in character constant
100708	Fatal Error Asm procedure incompatible with binary code generation. Try command line option -noobj, or builder menu File Options->Advanced->Compilation = Assembly
100709	Fatal Error #pragma asm incompatible with binary code generation. Try command line option -noobj, or builder menu File Options->Advanced->Compilation = Assembly
100711	Fatal Error This is a binary file
100712	Fatal Error Duplicate case
100713	Fatal Error Controlling expression of a switch statement must be integral
100714	Fatal Error Case not in switch statement
100715	Fatal Error Only one "default" case per switch statement allowed
100716	Fatal Error Case expression not constant
100717	Fatal Error Semicolon missing at end of switch statement
100718	Fatal Error Break statement must appear inside of a loop or switch
100719	Fatal Error Continue statement must appear inside of a loop

100721	Fatal Error Used before defined in scope,
100722	Fatal Error Semicolon omitted before case in variant record
100723	Fatal Error Tag field must be a scalar type
100724	Fatal Error Selector must be constant
100725	Fatal Error Subrange not legal in record tag/case
100726	Fatal Error Not all tag cases specified in variant record
100727	Fatal Error Undefined type:
100728	Fatal Error Ordinal type expected
100729	Fatal Error Type name expected
100730	Fatal Error File of file not allowed
100731	Fatal Error Subrange type expected
100732	Fatal Error Set too large for representation
100733	Fatal Error Structured type expected
100734	Fatal Error Labels must be in the range 0..9999
100735	Fatal Error Nil may not be in constant

100736	Fatal Error Type not declared
100737	Fatal Error Cannot inline a procedure or function which has a nested procedure or function
100738	Fatal Error Cannot dereference a function call
100739	Fatal Error Type illegal in expression
100740	Fatal Error Illegal use of a procedure as a function
100741	Fatal Error Built in operation may not be an actual parameter
100742	Fatal Error This is not a variable
100743	Fatal Error No such field in this record:
100744	Fatal Error Operand must be a variable
100745	Fatal Error File comparison not legal
100746	Fatal Error Illegal type for comparison
100747	Fatal Error Only equality and inequality allowed on pointers
100748	Fatal Error Procedure call illegal in expression
100749	Fatal Error Set constructor elements must be ordinal values
100750	Fatal Error File may not be assigned to

100751	Fatal Error Extraneous semicolon
100752	Fatal Error A procedure may not return a value
100753	Fatal Error Function return must be scalar/pointer
100754	Fatal Error Inconsistent redeclaration of routine
100755	Fatal Error Nested routines may not be inlined
100756	Fatal Error Multiple forward declarations
100757	Fatal Error External declaration only allowed at top level
100758	Fatal Error No assignment to return variable in function
100759	Fatal Error Scalar value required
100760	Fatal Error Argument to round or trunc must be real
100761	Fatal Error Argv requires a string variable
100762	Fatal Error Array size undefined
100763	Fatal Error File expected
100764	Fatal Error Text variable expected
100765	Fatal Error Input or output not defined

100766	Fatal Error Unpacked variable required for actual parameter
100767	Fatal Error This must be a procedure or function
100768	Fatal Error Actual corresponding to a value conformant array may not be a conformant array
100769	Fatal Error Tag field used as var parameter
100770	Fatal Error For index may not be var parameter
100771	Fatal Error Packed variable may not be passed by reference
100772	Fatal Error Actual array arguments have different types when conformant formals match:
100773	Fatal Error Too many arguments given for
100774	Fatal Error Not enough arguments given for
100775	Fatal Error Parameter not declared:
100776	Fatal Error Parameter is not a variable:
100777	Fatal Error Program ends before end of file
100778	Fatal Error New requires a pointer variable
100779	Fatal Error Dispose requires a pointer value
100780	Fatal Error May not dispose of a value parameter

100781	Fatal Error Initial value for tag must be constant
100782	Fatal Error Pointer type undefined
100783	Fatal Error Goto out of scope
100784	Fatal Error Forward procedure not defined:
100785	Fatal Error Digit required after decimal point
100786	Fatal Error A number may not be followed by a letter
100787	Fatal Error Null string, '', not legal
100789	Fatal Error Label not declared
100790	Fatal Error Label already defined
100791	Fatal Error This variable is a constant
100792	Fatal Error Assignment to for loop index inside loop
100793	Fatal Error Local variable required
100794	Fatal Error For loop variable assigned in procedure
100795	Fatal Error Value out of bounds
100796	Fatal Error Ordinal type required in case statement

100797	Fatal Error Record variable expected
100798	Fatal Error Second parameter required
100799	Fatal Error Text file expected

Diagnostics 100800 to 100899

100800	Fatal Error Cannot read into this type of variable
100801	Fatal Error Cannot write this type of expression
100802	Fatal Error Packed array variable expected
100803	Fatal Error Unpacked array variable expected
100804	Fatal Error Array component types incompatible
100805	Fatal Error Statement expected: function call illegal
100806	Fatal Error Statement expected
100807	Fatal Error #pragma intvect incompatible with binary code generation. Try command line option -noobj, or builder menu File Options->Advanced->Compilation = Assembly
100808	Fatal Error Illegal TDA call to function

Diagnostics 101000 to 101099

101000	Fatal Error No source file specified
101001	Fatal Error Ran out of string space
101002	Fatal Error Too many parameters for a macro
101007	Fatal Error NAMELIST name must be a variable name or array name
101008	Fatal Error Include nested too deeply
101009	Fatal Error Unknown .keyword.
101011	Fatal Error A cast is illegal in the expression of a #if/#elif
101012	Fatal Error (expected after # identifier
101013	Fatal Error End of file found in arguments to macro
101014	Fatal Error Unmatched #endif
101015	Fatal Error End of file found in #if, #ifdef, #ifndef or #elif
101016	Fatal Error An #if(def) directive begins in a different include file than it ends in
101017	Fatal Error Unmatched #else or #elif
101018	Fatal Error End of file found in comment
101019	Fatal Error Illegal preprocessor command

101020	Fatal Error Preprocessor expression must be constant
101022	Fatal Error Redefinition of this builtin macro not permitted:
101023	Fatal Error Extraneous comma in macro
101024	Fatal Error Missing comma in argument list for macro:
101025	Fatal Error # operator must be followed by a macro parameter
101026	Fatal Error ## operator may not begin or terminate a macro
101027	Fatal Error Redefinition of macro:
101038	Fatal Error All names listed inside an unknown_control_flow pragma must be routines:
101042	Fatal Error #defines nested too deeply or are recursive
101044	Fatal Error Wrong number of parameters in macro call
101046	Fatal Error Error directive encountered
101047	Fatal Error redeclaration of:
101048	Fatal Error End of file found in #if, #ifdef, #ifndef, or #elif
101050	Fatal Error #defines nested too deeply
101052	Fatal Error Intrinsic arguments have wrong type, please include spe.h

101053	Fatal Error <code>__ev64_*__</code> types not permitted in SDA or ZDA
101054	Fatal Error Intrinsic requires compile time constant as argument:
101055	Fatal Error Intrinsic requires compile time constant (-128..127) as argument:
101056	Fatal Error Intrinsic requires compile time constant (-16..15) as argument:
101057	Fatal Error Intrinsic requires coprocessor register (0..31) as argument:
101058	Fatal Error Unknown identifier
101060	Fatal Error #pragma must use a non-common symbol defined in this module, not:
101061	Fatal Error Size overflow of section
101064	Fatal Error <code>alloca()</code> is not supported for MIPS16
101066	Fatal Error <code>__bytereversed</code> only applies to int or short
101067	Fatal Error <code>_packed</code> floating point types not allowed

101068	Fatal Error Intrinsic requires compile time constant (0..1023) as argument:
101069	Fatal Error Intrinsic requires compile time constant (-512..511) as argument:
101070	Fatal Error Intrinsic requires compile time constant (0..255) as argument:
101071	Fatal Error Intrinsic requires compile time constant (-32..31) as argument:
101072	Fatal Error Intrinsic requires compile time constant (0..31) as argument:
101073	Fatal Error Intrinsic requires compile time constant (0..15) as argument:
101074	Fatal Error Intrinsic requires compile time constant (0..7) as argument:
101075	Fatal Error stack overflow or underflow
101076	Fatal Error Unable to acquire license for product code:
101077	Fatal Error Multiple aliases detected for symbol:
101079	Fatal Error Read/Write past top of stack frame
101080	Fatal Error Read/Write past bottom of stack frame
101082	Fatal Error This target does not support linkonce functions:
101083	Fatal Error Processor not supported in this release

101084	Fatal Error Alias conflicts with existing definition of identifier:
101086	Fatal Error Inconsistency in inliner intermediate code files (.inf files). Clean your project and rebuild.
101087	Fatal Error GNU ASM operand constraints do not allow for allocation
101088	Fatal Error Unable to find suitable register for GNU ASM statement
101089	Fatal Error Reference to undefined GNU ASM operand
101090	Fatal Error Intrinsic requires compile time constant (0..63) as argument:
101091	Fatal Error Intrinsic requires compile time constant (1..32) as argument:
101092	Fatal Error Intrinsic requires compile time constant (1..64) as argument:
101093	Fatal Error Too many ELF sections
101094	Fatal Error Cannot allocate function; please lessen GNU inline assembly restrictions
101095	Fatal Error Unexpected declaration or definition of symbol:
101096	Fatal Error LSP intrinsic immediate argument(s) must be literals
101097	Fatal Error LSP intrinsic immediate(s) out of range

101098	Fatal Error Overlapping volatile region detected; check for structure packing. Object is:
101099	Fatal Error Too many volatile regions; only 65535 may be tracked.

Diagnostics 101100 to 101199

101100	Fatal Error Intrinsic requires compile time constant (0..0x1fffffff) as argument:
101101	Fatal Error Elf file overflow
101102	Fatal Error Identifier too long
101103	Fatal Error Function stack size too large for -gtws (each function's stack must be smaller than 512MB).
101104	Fatal Error Code/object tree debugging output suppressed with binary codegen
101105	Fatal Error A filename is required for
101106	Fatal Error Illegal use of 'H' or 'L' GNU ASM modifier. Modifier may only be used on a 32-bit processor for 64-bit integer types.
101107	Fatal Error Line count exceeds implementation limit
101108	Fatal Error MMX and floating-point stack used in the same function
101109	Fatal Error Local branch out of range. Function too large.

101110	Fatal Error GNU ASM floating point constraint used with software floating point
101111	Fatal Error Reference to unknown GNU ASM modifier:
101112	Fatal Error Only basic asm expressions are allowed for functions with <code>__attribute__((naked))</code> :
101113	Fatal Error Thumb-1 codegen is incompatible with hardware floating point, but both were requested for function

Chapter 2

Linker Diagnostic Messages

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This chapter lists diagnostic messages that you may encounter when linking code, listed by diagnostic number.

Linker Diagnostic Message Codes

The following list contains all the linker diagnostic messages:

Diagnostics 1 to 99

1	Fatal Error expected <code>-Cname=value</code> Option -Cname is not followed by expected syntax of equal sign and constant.
2	Fatal Error expected <code>'{'</code> for memory map MEMORY directive not followed by bracket. See syntax for MEMORY directive in “Defining a Memory Map with the MEMORY Directive” in the chapter “The elxr Linker” in <i>MULTI: Building Applications</i> .
3	Fatal Error expected <code>ORIGIN</code> in memory declaration for <code>xxxx</code> In MEMORY directive, block declaration not followed by <code>ORIGIN</code> . See syntax for MEMORY directive in “Defining a Memory Map with the MEMORY Directive” in the chapter “The elxr Linker” in <i>MULTI: Building Applications</i> .
4	Fatal Error negative <code>LENGTH</code> in memory declaration In MEMORY directive, block declared with <code>LENGTH</code> less than zero. Memory block length must be non-negative integer.
5	Fatal Error expected <code>LENGTH</code> in memory declaration for <code>xxxx</code> In MEMORY directive, block declaration not followed by <code>LENGTH</code> . See syntax for MEMORY directive in “Defining a Memory Map with the MEMORY Directive” in the chapter “The elxr Linker” in <i>MULTI: Building Applications</i> .

6	<p>Fatal Error</p> <p>expected '{' for constant list</p> <p>DEFAULTS or CONSTANTS directive not followed by open bracket. See syntax for DEFAULTS directive in “Setting Defaults with the DEFAULTS Directive” in the chapter “The elxr Linker” in <i>MULTI: Building Applications</i>.</p>
7	<p>Fatal Error</p> <p>don't know how to evaluate xxxx(...) as a constant</p> <p>Expected expression that evaluates to a constant, either a number, a previously defined constant symbol, or some arithmetic combination of those.</p>
8	<p>Fatal Error</p> <p>don't know how to evaluate xxxx as a constant</p> <p>Expected expression that evaluates to a constant, either a number, a previously defined constant symbol, or some arithmetic combination of those.</p> <p>Example:</p> <pre> DEFAULTS { foo = 0x2000 // Correct bar = foo + 0x2000 // Correct baz = nonsense // Error, don't know how to evaluate // nonsense as a constant } </pre>
10	<p>Fatal Error</p> <p>expected -argcheck=none normal full</p> <p>Option -argcheck given parameter other than none, normal, or full.</p>
11	<p>Fatal Error</p> <p>section xxxx multiply defined in section map</p> <p>Section declared more than once in SECTIONS directive.</p> <p>Example:</p> <pre> SECTIONS { .mytext : > . .mytext : } </pre>
12	<p>Fatal Error</p> <p>expected -ccvcheck=none partial full</p> <p>Option -ccvcheck given parameter other than none, partial, or full.</p>

13	Fatal Error expected OPTION("-option") OPTION directive did not contain string expression. Example: OPTION(-append) Correct: OPTION("-append")
14	Fatal Error expected -Y U L UL, dir Option -Y not followed by U, L, or UL.
15	Fatal Error CROM sections are not supported with -a or -r CROM section attribute used with relocatable object link. Solution: Use CROM in final, absolute link stage or use uncompressed ROM.
16	Fatal Error cannot find file xxxx An option refers to a specific file which does not exist. Example: ccppc -exportall=dummy.o hello.c Solution: Make sure the file exists or remove the option referring to it.
17	Fatal Error No files to link. Use -help for help Linker has been invoked without specifying any modules to link on the command line. Provide valid object files to link into an executable.

<p>18</p>	<p>Fatal Error</p> <p>Section xxxx cannot have additional contents because it is already ROMming section xxxx</p> <p>A section with the ROM directive may not also be declared with other section contents.</p> <p>Example:</p> <pre>SECTIONS { .text : > . .ROM.text ROM(.text) : { *(.text2) } > . }</pre> <p>Correct:</p> <pre>.ROM.text ROM(.text) : > .</pre>
<p>19</p>	<p>Fatal Error</p> <p>In section map, expected: *(section) or file(section) or library(file)(section) or library(*) (section) instead of 'xxxx', or missing ';' after expression</p> <p>Unrecognized section contents specified in SECTIONS directive.</p> <p>Example:</p> <pre>SECTIONS { .text : { .text2 } > . }</pre> <p>Correct:</p> <pre>SECTIONS { .text : { *(.text2) } > . }</pre> <p>See section inclusion commands syntax in “Writing Section Inclusion Commands” in the chapter “The elxr Linker” in <i>MULTI: Building Applications</i>.</p>
<p>20</p>	<p>Fatal Error</p> <p>expected section name instead of 'xxxx'</p> <p>SECTIONS directive contains entry that is not a valid section name.</p> <p>Example:</p> <pre>SECTIONS { * : > . }</pre> <p>Correct:</p> <pre>SECTIONS { .text : > . }</pre> <p>See syntax for SECTIONS directive in “Defining a Section Map with the SECTIONS Directive” in the chapter “The elxr Linker” in <i>MULTI: Building Applications</i>.</p>

21	<p>Fatal Error</p> <p>cannot find library xxxx</p> <p>Specified library does not exist in the library directories provided.</p> <p>Example:</p> <pre>ccppc -ldummy hello.c</pre> <p>Solution: Make sure library exists, add the directory to find it with -L, or remove the library from build if unnecessary.</p>
22	<p>Fatal Error</p> <p>-shared_lib and -use_shared_libs are mutually exclusive</p> <p>The -shared_lib and -use_shared_libs options cannot both be used. Choose one or the other.</p>
23	<p>Fatal Error</p> <p>Multiple ROM directives for section xxxx</p> <p>More than one ROM directive specified for a single section.</p> <p>Example:</p> <pre>SECTIONS { .ROM.text ROM(.text) ROM(.data) : > . }</pre> <p>Correct:</p> <pre>SECTIONS { .ROM.text ROM(.text) : > . }</pre>
24	<p>Fatal Error</p> <p>section xxxx already has a start directive</p> <p>BIND directive encountered in SECTION map entry that already has a start_expression. This counts as a start_expression, and each section may only have one. See syntax for SECTIONS directive in “Defining a Section Map with the SECTIONS Directive” in the chapter “The elxr Linker” in <i>MULTI: Building Applications</i>.</p> <p>Example:</p> <pre>SECTIONS { .text BIND(0x1000) BIND(0x2000) : }</pre> <p>Correct:</p> <pre>SECTIONS { .text BIND(0x1000) : }</pre>

25	<p>Fatal Error</p> <p>expected -Dsymbol=value</p> <p>Option -Dsymbol is not followed by expected syntax of equal sign and constant.</p>
26	<p>Fatal Error</p> <p>expected -default_section leader=follower</p> <p>Option -default_section is not provided an argument in the form of .section1=.section2.</p> <p>Example:</p> <pre>ccppc hello.c -lnk="-default_section .text"</pre> <p>Correct:</p> <pre>ccppc hello.c -lnk="-default_section .text=.text2"</pre>
27	<p>Fatal Error</p> <p>expected -debug_section section=data</p> <p>Incorrect syntax for option -debug_section, which requires argument in the form section=data.</p>
28	<p>Fatal Error</p> <p>expected '}' for section map</p> <p>Link map has a SECTIONS directive with an open bracket and no matching close bracket.</p>
29	<p>Non-Fatal Error</p> <p>GNU linkmap output filename not specified.</p> <p>-gnu_linkmap option used without specifying the name of the file to output.</p> <p>Example:</p> <pre>ccppc hello.c -lnk=-gnu_linkmap</pre> <p>Correct:</p> <pre>ccppc hello.c -lnk=-gnu_linkmap=out.ld</pre>

30	<p>Fatal Error</p> <p>section xxxx references unknown memory block xxxx</p> <p>In SECTIONS directive, a section is assigned to a block that has not been declared with a MEMORY directive.</p> <p>Example:</p> <pre>SECTIONS { .text : > block_unknown }</pre> <p>Correct:</p> <pre>MEMORY { block_known : ORIGIN = 0x1000, LENGTH = 0x1000 } SECTIONS { .text : > block_known }</pre>
31	<p>Fatal Error</p> <p>section declared more than once with -default_section</p> <p>The same section is defined with two different -default_section options.</p> <p>Example:</p> <pre>ccppc hello.c -lnk="-default_section .text=.text2" \ -lnk="-default_section .rodata=.text2"</pre> <p>Correct:</p> <pre>ccppc hello.c -lnk="-default_section .text=.text2"</pre>
32	<p>Fatal Error</p> <p>expected -follow_section leader=follower</p> <p>Option -follow_section is not provided a parameter in the form of .section1=.section2.</p> <p>Example:</p> <pre>ccppc hello.c -lnk="-follow_section .text"</pre> <p>Correct:</p> <pre>ccppc hello.c -lnk="-follow_section .text=.text2"</pre>
33	<p>Fatal Error</p> <p>expected '{' for section map</p> <p>SECTIONS directive is not immediately followed by an open bracket. See syntax for SECTIONS directive in “Defining a Section Map with the SECTIONS Directive” in the chapter “The elxr Linker” in <i>MULTI: Building Applications</i>.</p>

<p>34</p>	<p>Fatal Error</p> <p>unknown directive xxxx for section xxxx (perhaps a second <start> directive?)</p> <p>In SECTIONS directive, a section is declared with an expression that is not recognized as a valid section attribute and cannot be the start_expression, since the section already has a start_expression. See syntax for SECTIONS directive in “Defining a Section Map with the SECTIONS Directive” in the chapter “The elxr Linker” in <i>MULTI: Building Applications</i>.</p> <p>Example:</p> <pre>SECTIONS { .text 0x1000 NONSENSE ALIGN(8) : }</pre> <p>Correct:</p> <pre>SECTIONS { .text 0x1000 ALIGN(8) : }</pre>
<p>35</p>	<p>Fatal Error</p> <p>expected ':' in the section map</p> <p>In SECTIONS directive, a section name is not followed by a colon. See syntax for SECTIONS directive in “Defining a Section Map with the SECTIONS Directive” in the chapter “The elxr Linker” in <i>MULTI: Building Applications</i>.</p>
<p>36</p>	<p>Fatal Error</p> <p>already have a load address for xxxx</p> <p>Multiple LOAD or AT directives declared for the same section.</p> <p>Example:</p> <pre>SECTIONS { .text LOAD(0x1000) LOAD(0x2000) : }</pre> <p>Correct:</p> <pre>SECTIONS { .text LOAD(0x1000) : }</pre>
<p>37</p>	<p>Fatal Error</p> <p>argument too long</p> <p>An option was provided an argument billions of characters long.</p>
<p>38</p>	<p>Fatal Error</p> <p>expected -symbol_override oldsym=newsym</p> <p>Incorrect syntax for option -symbol_override, which requires argument in the form symbol=symbol.</p>

<p>39</p>	<p>Fatal Error expected -Qy or -Qn Option -Q followed by something other than the character y or n.</p>
<p>40</p>	<p>Fatal Error xxxx is an invalid diagnostic number -elxr_diag_(suppress error warning) option provided with an argument that does not correspond to a valid diagnostic number. Example: ccppc hello.c -lnk="-elxr_diag_warning -1"</p>
<p>41</p>	<p>Fatal Error diagnostic #xxxx cannot be suppressed Attempt to use -elxr_diag_suppress on a fatal error number.</p>
<p>42</p>	<p>Fatal Error diagnostic #xxxx cannot be demoted to a warning Attempt to use -elxr_diag_warning on a fatal error number.</p>
<p>43</p>	<p>Fatal Error could not access file: xxxx A .raw file specified with -rawimport option cannot be opened for reading.</p>
<p>44</p>	<p>Fatal Error While allocating commons: unknown common symbol xxxx from module xxxx for section #### A variable using the --commons syntax could not be mapped to a suitable section.</p>
<p>45</p>	<p>Fatal Error malformed .ghs.linkonce section name "xxxx" A linkonce section name is not in the form: .ghs.linkonce.NUMBER.SECTION Example invalid symbol name: .ghs.linkonce.text or .ghs.linkonce.1 Example correct symbol name: .ghs.linkonce.1.text</p>
<p>47</p>	<p>Fatal Error module xxxx differs in machine type or endianness Attempting to link together incompatible modules, compiled with different endianness modes or for completely different architectures.</p>

48	<p>Fatal Error</p> <p>write failed</p> <p>The linker was not allowed by the host operating system to finish writing data to an output file. Possibly the disk is full.</p>
49	<p>Fatal Error</p> <p>unknown internal relocation: ####</p> <p>A module contains an unrecognized relocation code in a special reserved range.</p>
50	<p>Fatal Error</p> <p>Couldn't ROM xxxx to xxxx because section "xxxx" does not exist</p> <p>The ROM directive is used to declare a section as the ROM copy of a section that does not exist.</p> <p>Example:</p> <pre>SECTIONS { .ROM.text ROM(.unknown) : }</pre> <p>Correct:</p> <pre>SECTIONS { .ROM.text ROM(.text) : }</pre>
51	<p>Fatal Error</p> <p>[InMem TimeMachine] (error) Unable to locate a .inmemtm-like section during a kernel link.</p> <p>The option -inmemtm is used to link the INTEGRITY kernel but the link map does not define any *.inmemtm sections.</p>
52	<p>Fatal Error</p> <p>couldn't open file xxxx Maybe another process has xxxx this file?</p> <p>An object file being linked could not be opened for reading by the host operating system.</p>
53	<p>Fatal Error</p> <p>different machine flags in module xxxx: #### vs #### in other modules (machine = ####)</p> <p>Two modules being linked together have different and incompatible ELF flags, suggesting they were not compiled for the same processor type.</p>

<p>54</p>	<p>Fatal Error</p> <p>Couldn't CROM xxxx to xxxx because section "xxxx" does not exist</p> <p>The CROM directive is used to declare a section as the compressed ROM copy of a section that does not exist.</p> <p>Example:</p> <pre>SECTIONS { .ROM.text CROM(.unknown) : }</pre> <p>Correct:</p> <pre>SECTIONS { .ROM.text CROM(.text) : }</pre>
<p>55</p>	<p>Fatal Error</p> <p>can't have an 8-bit branch displacement of #### xxxx</p>
<p>57</p>	<p>Non-Fatal Error</p> <p>module xxxx was compiled with -registermode=32 but previous modules were compiled with -registermode=22</p> <p>RH850 specific. A module compiled with -registermode=22 is being linked with a module compiled with the incompatible -registermode=32 option.</p>
<p>59</p>	<p>Fatal Error</p> <p>.ghstraceedge section must be in 16-bit address range for ZDA mode</p> <p>PowerPC specific. *.ghstraceedge section is located too far from address 0.</p>
<p>60</p>	<p>Fatal Error</p> <p>bad character in literal: 'xxxx' in 'xxxx'</p> <p>An option was expecting an integer value and got something else.</p> <p>Example:</p> <pre>ccppc hello.c -lnk=-Cdummy=notanumber</pre> <p>Correct:</p> <pre>ccppc hello.c -lnk=-Cdummy=152</pre>
<p>63</p>	<p>Fatal Error</p> <p>missing a vital dynamic section in xxxx</p> <p>An INTEGRITY shared library object does not contain expected .dynamic or .dynsym sections.</p>

64	<p>Fatal Error</p> <p>-map_file and -prof_file are required with -profile. Use -help for help.</p> <p>The -cfprofile option is used but the corresponding -cfmap_file and -cfprof_file options have not been used to specify input files with profiling data.</p>
65	<p>Fatal Error</p> <p>cannot merge symbol with incompatible special common types: xxxx</p> <p>A COMMON symbol appears in two different modules with incompatible declarations such that they each belong in different section types.</p>
66	<p>Fatal Error</p> <p>cannot open directive file 'xxxx' (xxxx)</p> <p>An option file (specified with a 'e', like <code>elxr @commands.txt</code>) cannot be opened for reading by the host operating system. Does the file exist?</p>
67	<p>Fatal Error</p> <p>unable to obtain a suitable license</p> <p>A license may not be available to use the toolchain for various reasons. There could be a configuration or network issue, the licenses could all be in use, etc. Read documentation on licensing to troubleshoot.</p>
68	<p>Fatal Error</p> <p>Attempt to change the size of section "xxxx" which was already used in a relocation</p>
70	<p>Fatal Error</p> <p>file read failed for xxxx: possible file corruption or disk error</p> <p>Could not read from ELF module, or the values read are not properly formatted. This file may have been corrupted and should probably be removed and rebuilt.</p>
71	<p>Fatal Error</p> <p>SHT_GROUP section xxxx has an invalid sh_info index ###</p> <p>An SHT_GROUP section does not have the index of a corresponding symbol.</p>
72	<p>Fatal Error</p> <p>Function xxxx in xxxx in .text must be a multiple of four-bytes in size.</p> <p>PowerPC specific. A non-VLE function has a size that is not 4 byte aligned.</p>
73	<p>Fatal Error</p> <p>.robase section does not exist</p>

<p>74</p>	<p>Fatal Error</p> <p>Reference to non-exported symbol xxxx in module xxxx</p> <p>The <code>-exported_absolutes_only</code> option is used and there is a relocation to an external absolute symbol that has not been explicitly exported by an entry in the <code>.ghsexports</code> section.</p>
<p>75</p>	<p>Fatal Error</p> <p>More than one <code>.ghstraceedge</code> like section in linker directive file</p> <p>The section map contains multiple sections matching: <code>*.ghstraceedge</code></p>
<p>76</p>	<p>Fatal Error</p> <p>different machine flags in module xxxx: ##### vs ##### in other modules</p> <p>Two modules being linked together have different and incompatible ELF flags, suggesting they were not compiled for the same processor type.</p>
<p>77</p>	<p>Fatal Error</p> <p>attempt to allocate non-empty section xxxx to zero-length memory region xxxx</p> <p>A section has been assigned a block of memory of size zero.</p> <p>Example:</p> <pre>MEMORY { block_zero : ORIGIN = 0x10000, LENGTH=0x0 } SECTIONS { .text : > block_zero }</pre> <p>Correct:</p> <pre>MEMORY { block_nzero : ORIGIN = 0x10000, LENGTH=0x8000 } SECTIONS { .text : > block_nzero }</pre>
<p>78</p>	<p>Fatal Error</p> <p>Malformed object file: xxxx(xxxx) has bad symbols</p> <p>The object file format is wrong and possibly corrupt. A symbol is listed at a location that exceeds the size of the section it is in.</p>
<p>79</p>	<p>Fatal Error</p> <p>Unknown or malformed function description symbol xxxx in module xxxx</p> <p>A Green Hills Compiler generated symbol name beginning with the prefix <code>..gh.f.</code> has an unsupported format containing unexpected characters. The object file could be generated by a compiler of a newer version than the linker executable.</p>

80	<p>Fatal Error</p> <p>Relocation to overridden local linkonce symbol xxxx(xxxx)</p> <p>Something has gone wrong with template instantiation and there are references to a redundant instance that have not been redirected to the chosen instance. This might happen if one of the modules referencing the template was not recompiled after changing the template.</p>
82	<p>Fatal Error</p> <p>Relocation stack underflow xxxx</p> <p>Blackfin specific. A complex expression relocation expected to be preceded by another relocation on the stack but was not.</p>
83	<p>Fatal Error</p> <p>section xxxx's start address differs from the absolute (.org) address in module xxxx</p> <p>A section marked with an absolute fixed address is placed in an output section with a different, incompatible address.</p>
84	<p>Fatal Error</p> <p>compressed section xxxx is invalid: rommed section xxxx has type SHT_NOBITS</p> <p>A compressed ROM section is created for a section that is not initialized with data and therefore has nothing to compress.</p> <p>Example:</p> <pre>SECTIONS { .ROM.bss CROM(.bss) : }</pre> <p>Correct:</p> <pre>SECTIONS { .ROM.data CROM(.data) : }</pre>
85	<p>Fatal Error</p> <p>xxxx is an empty file</p> <p>Attempted to translate a COFF file that contained no data into an ELF file.</p>
87	<p>Fatal Error</p> <p>Attempt to change the value of symbol "xxxx" which has already been relocated</p>
88	<p>Fatal Error</p> <p>SHT_GROUP section xxxx has no flags word</p> <p>A GROUP section exists but contains no data.</p>

<p>89</p>	<p>Fatal Error</p> <p>archive xxxx is missing its symbol table, and errors occurred while recovering. Run 'ax -ts xxxx' to rebuild table manually.</p> <p>A library archive was missing the appropriate index that would allow us to access it, and an attempt to automatically generate this information failed. You can try to reformat this archive yourself using ax-ts</p>
<p>90</p>	<p>Fatal Error</p> <p>could not generate a -prog2 image. Program header summary: xxxx</p> <p>The option -prog2 was used, unsuccessfully.</p>
<p>91</p>	<p>Fatal Error</p> <p>AutoSDA is incompatible with TraceEdge</p> <p>The linker -sdaize or -zdaize optimization options are not supported in conjunction with the -traceedge or -inmemtm trace instrumentation options.</p>
<p>92</p>	<p>Fatal Error</p> <p>error reading library xxxx</p> <p>A library file was either unavailable for reading by the host operating system or the header was not formatted like a proper archive file.</p>
<p>93</p>	<p>Fatal Error</p> <p>file xxxx is not a library</p> <p>The header of a library file is not marked like a proper ELF archive should be.</p>
<p>94</p>	<p>Fatal Error</p> <p>literal 'xxxx' is out of range</p> <p>An immediate value is specified that would be more than 64-bits.</p> <p>Example:</p> <pre>MEMORY { block_big : ORIGIN = 0, LENGTH=1000000000000000M }</pre>
<p>96</p>	<p>Fatal Error</p> <p>unhandled symbol xxxx in section xxxx of module xxxx; this module might contain invalid inline assembly statements</p> <p>Linker optimizations were unable to properly disassemble the contents of a function. This may be due to inline assembly that is not safe to optimize.</p>
<p>98</p>	<p>Fatal Error</p> <p>.ghstraceedge section must have non-zero size</p> <p>The -traceedge option is used, but a *.ghstraceedge section is totally empty.</p>

99	<p>Non-Fatal Error</p> <p>module xxxx was compiled with <code>-registermode=22</code> but previous modules were compiled with <code>-registermode=32</code></p> <p>RH850 specific. A module compiled with -registermode=22 is being linked with a module compiled with the incompatible -registermode=32 option.</p>
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Diagnostics 100 to 199

100	<p>Fatal Error</p> <p>badly formed argument checking symbol encountered</p> <p>Link-time argument checking is used, but the argument checking symbol name does not conform to expected syntax. These labels are expected to be in the form: <code>__calle[e r].FunctionName.ReturnType.ArgumentList</code></p>
103	<p>Fatal Error</p> <p>ZDA overflow: symbol 'xxxx' out of range</p> <p>TriCore specific. <code>R_TRICORE_18ABS</code> relocation out of range.</p>
104	<p>Non-Fatal Error</p> <p>Possible xxxx incompatibility between modules xxxx and xxxx</p> <p>C++ ABI compilation options do not match for two of the modules being linked together. Make sure both are up to date and compiled with similar options.</p>
105	<p>Fatal Error</p> <p><code>.sdabase</code> section does not exist</p> <p>The section map does not declare an <code>.sdabase</code> section. Add one to the link map, or recompile without -sda options.</p>
106	<p>Fatal Error</p> <p>xxxx section does not exist</p> <p>V800 specific. A required SDA related section is missing from the link map.</p>
107	<p>Fatal Error</p> <p>AutoSDA cannot operate on a section map containing <code>.PPC.EMB.sbss0</code> but not <code>.PPC.EMB.sdata0</code></p> <p>PowerPC specific. The link time ZDA optimization is enabled, and the link map contains a <code>.PPC.EMB.sbss0</code> section, but not a <code>.PPC.EMB.sdata0</code> section. Add a <code>.PPC.EMB.sdata0</code> section to the link map or disable the ZDA optimization.</p>

<p>108</p>	<p>Fatal Error</p> <p><code>.sdabase</code> section not defined</p> <p>The section map does not declare an <code>.sdabase</code> section. Add one to the link map, or recompile without -sda options.</p>
<p>109</p>	<p>Fatal Error</p> <p>corrupt dynamic string table reference in <code>xxxx</code></p> <p>An INTEGRITY shared library has an invalid entry in <code>.dynamic</code> section.</p>
<p>110</p>	<p>Fatal Error</p> <p>unable to obtain license for product code <code>####</code></p> <p>Linking a proprietary module that requires a separate license, but a license was unavailable. Read licensing documentation or contact support.</p>
<p>111</p>	<p>Fatal Error</p> <p>module <code>xxxx</code> has incompatible FPU version <code>xxxx</code>, should be <code>xxxx</code> RH850 specific. Two modules are compiled for different floating point versions. Make sure all modules are recompiled with compatible options.</p>
<p>112</p>	<p>Fatal Error</p> <p>corrupt string table reference for symbol <code>####</code> in <code>xxxx</code></p> <p>This ELF object file has invalid references from symbol table to string table. It is possible that it has been corrupted and needs to be rebuilt.</p>
<p>114</p>	<p>Fatal Error</p> <p>section <code>xxxx</code> in module <code>xxxx</code> does not conform to the ABI, has item with unrecognized name <code>xxxx</code></p> <p>RH850 specific. The <code>.note.renesas</code> containing supplemental ABI information is not properly formatted. Expected to contain the string <code>REL</code> in note entry.</p>
<p>115</p>	<p>Fatal Error</p> <p><code>sh_entsize</code> is 0 in section <code>####</code> of module <code>xxxx</code></p> <p>A table section is marked with an invalid entry size of zero.</p>
<p>116</p>	<p>Fatal Error</p> <p>problem during translation to ELF for <code>xxxx</code></p> <p>Translating COFF object file to ELF was unsuccessful. Attempt to translate to ELF file manually using gcof2elf or recompile with ELF tools.</p>

117	<p>Fatal Error</p> <p>not an ELF object file: xxxx</p> <p>An object file header is not properly formatted according to the ELF standard. Make sure it is an ELF object file.</p>
118	<p>Non-Fatal Error</p> <p>module xxxx was compiled with ep(r30) not reserved but previous modules may have been</p> <p>RH850 specific. Not all object files were compiled in the same mode with regard to whether to reserve ep(r30). Compile all files with the same option.</p>
119	<p>Fatal Error</p> <p>couldn't find section xxxx needed to initialize symbol xxxx</p> <p>A required section was not defined in the link map, so add it there.</p>
120	<p>Fatal Error</p> <p>couldn't redirect every reference from xxxx to xxxx</p>
121	<p>Fatal Error</p> <p>module xxxx has incompatible data alignment xxxx, should be xxxx</p> <p>RH850 specific. Not all object files were compiled according to the same ABI data alignment setting. Compile all files with the same option.</p>
122	<p>Fatal Error</p> <p>bad magic number in archive xxxx at offset ####</p> <p>Library header contains unexpected characters. Possibly corrupt file.</p>
124	<p>Fatal Error</p> <p>module xxxx has incompatible double size xxxx, should be xxxx</p> <p>RH850 specific. Not all object files were compiled according to the same ABI double size setting. Compile all files with the same option.</p>
125	<p>Fatal Error</p> <p>unable to parse license identifier</p> <p>A proprietary module has improperly formatted licensing information. Contact customer support for help resolving.</p>
127	<p>Fatal Error</p> <p>file xxxx didn't have a symbol table</p> <p>An ELF object file is expected to have a table of symbols, but this did not. This file is possibly corrupt or not a valid ELF file.</p>

<p>128</p>	<p>Fatal Error</p> <p><code>_SMALL_DATA_A8_</code> symbol is not defined for a8-relative SDA.</p> <p>TriCore specific. SDA is used, but no <code>_SMALL_DATA_A8_</code> symbol is defined. Declare that symbol in the link map or disable SDA optimizations.</p>
<p>129</p>	<p>Fatal Error</p> <p>unknown object file format in <code>xxxx</code></p> <p>Object file is in a format that is neither ELF nor a supported COFF format. This file may need to be recompiled with tools that use a supported format.</p>
<p>130</p>	<p>Non-Fatal Error</p> <p>module <code>xxxx</code> was compiled with <code>r2</code> reserved but previous modules may not have been</p> <p>RH850 specific. Not all object files were compiled in the same mode with regard to whether to reserve <code>r2</code>. Compile all files with the same option.</p>
<p>131</p>	<p>Fatal Error</p> <p><code>-rpxtntp</code> requires <code>.ghstraceedge</code> section defined in section map</p> <p>Option <code>-rpxtntp</code> is used, but <code>.ghstraceedge</code> section is not defined in link map. Define that section or eliminate the option.</p>
<p>132</p>	<p>Fatal Error</p> <p>encountered PICBASE relocation in <code>.rel</code> section</p> <p>V800 specific. The PICBASE relocation is only supported in sections that use the <code>.rela</code> format, such as those generated by GHS Compilers.</p>
<p>134</p>	<p>Fatal Error</p> <p>Could not compress <code>xxxx</code> to <code>xxxx</code></p> <p>A compressed ROM section is created for a section that is not initialized with data and therefore has nothing to compress.</p>
<p>135</p>	<p>Fatal Error</p> <p>combining Elf64 relocatable file into Elf32 executable</p> <p>A file using the 64-bit ELF format is being linked into a 32-bit program. If this is being done intentionally, you can work around it using the <code>-allow_elf64_to_elf32</code> linker option, otherwise recompile in a 32-bit mode.</p>

136	<p>Fatal Error</p> <p>V800: section xxxx in module xxxx is too large to insert a farcall patch for function xxxx</p> <p>V800 specific. Linker far call patching failed because this module is larger than the maximum range of a non-far call. Read documentation on far calls for possible alternatives to linker far call patching.</p>
137	<p>Non-Fatal Error</p> <p>module xxxx was compiled with gp(r4) not reserved but previous modules may have been</p> <p>RH850 specific. Not all object files were compiled in the same mode with regard to whether to reserve gp(r4). Compile all files with the same option.</p>
138	<p>Non-Fatal Error</p> <p>module xxxx was compiled with r2 not reserved but previous modules may have been</p> <p>RH850 specific. Not all object files were compiled in the same mode with regard to whether to reserve r2. Compile all files with the same option.</p>
139	<p>Fatal Error</p> <p><code>_SMALL_DATA_</code> symbol is not defined</p> <p>TriCore specific. SDA is used, but no <code>_SMALL_DATA_</code> symbol is defined. Declare that symbol in the link map or disable SDA optimizations.</p>
140	<p>Non-Fatal Error</p> <p>module xxxx was compiled with tp(r5) reserved but previous modules may not have been</p> <p>RH850 specific. Not all object files were compiled in the same mode with regard to whether to reserve tp(r5). Compile all files with the same option.</p>
141	<p>Fatal Error</p> <p><code>_SMALL_DATA_A9_</code> symbol is not defined for a9-relative SDA.</p> <p>TriCore specific. SDA is used, but no <code>_SMALL_DATA_A9_</code> symbol is defined. Declare that symbol in the link map or disable SDA optimizations.</p>
142	<p>Fatal Error</p> <p>bad ELF object file (header): xxxx</p> <p>An ELF header is not properly marked, indicating that the object file could be corrupt or in an unsupported format. Recompile with supported tools.</p>

<p>143</p>	<p>Fatal Error</p> <p>Output section xxxx includes xxxx(yyyy) with type ####:xxxx, unlike xxxx(yyyy) with type ####:xxxx</p> <p>Two sections given the same name are fundamentally different section types. Make sure that custom sections are defined with the same attributes wherever they are used, or give different uses a new section name to resolve conflicts.</p>
<p>144</p>	<p>Fatal Error</p> <p>SDA/ZDA is not supported on the section used as the TraceEdge instrumentation section.</p> <p>PowerPC specific. Some modules are attempting to use the same register for SDA/ZDA optimizations that others are using for TraceEdge instrumentation. Make sure all modules are compiled with consistent options, and either disable the conflicting SDA optimization or change the TraceEdge register.</p>
<p>145</p>	<p>Fatal Error</p> <p>SHT_GROUP section xxxx contains invalid section index ####</p> <p>A GROUP entry references a section that does not exist in that module. This ELF file may be corrupt or in an unsupported format.</p>
<p>146</p>	<p>Fatal Error</p> <p>.pcpdata section must exist for -pcptrans</p> <p>TriCore specific. The .pcpdata is not defined in link map. Either define that section or disable the -pcptrans option.</p>
<p>147</p>	<p>Fatal Error</p> <p>Failure to initialize TraceEdge framework</p> <p>The -inmemtm option is used, but the required record symbols are not present.</p>
<p>148</p>	<p>Fatal Error</p> <p>couldn't ROM xxxx to xxxx</p> <p>Failed to generate a ROM() section because either the ROM section already has contents of its own or the RAM version is a non-standard section type.</p>
<p>149</p>	<p>Fatal Error</p> <p>section xxxx in module xxxx does not conform to the ABI</p> <p>RH850 specific. The .note.renesas containing supplemental ABI information is not properly formatted.</p>

150	<p>Fatal Error</p> <p>relocation section ##### has invalid sh_info field ##### (should be a section index)</p> <p>An ELF relocation section refers to another section that does not exist. This could indicate a corrupt file or unsupported file format.</p>
151	<p>Non-Fatal Error</p> <p>module xxxx was compiled with tp(r5) not reserved but previous modules may have been</p> <p>RH850 specific. Not all object files were compiled in the same mode with regard to whether to reserve tp(r5). Compile all files with the same option.</p>
153	<p>Fatal Error</p> <p>.ghstraceedge section size must be a non-zero power of 2</p> <p>The -traceedge option is used, but a *.ghstraceedge section has an invalid size. This section should have a power of 2 size.</p>
154	<p>Fatal Error</p> <p>AutoSDA cannot operate on a section map containing .sbss but not .sdata</p> <p>PowerPC specific. The link time SDA optimization is enabled, and the link map contains an .sbss section, but not an .sdata section. Add an sdata section to the link map or disable the SDA optimization.</p>
155	<p>Non-Fatal Error</p> <p>Possible xxxx incompatibility detected in module xxxx</p>
157	<p>Fatal Error</p> <p>bad relocation sequence: expected HIGH to be followed by IPAIR, not nothing</p> <p>V800 specific. A HIGH relocation should be followed by an IPAIR relocation.</p>
158	<p>Non-Fatal Error</p> <p>module xxxx was compiled with gp(r4) reserved but previous modules may not have been</p> <p>RH850 specific. Not all object files were compiled in the same mode with regard to whether to reserve gp(r4). Compile all files with the same option.</p>
160	<p>Fatal Error</p> <p>.pcptext section must exist for -pcptrans</p> <p>TriCore specific. The .pcpdata is not defined in link map. Either define that section or disable the -pcptrans option.</p>

161	<p>Fatal Error</p> <p><code>_LITERAL_DATA_</code> symbol is not defined</p> <p>TriCore specific. SDA is used, but no <code>_LITERAL_DATA_</code> symbol is defined. Declare that symbol in the link map or disable SDA optimizations.</p>
163	<p>Fatal Error</p> <p>module <code>xxxx</code> has incompatible SIMD/FXU mode <code>xxxx</code>, should be <code>xxxx</code></p> <p>RH850 specific. Not all object files were compiled according to the same ABI SIMD mode setting. Compile all files with the same option.</p>
165	<p>Non-Fatal Error</p> <p>module <code>xxxx</code> was compiled with <code>ep(r30)</code> reserved but previous modules may not have been</p> <p>RH850 specific. Not all object files were compiled in the same mode with regard to whether to reserve <code>ep(r30)</code>. Compile all files with the same option.</p>
167	<p>Fatal Error</p> <p>bad relocation sequence: expected HIGH to be followed by IPAIR, not #####</p> <p>V800 specific. A HIGH relocation should be followed by an IPAIR relocation.</p>
168	<p>Fatal Error</p> <p>link-time SDA cannot be performed: relocation in module <code>xxxx</code> at <code>xxxx+####</code> to section <code>xxxx+####</code></p> <p>The link-time AutoSDA optimization cannot be performed because there are relocations relative to data sections rather than the symbols within those data sections. It is not safe to optimize section relative relocations because it is unknown what variables they might be referring to. If this type of relocation occurs in compiled code built for AutoSDA, it might indicate a compiler bug.</p>
169	<p>Fatal Error</p> <p>Unexpected relocation kind (####) from a function descriptor <code>xxxx [xxxx] + 8</code> for the TOC base</p> <p>PowerPC64 specific. Unexpected PPC64 TOC base relocation type in <code>.opd</code> section.</p>
170	<p>Fatal Error</p> <p>Internal error - expected a ppc64 farcall</p>
171	<p>Fatal Error</p> <p>Section <code>xxxx</code> is larger than ##### bytes</p> <p>A section in a 32-bit ELF image exceeds 32-bits in size.</p>

172	<p>Fatal Error</p> <p>Relocation of type R_MIPS_PICHIGHADJ encountered without a preceding R_MIPS_PICBASE</p> <p>MIPS specific. An R_MIPS_PICHIGHADJ relocation must be paired with a R_MIPS_PICBASE relocation.</p>
173	<p>Fatal Error</p> <p>section xxxx starting at #### didn't fit in configured memory</p> <p>A section is declared with SECTIONS directive at a specific memory location that does not place it in any of the configured blocks of memory declared with the MEMORY directive. If the target has available memory there, then declare a MEMORY block to represent it, otherwise move the section's starting address to within a valid region of memory.</p> <p>Example:</p> <pre>MEMORY { block_one : ORIGIN=0x1000, LENGTH=0x1000 } SECTIONS { dummy 0x3000 : }</pre> <p>Correct:</p> <pre>MEMORY { block_one : ORIGIN=0x1000, LENGTH=0x1000 } SECTIONS { dummy 0x1000 : }</pre>
174	<p>Fatal Error</p> <p>unknown ARM pool reference instruction: #### in module xxxx at xxxx+####</p> <p>ARM specific. An ARM pool relocation is located at an instruction that does not disassemble as any known pool instruction.</p>
175	<p>Non-Fatal Error</p> <p>Bad relocation sequence. REL R_MIPS_HI0 relocation is expected to be followed by REL R_MIPS_LO16, or R_IPAIR relocation</p> <p>MIPS specific. An R_MIPS_HI0 relocation is expected to be paired with another relocation, but is not. This can possibly be worked around with -gnu_compat.</p>
176	<p>Fatal Error</p> <p>module xxxx has Virtualization/Hardware Multiple Task Thread instructions but a previous module might have been a RH850G3K core</p> <p>RH850 specific. Not all object files were compiled for compatible CPU types. Compile all files with the same CPU option.</p>

<p>177</p>	<p>Fatal Error</p> <p>PPC: Illegal R_PPC_EMB_BIT_FLD addend form</p> <p>PowerPC specific. An R_PPC_EMB_BIT_FLD relocation has an invalid addend value.</p>
<p>178</p>	<p>Fatal Error</p> <p>Insufficient additional SDA registers provided.</p> <p>PowerPC specific. There is too much data put in SDA sections to fit within their range limits. Either fewer variables need to be placed in SDA, or additional registers must be allocated to offset the expanded SDA area. You can use the -additional_sda_reg=N option to reserve more registers.</p>
<p>179</p>	<p>Fatal Error</p> <p>Internal error: no function symbol to jump to after .opd adjustments</p>
<p>180</p>	<p>Non-Fatal Error</p> <p>Bad relocation sequence. REL R_MIPS_HI16 relocation is expected to be followed by REL R_MIPS_LO16, or R_IPAIR relocation</p> <p>MIPS specific. An R_MIPS_HI16 relocation is expected to be paired with another relocation, but is not. This can possibly be worked around with -gnu_compat.</p>
<p>181</p>	<p>Fatal Error</p> <p>Intercall patching not supported for function entry/exit history</p> <p>ARM specific. A <code>__ghs_log_fee</code> function is in a different execution mode than the caller on a target that cannot switch modes without an intercall veneer. This combination of options is not supported. Compile this FEE instrumented code in ARM mode.</p>
<p>182</p>	<p>Fatal Error</p> <p>PPC: Unknown section for relocation to xxxx from xxxx + ####</p>
<p>183</p>	<p>Fatal Error</p> <p>Cannot change ISA mode with <code>j xxxx at xxxx+####</code></p> <p>MIPS specific. There is a relocation from a function in non-MIPS16 mode to a function in MIPS16 mode for an instruction that is not capable of switching modes automatically.</p>

184	<p>Non-Fatal Error</p> <p>Bad relocation sequence. REL R_MICROMIPS_HI0 relocation is expected to be followed by REL R_MICROMIPS_LO16, or R_IPAIR relocation</p> <p>MIPS specific. An R_MICROMIPS_HI0 relocation is expected to be paired with another relocation, but is not. This can possibly be worked around with -gnu_compat.</p>
186	<p>Fatal Error</p> <p>Not in the same region with bgezal xxxx at xxxx+####</p> <p>MIPS specific. There is a relocation from a function in non-MIPS16 mode to a function in MIPS16 mode that cannot be fixed because it spans across different memory regions.</p>
187	<p>Fatal Error</p> <p>module xxxx is a RH850G3K core but a previous module might have Virtualization/Hardware Multiple Task Thread instructions</p> <p>RH850 specific. Not all object files were compiled for compatible CPU types. Compile all files with the same CPU option.</p>
188	<p>Fatal Error</p> <p>Attempt to change the address of section "xxxx" which was already used in a relocation; maybe this section's address depends on the size of a CROM section</p>
189	<p>Fatal Error</p> <p>Encountered unknown relocation type (####) in module xxxx.</p> <p>MIPS specific. Unhandled relocation. This object file may be generated by a toolchain that is newer than or not supported by this linker version.</p>
190	<p>Fatal Error</p> <p>Cannot switch ISA in PIC mode with branch to xxxx at xxxx+####</p> <p>MIPS specific. There is a relocation from a function in non-MIPS16 mode to a function in MIPS16 mode that cannot be fixed when using the -pic option.</p>
191	<p>Fatal Error</p> <p>.toc section does not exist</p> <p>PowerPC64 specific. There are PPC64 TOC relocations present, but the section map does not contain a .toc section. Declare a .toc section in linker directive file.</p>

<p>192</p>	<p>Fatal Error</p> <p>Cannot switch ISA with conditional branch to xxxx at xxxx+#### MIPS specific. There is a relocation from a function in non-MIPS16 mode to a function in MIPS16 mode for an instruction that is not capable of switching modes automatically.</p>
<p>193</p>	<p>Fatal Error</p> <p>Expected 'nop' instruction after PC-relative relocation from xxxx [xxxx] to xxxx.</p> <p>PowerPC64 specific. An out of range PPC64 TOC call does not have an expected NOP instruction to use during far call expansion.</p>
<p>194</p>	<p>Fatal Error</p> <p>unknown THUMB2 pool reference instruction: #### in module xxxx at xxxx+####</p> <p>ARM specific. An Thumb-2 pool relocation is located at an instruction that does not disassemble as any known pool instruction.</p>
<p>195</p>	<p>Fatal Error</p> <p>failed to convert SDA23 to SDA16 at xxxx (####)</p> <p>V800 specific. There is a 23-bit SDA relocation associated with an unrecognized type of instruction. Workaround by disabling the -shorten_loads and -shorten_moves optimizations.</p>
<p>196</p>	<p>Fatal Error</p> <p>Unexpected relocation kind (####) from a function descriptor xxxx [xxxx] to function xxxx</p> <p>PowerPC64 specific. Unexpected PPC64 TOC function relocation type in .opd section.</p>
<p>197</p>	<p>Non-Fatal Error</p> <p>Bad relocation sequence. REL R_MICROMIPS_HI16 relocation is expected to be followed by REL R_MICROMIPS_LO16, or R_IPAIR relocation</p> <p>MIPS specific. An R_MICROMIPS_HI16 relocation is expected to be paired with another relocation, but is not. This can possibly be worked around with -gnu_compat.</p>
<p>198</p>	<p>Fatal Error</p> <p>ARM: section xxxx in module xxxx is too large to insert a farcall patch for function xxxx xxxx</p> <p>ARM specific. Linker far call patching failed because this module is larger than the maximum range of a non-far call. Read documentation on far calls for possible alternatives to linker far call patching.</p>

Diagnostics 200 to 299

200	<p>Fatal Error</p> <p><code>__gp</code> is not set</p> <p>MIPS specific. The <code>.sdatabase</code> section is not defined. Declare it in your linker directive file.</p>
201	<p>Fatal Error</p> <p>Relocation of type <code>R_MIPS_PICLOW</code> encountered without a preceding <code>R_MIPS_PICBASE</code></p> <p>MIPS specific. An <code>R_MIPS_PICLOW</code> relocation must be paired with a <code>R_MIPS_PICBASE</code> relocation.</p>
203	<p>Fatal Error</p> <p><code>don't know how to extract addend for relocation ####</code></p> <p>Unhandled relocation in a <code>REL</code> relocation section. This object may have been compiled by a non-GHS toolchain that is not supported by this linker.</p>
204	<p>Fatal Error</p> <p><code>Saw unexpected xxxx in xxxx (####), relink with -no_remove_pid to avoid error</code></p> <p>V850 specific. A PID relocation was associated with an unexpected instruction type. Pass <code>-no_remove_pid</code> as a workaround.</p>
205	<p>Fatal Error</p> <p><code>can't extract relocation ####</code></p> <p>Unhandled relocation in a <code>REL</code> relocation section. This object may have been compiled by a non-GHS toolchain that is not supported by this linker.</p>
206	<p>Warning</p> <p>The program contains no reference to <code>_dtors</code>. The following C++ dynamic destruction routines will probably not get called: <code>xxxx</code></p>
207	<p>Warning</p> <p><code>ignoring ..fend symbol before end of function xxxx</code></p>
208	<p>Warning</p> <p>Symbol <code>xxxx</code> has size 0.</p>
209	<p>Warning</p> <p>Error in parsing the MISRA option.</p>

210	Warning Coverage section deletion failed -- unequal number of entries in xxxx and xxxx sections.
212	Warning Unable to instrument function xxxx
213	Warning Unexpected instruction #### with xxxx relocation
214	Warning Option -extractall=xxxx was ignored, since option xxxx was not given
215	Warning function: xxxx called in xxxx doesn't have an argument type checking declaration
216	Warning Absolute relocation xxxx to function: from 'xxxx [xxxx]' to 'xxxx [xxxx]'
217	Warning the checksum word on section xxxx overlaps section xxxx; removing checksum on xxxx to avoid overlap
218	Warning TraceEdge unable to find .sdata2/.sdabase section in SDA mode
219	Warning shared library xxxx does not support TDEH exception handling. Refer to the MULTI release notes for instructions on how to build shared libraries with TDEH support.
220	Warning BLOCK directive has no effect.
221	Warning no section map present. Assuming .text/.data/.bss use -T[text data bss] to set segment starts and avoid this warning use a section map for advanced placement control
222	Warning The program contains no reference to _ctors. The following C++ dynamic initialization routines will probably not get called: xxxx

223	Warning not defining xxxx: xxxx already exists in xxxx
225	Warning ARM mapping symbols not found in section xxxx, module xxxx.
226	Warning SHT_GROUP section ##### has relocations! ignoring...
227	Warning translating COFF file xxxx
228	Warning .sdata and .sbss are not contiguous in the section map; AutoSDA will not place anything into .sbss
230	Warning Unknown Pool Load
231	Warning symbol xxxx in section xxxx was referenced as SDA at xxxx+### but is out of range of the SDA base pointer
232	Warning Function deletion should not be performed on object files with position-independent code that were built with older versions of the compiler. Please rebuild with a newer compiler or disable function deletion
233	Warning Weak xxxx xxxx in xxxx overrides an equally weak definition in xxxx
234	Warning Section xxxx at ##### extends past 0
235	Warning ignored -T[text data bss] due to section map
236	Warning INTEGRITY interrupt routine does not have requisite padding: xxxx
237	Warning section xxxx(xxxx) is not being included; module xxxx is not part of this link

238	Warning Writeable section xxxx at #### liesxxxx between __ghs_romstart and __ghs_romend
239	Warning xxxx will not be satisfied for -dyload links
240	Warning ignoring size-#### ..fend symbol inconsistent with end of function xxxx
241	Warning Layout of section xxxx does not converge on fixed address.
243	Warning Unable to find map file, disabling CodeFactor profile feedback
244	Warning Use of the special symbol __ghssizexxxx in -pic or -pid mode may produce incorrect results. Consider using (__ghsendxxxx - __ghsbeginxxxx) instead.
245	Warning section xxxx(xxxx) is not being included; did you mean xxxx(xxxx)?
246	Warning Did not find .callt section in linkmap. Enabling -v800_old_callt compatibility mode. See documentation on this option for more details.
247	Warning script file xxxx included multiple times
248	Warning -no_shared_lib_symbols should not be used when linking with shared libraries
249	Warning Function deletion should not be performed on object files with position-independent code that were built with older versions of the compiler. Please rebuild with a newer compiler or disable function deletion.
250	Warning Unexpected instruction #### with R_MICROMIPS_26_S1 relocation

251	Warning unknown attributes for MEMORY block xxxx: xxxx
252	Warning ARM mapping symbols not found for function xxxx, in section xxxx, module xxxx.
253	Warning section xxxx in module xxxx has unrecognized setting: name=xxxx, id=0x####, value=0x####
254	Warning relocation section #### has relocations! ignoring..
255	Warning Invalid setting for Program Counter valid bits with xxxx. Setting ignored.
256	Warning in module xxxx, section symbol ##### for section xxxx has a non-zero value. Attempting to fix and continue.
257	Warning symbol xxxx in section xxxx was referenced as ZDA at xxxx+#### but is out of range of the ZDA base pointer
258	Warning Patched reference to subroutine xxxx
259	Warning Error in parsing the MISRA option: Invalid range.
260	Warning TraceEdge has failed to fully instrument xxxx. Trace from this interrupt will be slightly limited.
261	Warning branch to self detected: module xxxx at xxxx+####
262	Warning cannot redirect stderr to xxxx
263	Warning SUBALIGN has no effect. ELF section header specifies alignment

264	Warning symbol xxxx in section xxxx was referenced as SDA at xxxx+#### but is out of range of 9-bit displacement from the SDA base pointer
265	Warning archive xxxx contains a bad string table reference (module name) at offset ####, recovering
266	Warning Unable to ignore instrumentation for function xxxx when instrumenting the kernel
267	Warning checksum generation suppressed with relocatable link
268	Warning size of symbol xxxx is inconsistent with location of function xxxx
269	Warning Invalid map file, disabling CodeFactor profile feedback
270	Warning section xxxx(xxxx) is not being included; section xxxx appears to be empty
271	Warning maplines must be at least 5; ignoring -maplines=####
272	Warning ignoring malformed option xxxx; try xxxx instead
273	Warning ARM: unknown postamble in xxxx: ####
274	Warning symbol xxxx in section xxxx was referenced as ZDA at xxxx+#### but is out of range of 9-bit displacement from the ZDA base pointer
275	Warning unrecognized option: xxxx
276	Warning setting start address to zero

277	Warning xxxx generation not supported with CROM(xxxx)
278	Warning orphan area at xxxx(xxxx)+####, nearest was xxxx at offset ####
279	Warning unknown machine type: ####
280	Warning this target doesn't support farcall patching
281	Warning module xxxx contains relocations versus SHT_NOBITS section xxxx
282	Warning Unknown MISRA option.
283	Warning section xxxx from xxxx isn't included by the section map; appending after last section. add to section map or use -append to append without warning
284	Warning ignoring ..fbeg symbol after start of function xxxx
285	Warning Truncating the value of xxxx to 32 bits
286	Warning Section flags do not match known section name - assuming SDA type by name - for section xxxx xxxx
288	Warning unable to determine if absolute symbol: xxxx will work as the target of an intercall
289	Warning couldn't adjust REL-type relocation (rel#####)!
290	Warning found relocation into middle of now-defunct function xxxx xxxx
291	Warning Unable to open profile information, disabling CodeFactor profile feedback

293	Warning symbol xxxx has different sizes in: xxxx xxxx
294	Warning symbol xxxx has different types in: xxxx xxxx
295	Warning [InMem TimeMachine] Unable to locate .inmemtm section Appending .inmemtm section with size ####KB
296	Warning Option -extractonce=xxxx was ignored, since option xxxx was not given
297	Warning module xxxx not compiled for use with -auto_sda
298	Warning ABS32 relocation mapping not defined
299	Warning Unrecognized relocation attached to symbol xxxx (xxxx) in func.

Diagnostics 300 to 399

300	Warning using subroutine symbol xxxx to patch references to deleted function.
301	Warning [codefactor]: skipping module xxxx. xxxx
302	Warning No functions found.
303	Warning non-debug symbol at end of section
304	Warning couldn't trace through pool relocation.
305	Warning Unrecognized relocation.

306	Warning pool data is 0x0. is it really data?
307	Warning Unrecognized relocation attached to symbol xxxx (xxxx) in block.
308	Warning deleted symbol has relocation refs.
309	Non-Fatal Error unknown relocation type (xxxx) in xxxx
310	Fatal Error section xxxx (####-####) doesn't fit in memory block xxxx (####-####)xxxx
311	Fatal Error corrupt string table reference for section #### in xxxx
312	Warning archive xxxx contains a bad string table reference (module name) at offset ####, recovering
313	Warning library xxxx has a bad header at position ####, entry: xxxx
314	Warning Symbol xxxx in module xxxx has a .fixaddr entry, but points to symbol xxxx which has an absolute address. This value may not be loaded properly at run time. Pass -delete_absolute_fixaddrs to the linker to fix this issue.
316	Warning section xxxx is at a high address (#### - ####) that is out of range of the ####-bit Program Counter
317	Warning module xxxx was compiled with 8-byte stack alignment but previous modules may not have been
318	Fatal Error The program cannot be instrumented because of a non-local branch with no relocation, in function xxxx The compiler or assembler that produced that object file may not be compatible with -inmemtm. Turn off -inmemtm and run the linker again.

319	Fatal Error The offset is too large to insert a farcall patch from xxxx (####) to xxxx (####) in module xxxx
320	Warning module xxxx may have been compiled with 4-byte stack alignment but previous modules were compiled with explicit 8-byte stack alignment
321	Warning couldn't adjust REL-type relocation: Offset: #### Type: #### Adjust: #### Dest Sym: xxxx in module xxxx
322	Warning patching out of range relocation from xxxx (####) to xxxx (####) in module xxxx
323	Warning Will not adjust section-relative relocation in file xxxx at location xxxx+#### that references section xxxx+#### relocation type: xxxxxxxx
346	Fatal Error PLT entry for xxxx does not have corresponding .dynsym entry
349	Fatal Error invalid .ghsinfo jtable size
350	Fatal Error relocation at xxxx:xxxx+#### is outside of that section
352	Fatal Error Unknown vtbl parent: xxxx
353	Fatal Error some modules compiled with options unsafe for use with elxr
354	Fatal Error .ghsinfo jtable out of sync
355	Fatal Error Symbol 'xxxx' in module 'xxxx' is not located within executable section 'xxxx'
357	Fatal Error Unknown vtbl class: xxxx

368	Fatal Error corrupt symbol table in xxxx
370	Fatal Error too many sections defined. At most #### supported.
373	Fatal Error Cortex-A8 branch errata patching failure
375	Non-Fatal Error section mismatch patching far-call to function xxxx
378	Fatal Error bad relocation in module xxxx, references non-existent symbol ####
379	Fatal Error Section too large for Cortex-A8 branch errata patching
384	Fatal Error Sister vtbl entry was found!
388	Fatal Error File error while writing binary; out of disk space?
392	Fatal Error Bad sentinel value in UVFD section: ####
394	Fatal Error bad elf file (sections): xxxx
396	Fatal Error Unknown vtbl sym in readRoutSection(): xxxx
397	Fatal Error inconsistent .fixaddr/.fixtype sections in xxxx
399	Fatal Error relocation at xxxx:xxxx+#### is outside of that section

Diagnostics 400 to 499

400	Non-Fatal Error Adjustment for j/jal/jalx offset too large
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401	Non-Fatal Error Function entry/exit history farcall patching not supported in THUMB mode
402	Non-Fatal Error Unknown opcode for TDA relocation: ####
403	Non-Fatal Error Mapping symbol xxxx does not indicate Arm/Thumb region.
404	Non-Fatal Error Loop detected attempting to patch call to VLE function xxxx
405	Non-Fatal Error .ghpepatch[xxxx] (@ ####): type = ####
406	Non-Fatal Error .ghpepatch[xxxx] (@ ####): size = ####
407	Non-Fatal Error Call table module xxxx not found
408	Non-Fatal Error Bad relocation sequence. REL R_MIPS_GHS_PIDHIGHADJ relocation is expected to be followed by REL R_MIPS_GHS_PIDLOW, or R_IPAIR relocation
409	Non-Fatal Error Failed to relocate data in TDA segment: address #### is out of range. (symbol xxxx, offset ####, addend ####)
410	Non-Fatal Error malformed xxxx section in module xxxx
411	Non-Fatal Error File error opening map file xxxx; skipping map file
412	Non-Fatal Error unresolved symbols: #### xxxx
413	Non-Fatal Error -traceedge_size must be power of 2
414	Non-Fatal Error usage: -traceedge_size=hexsize, 0 < hexsize <= 0x10000

415	Non-Fatal Error Call table symbol xxxx not defined
416	Non-Fatal Error Function xxxx called from a no-TDA function in xxxx
417	Non-Fatal Error cannot determine type of undefined function xxxx
418	Non-Fatal Error ARM mapping symbols do not cover the address range of the section xxxx in module xxxx.
419	Non-Fatal Error Loop detected attempting to patch far-call to function xxxx
420	Non-Fatal Error Attempting to extract .rel relocation addend from non .rel section
421	Non-Fatal Error Attempt to link module (xxxx) compiled with -notda against a module (xxxx) that uses the TDA
422	Non-Fatal Error Bad relocation sequence. REL R_MICROMIPS_GHS_PIDHIGHADJ relocation is expected to be followed by REL R_MICROMIPS_GHS_PIDLOW
423	Non-Fatal Error no global symbol for xxxx(xxxx)+####, local sym was xxxx
425	Non-Fatal Error File error opening whitelist file xxxx; skipping whitelist
426	Non-Fatal Error Module xxxx was compiled with TDA disabled but we are linking in MTDA mode
427	Non-Fatal Error Could not find .dynsym entry for xxxx
428	Non-Fatal Error -no_data_in_text is not supported for -pic

429	Non-Fatal Error section xxxx from xxxx isn't included by the section map! add to section map or remove option -no_append
430	Non-Fatal Error section symbol xxxx has non-zero st_value
431	Non-Fatal Error -no_data_in_text is only supported on Thumb2 capable targets
432	Non-Fatal Error usage: -traceedge_reg=R, for some gprR
433	Non-Fatal Error Invalid instruction for R_ARM_ALU_PCREL relocation
434	Non-Fatal Error patching to undefined symbols only supported with --integrity_posix_dll
435	Non-Fatal Error malformed SHT_NOTE section xxxx in module xxxx
436	Non-Fatal Error can't intercall_patch undefined symbol: xxxx
437	Non-Fatal Error MISRA xxxx recommends that objects be declared at function scope whenever possible.
438	Non-Fatal Error bad thumb BLxxxx relocation in module xxxx: got #### ####
439	Non-Fatal Error Section xxxx moved as a result of compression and is not a ROM copy
440	Non-Fatal Error MISRA xxxx recommends that objects declared at file scope be static whenever possible.
441	Non-Fatal Error usage: -traceedge_addr=hexaddr
442	Non-Fatal Error R_V800_CFPICREL32 relocation without matching R_V800_PICBASE

443	Non-Fatal Error alias symbols have differing subcpu types: xxxx, xxxx
444	Non-Fatal Error Unmatched TDA call to function xxxx in xxxx
445	Non-Fatal Error common xxxx in xxxx has unsupported alignment: ###
446	Non-Fatal Error -no_data_in_text is not supported with INTEGRITY TimeMachine
447	Non-Fatal Error Cross-TDA call to function xxxx from TDA xxxx in xxxx
448	Non-Fatal Error TDEH section deletion failed.
449	Non-Fatal Error ambiguous local symbol xxxx multiply defined in: xxxx xxxx
450	Non-Fatal Error couldn't process option xxxx
451	Non-Fatal Error File error opening graph file xxxx; skipping call graph
452	Non-Fatal Error .ghpepatch[xxxx] (@ ####): flags = ####
453	Non-Fatal Error -no_data_in_text is not supported in THUMB mode
454	Non-Fatal Error Absolute or PC-relative relocation was expected to shared weak symbol xxxx
455	Non-Fatal Error Module xxxx contains a virtual function call to offset #### in the vtable for class xxxx, but the vtable for xxxx (defined in xxxx) does not contain an entry at that offset. The UVFD optimization cannot be performed. Pass -no_uvfd to continue.
456	Non-Fatal Error Unexpected R_ARM_REL32 relocation found in optimized module.

458	Non-Fatal Error .ghpepatch[xxxx] (@ ####): PC == 0
460	Fatal Error in expression syntax: "xxxx" expected #### arguments
461	Fatal Error globalreg count too large
462	Fatal Error store instrumentation expected
463	Non-Fatal Error read-only small data overflow: #### (signed) didn't fit in 16 bits, and could not be patched because the instruction or base register was not recognizedxxxx
464	Fatal Error error() xxxx
465	Non-Fatal Error xxxx: ####xxxx didn't fit in #### bits
466	Non-Fatal Error ROSDA relocation encountered when ROSDA has been disabled
467	Non-Fatal Error zero data overflow: #### (signed) didn't fit in 16 bits, and could not be patched because the instruction or base register was not recognized
469	Fatal Error ABSOLUTE used outside of a section
470	Fatal Error expected an expression after 'xxxx'
471	Non-Fatal Error Cannot jump/call next instruction
472	Non-Fatal Error read-only small data overflow: #### (signed) didn't fit in 23 bits, and could not be patched because the instruction or base register was not recognized

473	Fatal Error expected an expression
474	Non-Fatal Error read-only small data overflow: #### (signed) didn't fit in 16 bits, and could not be patched because the instruction or base register was not recognized
475	Fatal Error expected ')'
476	Fatal Error unknown section xxxx used in SIZEOF
477	Fatal Error unterminated comment
478	Non-Fatal Error unaligned: #### wasn't ####-byte aligned xxxx
479	Fatal Error the argument to PROVIDE should be an assignment operation
480	Fatal Error during eval: symbol xxxx doesn't exist
481	Non-Fatal Error Table call relocation (R_V800_CALLT) without a table entry. Missing __ghs_call_table symbol?
482	Non-Fatal Error small data overflow: #### (signed) didn't fit in 16 bits, and could not be patched because the instruction or base register was not recognized
483	Fatal Error expected ') ' for 'xxxx'
484	Fatal Error unknown section xxxx used in ENDADDR
485	Fatal Error PHY is not supported. Remove the directive to avoid this error
486	Non-Fatal Error Out of range. Not suitable for call table

487	Warning Alignment expression must be a power of two
488	Fatal Error saw branch in between function entry and first start of basic block
489	Non-Fatal Error read-only small data overflow: ##### (signed) didn't fit in 23 bits, and could not be patched because the instruction or base register was not recognizedxxxx
490	Non-Fatal Error Overflow. CALLT table is full
491	Fatal Error expected an argument to 'xxxx'
492	Non-Fatal Error small data overflow: ##### (signed) didn't fit in 23 bits, and could not be patched because the instruction or base register was not recognizedxxxx
493	Fatal Error cannot assign to constant 'xxxx'
494	Fatal Error volatile load instrumentation with no load
495	Fatal Error unbounded string 'xxxx'
496	Fatal Error expected something after xxxx
497	Warning Alignment expression must be a power of two; changing from ##### to #####.xxxx
498	Non-Fatal Error Relocation not safe to be performed in shared code as it depends on core-specific initialization

499	Non-Fatal Error small data overflow: #### (signed) didn't fit in 23 bits, and could not be patched because the instruction or base register was not recognized
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Diagnostics 500 to 599

500	Fatal Error xxxx at #### size ####: xxxx
501	Non-Fatal Error zero data overflow: #### (signed) didn't fit in 23 bits, and could not be patched because the instruction or base register was not recognized
502	Fatal Error unknown section xxxx used in ADDR
503	Fatal Error expected ':' after conditional expression
504	Fatal Error unknown section xxxx used in ALIGNOF
505	Fatal Error Expected same block after inst
506	Warning expression ignored for GNU linkmap generation
507	Fatal Error while processing xxxx, expected 'xxxx'
508	Fatal Error PACK_OR_ALIGN used outside of a section
509	Fatal Error start of function expected
510	Fatal Error dot was decremented in xxxx, from #### to ####
511	Warning construct xxxx ignored for GNU linkmap generation

512	Fatal Error expected expression after '('
513	Non-Fatal Error Table call destination precedes call table
514	Warning Alignment expression must be a power of two.
515	Fatal Error start of basic block expected
516	Fatal Error end of function without stack exit
517	Fatal Error No instruction after inst
518	Fatal Error memory segment xxxx not defined.
519	Fatal Error expected an identifier
520	Non-Fatal Error small data overflow: #### (signed) didn't fit in 16 bits, and could not be patched because the instruction or base register was not recognizedxxxx
521	Non-Fatal Error jump table entry overflow in function xxxx in module xxxx at offset #### Please try recompiling with -bigswitch.
522	Warning multiply destination registers cannot be the same in function xxxx in module xxxx at offset #### => xxxx
523	Fatal Error jump table entry invalid in function xxxx in module xxxx at offset ####
524	Non-Fatal Error ####-bit branch is out of range in function xxxx in module xxxx at offset #### => xxxx

525	Warning multiply high destination register cannot be r0 in function xxxx in module xxxx at offset ##### => xxxx
526	Warning A branch becomes out of range by -fix_load_errata and has been expanded in function xxxx in module xxxx at offset ##### => xxxx
527	Fatal Error callt call to absolute index number in function xxxx in module xxxx at offset ##### => xxxx Re-link with -v800_old_callt to avoid this error. See documentation on this option for more details.
528	Warning Axxxx branch is followed by a load in function xxxx in module xxxx at offset ##### => xxxx / xxxxxxxxx
529	Warning callt call to absolute index number in function xxxx in module xxxx at offset ##### => xxxx Enabling -v800_old_callt compatibility mode. See documentation on this option for more details.
530	Non-Fatal Error Unknown relocation type xxxx
531	Warning PowerPC hazard found in function xxxx in module xxxx at offset ##### => xxxx xxxx
532	Non-Fatal Error xxxx incompatible with -record_timemachine, rebuild with -gen_timemachine
533	Non-Fatal Error intercall from xxxx in module xxxx to xxxx cannot be patched
534	Non-Fatal Error tracereg not always reserved in instrumented object xxxx.
535	Non-Fatal Error calling convention mismatch for function xxxx: declared as xxxx in xxxx, called as xxxx in xxxx
536	Non-Fatal Error Section xxxx overlaps section xxxx

537	Non-Fatal Error Memory region xxxx overlaps region xxxx
538	Non-Fatal Error In-Memory TimeMachine Warning In function xxxx at offset ### Unable to create instrumentation instruction.
539	Non-Fatal Error symbol xxxx multiply defined in: xxxx xxxx
540	Non-Fatal Error found fastcc and cdecl definitions for xxxx in: xxxx xxxx
541	Non-Fatal Error entry symbol xxxx is undefined
542	Warning entry symbol xxxx is undefined (allowed)
543	Non-Fatal Error symbol xxxx is defined in xxxx and provided in xxxx; pass -overridden_absolute_allow to silence this message
545	Warning bad argument types for function: declared as xxxx in xxxx, called as xxxx in xxxx
546	Warning In OR/LOAD/XOR sequence, only OR can be branch destination.
547	Warning LWC1 cannot be used. Please expand it to LW/MTC1.
548	Warning R1 is used illegally in this instruction.
549	Warning The destination register of the next instruction is the same as the base register of this instruction.
550	Warning In LOAD/GSTM sequence, LOAD destination must match GSTM source.
551	Warning Branch/jump must be to labeled address.

552	Warning Load should not be in delay slot.
553	Warning Only JALR is allowed for calls through a register.
554	Warning In LDC1/FSTM sequence, the instruction following FSTM must be aligned to 4 mod 8 by 'xor r0, r0, r0'.
555	Warning The destination register of this load instruction is the same as the base register. Please expand it into LOAD/XOR.
556	Warning Branch destination must be aligned to 8 bytes.
557	Warning JAXA hazard found with section xxxx in module xxxx Executable section contains no functions. Please verify that this is correct.
558	Warning In LOAD/GSTM sequence, only LOAD can be branch destination.
559	Warning JAXA hazard found with section xxxx in module xxxx at offset ####, size #### => Untyped, non-padding data in assembly module. Please check that this is not supposed to be a function, and use both .type and .size directives.
560	Warning An index load instruction must be followed by 'bne r0, r0, .+4'.
561	Warning OR/LDR/XOR must be aligned to 8 bytes.
562	Warning And-link instruction requires 'xori r31, r31, 4' in the delay slot.
563	Warning JAXA hazard found with section xxxx in module xxxx Cannot verify alignments mod 8, because section alignment is ####

564	Warning The next instruction is the destination of a branch.
565	Warning The next instruction is not a Basic load nor LDC1 with #offset(Rbase) operand.
566	Warning This instruction must be aligned to 4 mod 8 by 'xor r0, r0, r0'.
567	Warning In LW/MTC1 sequence, MTC1 must be aligned to 4 mod 8 by 'xor r0, r0, r0'.
568	Warning NOP must be in the delay slot.
569	Warning The next instruction is a branch destination.
570	Warning Load instruction may not appear at end of function.
571	Warning This unaligned load instruction is in bad sequence. Please expand it into OR/LOAD/XOR.
572	Warning This instruction is prohibited.
573	Warning Only JR r31 is allowed for subroutine return.
574	Warning In LDC1/FSTM sequence, only LDC1 can be branch destination.
575	Warning The next instruction is not a load with #offset(Rbase) operand.
576	Warning In LW/MTC1 sequence, only LW can be branch destination.
577	Fatal Error wrong number of symbols read from section #### in xxxx

578	Warning Delay slot expected for this instruction at end of function.
579	Warning In LOAD/XOR sequence, only LOAD can be branch destination.
580	Non-Fatal Error MISRA xxxx: Function xxxx:xxxx is recursive
581	Non-Fatal Error MISRA xxxx Rule xxxx forbids the use of "xxxx"
582	Warning MISRA xxxx: Global variable xxxx:xxxx is referenced only from function xxxx:xxxx
583	Non-Fatal Error MISRA xxxx: The following global symbols share a 31-character prefix:
584	Warning MISRA xxxx: Global xxxx xxxx:xxxx is referenced only from module xxxx
585	Non-Fatal Error MISRA xxxx: Common symbol xxxx in xxxx is overridden by a definition in xxxx
586	Non-Fatal Error MISRA Rule #### forbids the use of "xxxx"
587	Warning bad type for variable: defined as 'xxxx' in xxxx, used as 'xxxx' in xxxx
588	Non-Fatal Error Unexpected character 'xxxx' in variable type-checking symbol 'xxxx'
589	Fatal Error expected -globalcheck=none normal full
590	Warning variable: 'xxxx' used in xxxx doesn't have a type checking declaration

591	Warning Bad relocation sequence. R_MIPS_32 or R_MIPS_16 expected after R_MIPS_GHS_SUBPAIR. Got xxxx instead
592	Warning individual section xxxx from xxxx contains symbol xxxx which does not match the individual section's symbol name
593	Fatal Error cannot openxxxx file 'xxxx' (xxxx)
594	Non-Fatal Error Relocation suggests data located in .text section but data-in-text is disabled
595	Warning Global register written in kernel function: xxxx + #### (xxxx)
596	Non-Fatal Error Global register written in non-kernel function: xxxx + #### (xxxx)
597	Non-Fatal Error File error opening blacklist file xxxx; skipping blacklist
598	Non-Fatal Error Blacklisted symbol xxxx defined in module xxxx
599	Non-Fatal Error Blacklisted symbol xxxx referenced by module xxxx

Diagnostics 600 to 699

600	Non-Fatal Error INTEGRITY TimeMachine does not support Thumb function:
601	Non-Fatal Error Thumb mode cannot be used in this context
602	Warning The program contains no reference to _tls_ctors. The following C++ thread local storage dynamic initialization routines will probably not get called: xxxx

603	Fatal Error module xxxx has incompatible SDA_EXTRA_REGS count ####, should be ####
604	Warning thread local storage section xxxx not defined
605	Warning #### bytes of nops due to unsafe assembly
606	Fatal Error Instruction using multiple relocations not supported with advanced linker optimizations.
607	Fatal Error Instruction not supported with INTEGRITY TimeMachine
608	Fatal Error Big switch table with align directive is not aligned in object file.
609	Warning Assembly instruction using multiple relocations not supported with advanced linker optimizations.
610	Non-Fatal Error Unknown INTEGRITY TimeMachine version in module xxxx (version ####).
611	Fatal Error Tricore: section xxxx in module xxxx is too large to insert a farcall patch for function xxxx
612	Warning The INTEGRITY TimeMachine atomic MFTB opcode is not set. Pass -C_ghs_itm_atomic_mftb_opcode=<opcode> to set it.
613	Warning Linkonce symbol xxxx (from xxxx) is overridden by non-linkonce version from xxxx, but xxxx is not overridden
614	Fatal Error module xxxx was generated by a compiler with a version number greater than the version number of this elxr

615	Fatal Error output file xxxx also specified as input file
616	Warning unable to find function xxxx for ..lin label
617	Warning unable to deconstruct "xxxx"
618	Warning individual section xxxx from xxxx contains multiple symbols named xxxx
619	Non-Fatal Error thread local storage is disabled, but .tls* sections are not empty.
621	Warning __c_tls_offset symbol is referenced, but thread local storage is disabled.
622	Warning imported module xxxx uses TLS data sections.
623	Non-Fatal Error Reference to discarded linkonce section
624	Warning function: xxxx has an argument type checking declaration in xxxx, but is never defined
625	Warning min_p_align is larger than max_p_align (#### > ####)
626	Warning min_p_align must be a power of two integer, not ####
627	Warning max_p_align must be a power of two integer, not ####
628	Warning RAM initialization not supported with PIC or PID.
629	Non-Fatal Error incompatible ABI versions: xxxx in module xxxx vs xxxx in module xxxx

630	Non-Fatal Error unrecognized cpu type: xxxx
631	Non-Fatal Error incompatible machine flags in module xxxx: ####
632	Fatal Error failed to read line #### ofxxxx file 'xxxx' (xxxx)
633	Warning section xxxx can't be randomized
634	Warning section xxxx(xxxx) marked as both sorted and randomized
635	Non-Fatal Error imported symbol xxxx from executable section in image xxxx
636	Warning symbol xxxx is provided in both xxxx and xxxx with address ####
637	Non-Fatal Error symbol xxxx is provided in xxxx with address #### and xxxx with address ####
638	Non-Fatal Error Maximum number of symbols supported by ELF32 (2^{24}) exceeded in output symbol table.
639	Non-Fatal Error Maximum number of symbols supported by ELF64 (2^{32}) exceeded in output symbol table.
640	Fatal Error start_expression for monotonic section xxxx places it outside memory_block list
641	Fatal Error start_expression for monotonic section xxxx places it in block xxxx, swapping it with section(s) assigned to xxxx
642	Fatal Error start_expression for section xxxx assigns it to block xxxx, swapping it across monotonic section(s)

643	Fatal Error section xxxx cannot be assigned to any block without swapping across monotonic section(s)
645	Non-Fatal Error Not applying <code>-replace_rdtsc_to_int=</code> to module xxxx (xxxx).
646	Non-Fatal Error Error in parsing xxxx: Invalid range.
647	Non-Fatal Error A 'movhi' instruction was shortened to a 'mov', but after farcall patching it is out of range. You may need to disable farcall patching (with <code>-nofarcallpatch</code>) or move shortening (with <code>-no_shorten_moves</code>). Inconsistency found
648	Fatal Error unrecognized <code>-variant</code> argument
649	Warning Preprocessor directive #xxxx found in file which is not being preprocessed
650	Non-Fatal Error Not checking for non-replayable instructions in module xxxx (xxxx).
651	Non-Fatal Error Encountered non-replayable xxxx instruction in function xxxx
652	Non-Fatal Error xxxx incompatible with <code>-record_replay</code> , rebuild with <code>-gen_replay</code>
653	Non-Fatal Error Unexpected farcall patch from xxxx to xxxx.
654	Fatal Error Intercall patching not supported for prologue/epilogue snippets
655	Non-Fatal Error mismatched ISA specification for module xxxx. Cannot merge 'i' and 'e' extensions.
656	Non-Fatal Error incompatible embedded ABI (RVE) for module xxxx: xxxx vs xxxx in other modules

657	Non-Fatal Error privileged spec version for module xxxx: ####.####.#### vs ####.####.#### in other modules
658	Non-Fatal Error Error parsing arch attribute (xxxx) for module xxxx: xxxx
659	Non-Fatal Error invalid data in xxxx section in xxxx
660	Non-Fatal Error Unexpected architecture type for module xxxx. Must be RV32 or RV64
661	Non-Fatal Error architecture type for module xxxx: xxxx vs xxxx in other modules
662	Non-Fatal Error stack alignment for module xxxx: #### vs #### in other modules
663	Non-Fatal Error incompatible floating-point ABI for module xxxx: xxxx vs xxxx in other modules
664	Non-Fatal Error mismatched ISA extension version for 'xxxx' in module xxxx: ####.#### vs ####.#### in other modules
665	Warning Straightline vulnerable assembly detected
667	Fatal Error xxxx is not defined
668	Non-Fatal Error ghatable with non-function xxxx and function xxxx
669	Non-Fatal Error Cannot locate IFCC pair virtual function corresponding to xxxx
670	Non-Fatal Error jump table entry overflow: try recompiling with -bigswitch in table entry at xxxx+#### from function xxxx in module xxxx

671	Warning section xxxx couldn't be split across multiple memory blocks due to: xxxx
672	Non-Fatal Error data overflow: #### didn't fit in #### bits in expression in module xxxx at xxxx+#### involving symbolxxxx
673	Non-Fatal Error Unexpected symbol 'xxxx' encountered by block optimization

Chapter 3

Assembler Diagnostic Messages

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This chapter lists diagnostic messages that you may encounter when assembling code, listed by diagnostic number. Diagnostic message numbers will only appear for Power Architecture, ARM, V850, and TriCore targets.

Assembler Diagnostic Message Codes

The following list contains all the assembler diagnostic messages:

Diagnostics 1 to 99

1	Fatal Error Unrecognized option 'xxxx'
2	Fatal Error COFF not supported for this configuration.
3	Fatal Error Option 'xxxx' requires an argument of the form oldsect=newsect
4	Fatal Error Invalid argument xxxx
5	Fatal Error A source file must be specified.
6	Fatal Error The assembler -globalreg check is not compatible with -tracereg.
7	Fatal Error Invalid syntax for option 'xxxx'
8	Fatal Error Argument xxxx too large
9	Fatal Error diagnostic xxxx cannot be demoted to a warning
10	Fatal Error xxxx is an invalid diagnostic number
11	Fatal Error diagnostic xxxx cannot be suppressed

12	Fatal Error out of memory
13	Fatal Error syntax error
14	Fatal Error constant required
15	Fatal Error instruction not 16-bit aligned
16	Fatal Error instruction not 32-bit aligned
17	Fatal Error expected register r0-r7 or r24-r31
18	Fatal Error use of global register
19	Fatal Error displacement not 16-bit aligned
20	Fatal Error expected floating point register
21	Fatal Error expected condition register
22	Warning VLE instruction in section not declared with "v" flag.
23	Fatal Error expected register
25	Fatal Error expected constant
26	Fatal Error constant cannot be expressed as simple bitfield
27	Fatal Error expected ', '

28	Fatal Error expected special purpose register
29	Fatal Error displacement not 32-bit aligned
30	Fatal Error expected vector register
31	Fatal Error expected register r8-r23
32	Fatal Error displacement must be in [-256,255]
33	Fatal Error constant must be in [0,31]
34	Fatal Error displacement must be in [-32768,32767]
35	Fatal Error expected displacement
36	Fatal Error constant must be in [0,2]
37	Fatal Error n must be in [0,63]
38	Fatal Error b must be in [0,63]
39	Fatal Error constant must be in [-16,15]
40	Fatal Error cannot branch this far
41	Fatal Error (b+n) must be in [0,64]
42	Fatal Error offset must be multiple of 4

43	Fatal Error constant must be in [0,63]
44	Fatal Error Internal assembler error
45	Non-Fatal Error value not properly sign extended
46	Fatal Error offset must be multiple of 8
47	Fatal Error offset must be in [0,15])
48	Fatal Error offset not word aligned
49	Fatal Error offset must be multiple of 2
50	Fatal Error offset must be in [-8192,8191]
51	Fatal Error offset must be multiple of 4 and in [0,124]
52	Fatal Error illegal VLE relocation
53	Fatal Error constant must be in [1,64]
54	Fatal Error expected base register r0-r7 or r24-r31
55	Fatal Error offset must be in [0,30]
56	Fatal Error constant must be in [0,3]
57	Fatal Error offset must be multiple of 2 and in [0,62]

58	Fatal Error expected TB or TBU
59	Fatal Error offset not double aligned
60	Fatal Error (b-n) must be in [0,31]
61	Fatal Error offset not half-word aligned
62	Fatal Error expected condition register cr0-3 only
63	Fatal Error b-n must be in [0,63]
64	Fatal Error constant must be in [0,64]
65	Fatal Error n must be in [0,32]
66	Fatal Error n must be in [1,32]
67	Fatal Error constant must be in [0,255]
68	Fatal Error la without .using
69	Fatal Error b+n must be in [0,63]
70	Fatal Error illegal relocation
71	Fatal Error n must be in [0,7]
72	Fatal Error expected segment register

73	Fatal Error n must be in [0,64]
74	Fatal Error constant must be in [-32768,65535]
75	Fatal Error constant must be in [0,4]
76	Fatal Error expected address
77	Fatal Error constant must be 0 or 1
78	Fatal Error constant must be in [-32767,32768]
79	Fatal Error constant must be in [0,7]
80	Fatal Error offset must be in [-2048,2047]
81	Fatal Error expected 0 or 1
82	Fatal Error constant must be in [0,15]
83	Fatal Error (b+n) must be in [0,31]
84	Fatal Error offset must be in [-32768,32767]
85	Fatal Error expected TB (268) or TBU (269)
86	Fatal Error offset must be multiple of 8 and in [0,248]
87	Fatal Error Illegal TH value

88	Fatal Error offset must be in [0,60]
89	Fatal Error b must be in [0,31]
90	Fatal Error L=1 invalid for 32-bit implementation
91	Fatal Error offset must be in [-128,127]
92	Fatal Error expected 16-bit signed immediate
93	Fatal Error expected SCI8 formatted immediate
94	Non-Fatal Error use of reserved trace register
95	Fatal Error expected 20-bit signed immediate
96	Fatal Error constant must be in [-524288,524287]
97	Fatal Error expected 16-bit unsigned immediate
98	Warning constant encoding requires sign extension
99	Fatal Error .novle is not compatible with -convert_to_vle

Diagnostics 100 to 199

100	Fatal Error INTEGRITY TimeMachine instrumentation error
101	Fatal Error undefined temp label

102	Fatal Error bad 387 register number
103	Fatal Error no such temporary label
104	Non-Fatal Error label must be in range 0..65535
105	Fatal Error Expected =label
106	Fatal Error Expected const shift count
107	Fatal Error Illegal Binary Coded Decimal value
108	Fatal Error Expected shift amount 2
109	Fatal Error .equ symbol may not be redefined
111	Fatal Error register name may not be reused as a label
112	Fatal Error register name or other keyword may not be reused as a label
113	Fatal Error multiply defined
114	Fatal Error reference not addressable
115	Fatal Error expected identifier
116	Fatal Error value changed after use
117	Fatal Error illegal assignment type change

118	Fatal Error expected comma
119	Fatal Error Cannot weak this
120	Warning Symbol table cannot express a global symbol set to an undefined symbol
121	Non-Fatal Error Expect a push to MIPS .set stack first
122	Fatal Error weak symbol cannot be set to undefined symbol
123	Fatal Error dot cannot decrease
124	Non-Fatal Error Exceed maximum MIPS .set stack level
125	Fatal Error common symbol cannot be redeclared local; use .lcomm instead
126	Non-Fatal Error Expected .mips16 or its variants
127	Fatal Error Missing scope number
128	Non-Fatal Error Expected .set mips16 or its variants
129	Fatal Error .export symbol not defined
130	Fatal Error expected model name
131	Fatal Error Cannot nest
132	Fatal Error register names cannot be made external

133	Fatal Error Missing line number
134	Fatal Error label starting with "_" within .beginscope cannot be exported
135	Fatal Error expected symbol
137	Fatal Error Unmatched
138	Fatal Error .tracereg_endnowarn not matched with prior .tracereg_nowarn
139	Warning Currently, only the FLAT model is supported
140	Fatal Error .import symbol was defined
142	Fatal Error expected comment delimiter
143	Fatal Error Missing function name
144	Fatal Error expected new line
145	Warning unsupported directive
146	Non-Fatal Error Cannot declare symbol weak after definition
147	Non-Fatal Error No output file name assigned
148	Fatal Error expected immediate or label
149	Non-Fatal Error Unsupported operator

150	Warning Relocatable sym1-sym2 value may be incorrect after link-time function deletion
152	Fatal Error negative relocation not allowed
153	Fatal Error expect comma
155	Non-Fatal Error unterminated .if
156	Fatal Error Expected register
158	Non-Fatal Error Subtract of symbols in different sections
160	Fatal Error Expected , or }
161	Non-Fatal Error unterminated comment directive
162	Warning Couldn't open DBO file for patching
163	Fatal Error Expected `]'`
164	Non-Fatal Error unterminated macro or repeat
165	Fatal Error illegal addressing mode
167	Warning Couldn't write to DBO file
170	Non-Fatal Error negative offset for static symbol - may cause problems with software update
171	Warning Couldn't load DBO file for patching

172	Non-Fatal Error Error writing to object file.
174	Non-Fatal Error unexpected end of line
175	Fatal Error Expected shift operand
176	Fatal Error First operand must be register
177	Fatal Error Expected ']'
178	Warning Unknown issue processing DBO file
179	Fatal Error cannot convert undefined expr to register
180	Warning Couldn't open DBO file for writing
181	Non-Fatal Error Relocatable sym1-sym2 must have sym2 in current section
182	Non-Fatal Error 16-bit offset exceeds 32k, possibly due to big switch statement (try -bigswitch)
183	Fatal Error expected register or displacement
184	Fatal Error '-' illegal for System Registers
185	Fatal Error overflow
186	Fatal Error Expected `)'
187	Non-Fatal Error Couldn't add labels to symbol table in DBO file

188	Fatal Error Expected general register
189	Fatal Error alignment must be a power of two
190	Fatal Error "type" relocations only allowed in tv modules
191	Fatal Error Expecting comma
192	Fatal Error .align X mod Y not allowed in special sections
193	Fatal Error mismatched [] in macro parameter list
194	Fatal Error undefined symbol used
195	Fatal Error Branch cannot be expanded.
196	Fatal Error invalid redeclaration of linkonce type
197	Fatal Error non-void .scall directive used after void .scall directive
198	Warning ignoring -g as assembly file originates from source file compiled with -g and .dbo file already exists
199	Fatal Error exponent out of range

Diagnostics 200 to 299

200	Fatal Error too many parameters
201	Fatal Error unmatched conditional assembly directive

202	Warning inexact decimal conversion
203	Fatal Error too many type specifiers
204	Fatal Error mismatched <> in macro parameter list
205	Fatal Error mismatched () or [] in macro parameter list
206	Fatal Error section attribute must be x, d, r, or b
207	Fatal Error too many digits in BCD constant
208	Fatal Error too many nested .include files
209	Fatal Error expected hex digit
210	Fatal Error missing ')', ']' or '>'
211	Fatal Error illegal alignment boundary
212	Fatal Error local symbol cannot be redeclared common; use .lcomm instead
213	Fatal Error multiple maxstack values
214	Fatal Error can't fixup coff symbol scnum
215	Fatal Error expected end of line or ">" for address
216	Fatal Error relocation macro illegal here

217	Warning expected filename
218	Fatal Error expected ']'
219	Fatal Error Unable to open include file. Exiting.
220	Fatal Error .maxstack must be used within scope of current function
221	Fatal Error expected .align X mod Y
222	Fatal Error The difference of two labels with an offset is not allowed
223	Fatal Error multiple maxinstances values
224	Fatal Error .section requires a quoted name
225	Fatal Error constant must be in [1,3]
226	Fatal Error .offset directive cannot decrease current offset
227	Fatal Error type clash
228	Fatal Error mismatched () in macro parameter list
229	Fatal Error multiple hil, lo, sdaoff, etc. per line not allowed
230	Fatal Error missing single quote
231	Fatal Error hex digit in decimal literal

232	Fatal Error Expecting right parenthesis
233	Fatal Error expected ", entsize"
234	Fatal Error missing character constant
235	Fatal Error newlines in string constant
236	Warning output file not specified; using default filename
237	Fatal Error .endx must match .macro/.rept and begin the line
238	Fatal Error .frameinfo must start with .name
239	Fatal Error wrong number of hex digits
240	Warning coff directive specified but assembler is outputting ELF.
241	Fatal Error bcd constant too large
242	Fatal Error expected [:,]
243	Fatal Error bcd constant is NAN
244	Fatal Error Too many sections
245	Fatal Error expected end of line
246	Warning elf directive specified but assembler is outputting COFF.

247	Fatal Error float not allowed here
248	Warning too many digits in mantissa
249	Fatal Error .radix operand must be B, Q, D or H
250	Fatal Error unrecognized @type annotation
251	Fatal Error relocation incompatible with -torn
252	Fatal Error bad numeric literal
253	Fatal Error expected positive integer
254	Fatal Error Expected constant
255	Fatal Error range error
256	Fatal Error hi/lo illegal here
257	Fatal Error void .scall directive used after non-void .scall directive
258	Fatal Error .fsize must be used within scope of current function
259	Fatal Error expected comma followed by group name
260	Fatal Error symbol previously defined
261	Fatal Error expected group name

262	Fatal Error include name too long
263	Fatal Error relocation type not allowed
264	Warning ignoring -g as assembly file originates from source file compiled with -g
265	Fatal Error multiple fsize values
266	Fatal Error expected name or 0
267	Fatal Error Unknown directive
268	Fatal Error .scall must be used within scope of current function
269	Fatal Error bad section directive
270	Fatal Error size out of range
271	Fatal Error global not found in c_symnum()
273	Fatal Error value must be in range 0..255
274	Warning multiple text sections in one file; dwarf 1.1 debug information eliminated for this file
275	Fatal Error no coff symbol created
276	Fatal Error can't set coff symbol scnum
277	Fatal Error Expected right parenthesis

278	Fatal Error non zero fill value in .bss-like section
279	Fatal Error too many COFF relocation table entries
280	Warning -s0 not allowed with debug info generation; using -s1 instead
281	Fatal Error expected "bss" or "data"
282	Fatal Error line too complex
283	Fatal Error bad size specification for hex constant
284	Warning illegal octal digit
285	Fatal Error bad @<val> to .type
286	Fatal Error expected name
287	Fatal Error invalid redeclaration of associated linkonce section
288	Fatal Error division by 0
289	Fatal Error expected section attributes
290	Fatal Error recursive macro/rept loop
291	Fatal Error Expected id
292	Warning dc doesn't align odd-addressed data & labels. Precede it with align 2

293	Fatal Error undefined fill value
294	Warning include directory not specified
295	Warning multiple text sections in one file; debug information eliminated for this file
296	Warning immediate encoding requires change of sign
297	Fatal Error invalid expression
298	Warning section does not have allocation bit set
299	Fatal Error .section attribute must be .text, .data, or .bss

Diagnostics 300 to 399

300	Fatal Error fill not allowed in special sections
301	Fatal Error relocatable space < 32 bits
302	Fatal Error fill value out of range
303	Warning artificial macro has incomplete reference info
304	Fatal Error .exitm must be invoked inside a macro
305	Fatal Error Invalid .set syntax
306	Fatal Error recursive macro/rept loop recurses too deeply

308	Fatal Error Could not find associated linkonce section
309	Fatal Error Illegal redefinition of macro
310	Fatal Error Variable expression not allowed here
311	Fatal Error relocations of size other than 32 are not supported with COFF output
312	Fatal Error bss segment phase error type 1
313	Warning .fsize directive causing info specified by .frameinfo to be discarded
314	Fatal Error bcd constant too small
315	Fatal Error relocatable or undefined expression size != 32
316	Fatal Error fail encountered
317	Fatal Error relocation sizes other than 32 and 64 bits are not supported
318	Fatal Error can't combine these types for addressing
319	Fatal Error undefined byte count
320	Fatal Error statement too complicated
321	Fatal Error Expected left parenthesis
322	Fatal Error expected macro name

323	Fatal Error Expecting identifier
324	Fatal Error bcd constant is too large
326	Fatal Error .radix operand must be 2, 8, 10 or 16
327	Fatal Error unterminated < in macro argument
328	Fatal Error Size of section exceeds host memory limit
329	Fatal Error wrong type
330	Fatal Error ? operators are: ?i ?r ?c
331	Fatal Error attempt to dump pool in wrong section
332	Fatal Error Expected string
333	Fatal Error hex constant too long
334	Fatal Error c_symnum: null exref in rel entry
335	Fatal Error unsupported target
336	Fatal Error unknown section attribute
337	Fatal Error macro parameter mismatch
338	Fatal Error expected section flags

339	Fatal Error unknown linkonce type
340	Fatal Error .maxinstances must be used within scope of current function
341	Fatal Error illegal redefinition of section attributes
342	Fatal Error cannot insert negative-sized space
343	Fatal Error unexpected parameter
344	Fatal Error infinite .include loop
345	Warning syntax is obsolete
346	Fatal Error illegal >< concatenation operand
347	Fatal Error special section not closed
348	Fatal Error expected string
350	Warning INTEGRITY TimeMachine instrumentation warning: xxxx
351	Fatal Error Can't create builder information file: xxxx
352	Non-Fatal Error INTEGRITY TimeMachine instrumentation error: xxxx
353	Fatal Error Inconsistent operand types: xxxx and xxxx
354	Fatal Error assignments involving xxxx not allowed

355	Fatal Error xxxx undefined
356	Fatal Error constant must be in [0,####]
357	Fatal Error range error: immediate value xxxx does not fit in #### bits
358	Fatal Error constant must be in [xxxx,xxxx]
359	Fatal Error illegal character (####) 'xxxx'
361	Non-Fatal Error Section xxxx is larger than xxxx bytes
362	Fatal Error Expected ',' or 'xxxx'
364	Warning overflow warning
365	Fatal Error .error
366	Warning .warning
367	Fatal Error Assertion failed
368	Fatal Error type clash, operator='xxxx'
369	Fatal Error directive not supported without -asm3g option
370	Fatal Error unable to write to temp file "xxxx"
371	Fatal Error could not close dependencies file

372	Fatal Error directive not supported by the current target configuration
373	Fatal Error unknown object "xxxx"
374	Fatal Error object "xxxx" does not have struct/class/union type
375	Fatal Error struct "xxxx" has no field "xxxx"
376	Fatal Error field "xxxx" in struct "xxxx" does not have struct/class/union type
377	Fatal Error unable to process import file "xxxx"
378	Fatal Error Could not convert, no equivalent VLE instruction exists
379	Fatal Error Could not convert, operands are not compatible with any equivalent VLE instructions
380	Non-Fatal Error reference to blacklisted symbol
381	Non-Fatal Error definition of blacklisted symbol
382	Fatal Error Expected id defined in module

Diagnostics 1000 to 1099

1000	Fatal Error .localentry size must be a power of two between 1 and 16
1001	Fatal Error multiple .seh_setframe directives for same proc
1002	Fatal Error .seh directive in different section than .seh_proc

1003	Fatal Error unrecognized reg in .seh directive
1004	Fatal Error .seh_endproc expected
1005	Fatal Error multiple .seh_endprologue directives for same proc
1006	Fatal Error too many .seh unwind codes
1007	Fatal Error .seh directive out of prologue offset range
1008	Fatal Error .seh_beginproc missing or in different section than .seh_endproc
1009	Fatal Error .seh_endprologue in different section than .seh_proc
1010	Fatal Error .seh directives used in non-text section
1011	Fatal Error bad value in .seh_stackalloc directive
1012	Fatal Error .seh directives in COMDAT section with bad name
1013	Fatal Error bad offset in .seh_setframe directive

Diagnostics 2000 to 2099

2002	Fatal Error expected '}', ',', or '-' while parsing reglist
2003	Fatal Error immediate constant expected
2004	Fatal Error not within valid xxxx range

2005	Fatal Error parameter cannot be r0 on this architecture
2006	Fatal Error expected '{' at start of reglist
2009	Fatal Error out of range
2011	Fatal Error expected register while parsing reglist
2012	Fatal Error illegal register for this reglist
2013	Fatal Error comma expected
2014	Fatal Error expected a xxxx
2015	Fatal Error internal ease error: reghi > reglo+32
2016	Fatal Error expected a replicated immediate with #### identical ####-bit values
2018	Fatal Error expected an immediate with prefix 'xxxx'
2019	Fatal Error xxxx constant or relocatable expected
2021	Fatal Error expected least-significant bit to be zero
2022	Fatal Error Out of range sub-data specification '####'
2023	Fatal Error not within valid xxxx set
2024	Fatal Error expected #### least-significant bits to be zero

2025	Fatal Error unmatched text
2026	Fatal Error expected substring "xxxx"
2027	Fatal Error unexpected text before substring "xxxx"
2028	Fatal Error numeric label not found
2029	Fatal Error end-of-line expected
2030	Fatal Error xxxx is an invalid diagnostic number
2032	Non-Fatal Error reg3 cannot be r0 or the same as reg2
2033	Non-Fatal Error Only one rh850_flags directive allowed
2034	Non-Fatal Error bit instruction found
2035	Non-Fatal Error Bad rh850_flag, ep(r30) is previously set to fixed
2036	Non-Fatal Error Bad rh850_flag, double-precision is previously set to 32 bits
2037	Non-Fatal Error Bad rh850_flag, FPU version is previously set to FPU2.0
2038	Non-Fatal Error Bad rh850_flag, FPU version is previously set to FPU3.0
2040	Non-Fatal Error Bad rh850_flag, r2 is previously set to reserved
2042	Non-Fatal Error Bad rh850_flag, data alignment is previously set to 4 bytes

2043	Warning unrecognized cpu type: xxxx
2044	Non-Fatal Error Unrecognized rh850_flag
2045	Non-Fatal Error Bad rh850_flag, register mode is previously set to 32
2046	Non-Fatal Error Bad rh850_flag, data alignment is previously set to 8 bytes
2047	Non-Fatal Error Bad rh850_flag, gp(r4) is previously set to non-fixed
2048	Non-Fatal Error Bad rh850_flag, FXU is disabled
2049	Non-Fatal Error Bad rh850_flag, tp(r5) is previously set to fixed
2050	Non-Fatal Error Bad rh850_flag, tp(r5) is previously set to non-fixed
2051	Non-Fatal Error Bad rh850_flag, SIMD is disabled
2052	Non-Fatal Error Bad rh850_flag, FPU is disabled
2053	Non-Fatal Error Bad rh850_flag, ep(r30) is previously set to non-fixed
2054	Non-Fatal Error Bad rh850_flag, gp(r4) is previously set to fixed
2055	Non-Fatal Error Bad rh850_flag, r2 is previously set to non-reserved
2056	Non-Fatal Error Bad rh850_flag, register mode is previously set to 22
2057	Non-Fatal Error Bad rh850_flag, double-precision is disabled

2058	Warning cpu already set, ignoring option: -cpu=xxxx
2059	Non-Fatal Error Bad rh850_flag, double-precision is previously set to 64 bits
2060	Fatal Error no files to assemble. Use -help for help
2061	Non-Fatal Error Could not read comment file xxxx
2062	Warning cannot redirect stderr to xxxx
2063	Fatal Error expected a macro invocation
2064	Warning Couldn't open DBO file for writing Unable to open a file containing Green Hills debugging information for writing in order to patch in additional information from the assembler.
2065	Fatal Error instruction unsupported in this context
2066	Warning Couldn't load DBO file for patching A problem occurred when loading a file containing Green Hills debugging information in order to patch in additional information from the assembler.
2067	Fatal Error unknown instruction
2068	Fatal Error no default value to macro parameter
2069	Warning Couldn't open DBO file for patching Unable to open a file containing Green Hills debugging information for reading in order to patch in additional information from the assembler.

2070	Warning Couldn't write to DBO file A problem occurred when writing a file containing Green Hills debugging information after patching in additional information from the assembler.
2071	Fatal Error bad parameter
2072	Fatal Error label multiply defined
2073	Warning unknown option: xxxx
2074	Warning Unknown issue processing DBO file An unknown problem occurred while processing a file containing Green Hills debugging information in order to patch in additional information from the assembler. This warning is not currently given.
2075	Fatal Error can't concatenate here
2076	Non-Fatal Error Couldn't add labels to symbol table in DBO file A problem occurred while patching addition information from the assembler into a file containing Green Hills debugging information.
2077	Fatal Error diagnostic xxxx cannot be suppressed
2078	Fatal Error diagnostic xxxx cannot be demoted to a warning
2079	Fatal Error gen_fopen() error on file "xxxx" in INCBIN directive
2080	Fatal Error fseek()/ftell() error on file "xxxx" in INCBIN directive
2081	Fatal Error fread() error on file "xxxx" in INCBIN directive
2082	Non-Fatal Error assertion failed at line ####

2083	Fatal Error info: xxxx
2084	Non-Fatal Error jentry data does not fit in halfword
2085	Fatal Error line ####: invalid newline within symbol
2086	Fatal Error line ####: invalid semicolon within symbol
2087	Fatal Error -PD must be preceded by -armuk The -armuk option must be specified on the command line before options that declare and set ARM UK Assembler Predefines. This error is specific to the ARM target architecture.
2088	Fatal Error -PD: unable to find SET[A S L] directive in 'xxxx'
2089	Non-Fatal Error Arm UK macro parameters must start with '\$'
2093	Fatal Error expected ')' in parameter list
2094	Fatal Error EOF unexpected
2095	Fatal Error cannot find file xxxx
2096	Fatal Error Too many ELF sections
2097	Non-Fatal Error illegal redefinition of non-label symbol xxxx
2098	Fatal Error write to ELF file failed
2099	Non-Fatal Error missing dependency information in do_dependency_file()

Diagnostics 2100 to 2199

2100	Non-Fatal Error multiple fsize values for xxxx
2101	Non-Fatal Error multiple maxstack values for xxxx
2102	Non-Fatal Error multiple maxinstances values for xxxx
2103	Fatal Error xxxx illegal here
2105	Fatal Error invalid rotated immediate
2106	Fatal Error Use of reserved trace register
2107	Fatal Error destination registers are equal
2108	Fatal Error Writeback not permitted for store multiple of user registers
2109	Fatal Error Writeback not permitted for load multiple of user registers not including PC
2110	Fatal Error expected a register
2111	Warning INTEGRITY TimeMachine instrumentation warning (line ####): code outside function; instrumentation suppressed
2112	Warning unrecognized fpu type: xxxx
2113	Warning invalid eflags value: xxxx
2114	Warning AREA both CODE and READWRITE: creating nonstandard .text section with WRITE flag

2115	Warning OPT: unsupported option(s) set
2116	Fatal Error Store multiple of base register with writeback may have unpredictable results
2117	Fatal Error Load multiple of base register with writeback may have unpredictable results
2118	Fatal Error Thumb2 load/store multiple with fewer than 2 registers in mask may have unpredictable results
2119	Warning apcs options used only under -armuk flag The -armuk option must be specified on the command line before -apcs= options that set the values of simulated ARM Ltd. internal variables. This error is specific to the ARM target architecture.
2120	Warning -apcs parameter 'xxxx' unrecognized at position xxxx
2121	Warning Arm UK macro parameters: one token only, read as string Encountered more than one token for the value of an ARM UK macro parameter. This error is specific to the ARM target architecture.
2122	Warning frame address <reg>,<offset>: not supported
2123	Warning frame address <reg>: not supported
2124	Warning frame pop <integer>: not supported
2125	Warning frame pop {<registers>}: not supported
2126	Warning frame push <integer>: not supported

2127	Warning frame push {<registers>}: not supported
2128	Warning frame register: not supported
2129	Warning frame restore: not supported
2130	Warning frame save: not supported
2131	Warning frame state remember: not supported
2132	Warning frame state restore: not supported
2133	Warning require8: not supported
2134	Warning preserve8: not supported
2135	Warning entry: not supported
2136	Warning section xxxx has been assigned multiple types (old:#### new:####)
2137	Warning cannot create .inf file
2138	Warning Instruction length exceeds maximum for source-line debug info The number of bytes of machine code associated with a particular instruction exceeds the limit for what can be represented in the source line table of the debugging information.
2139	Warning ignoring -g as assembly file originates from source file compiled with -g and .dbo file already exists The assembler is not generating debugging information for a source file because it detected symbols in that file that indicate the compiler has already generated the information and the associated file containing the information is known to exist.

2140	Warning ignoring -g as assembly file originates from source file compiled with -g The assembler is not generating debugging information for a source file because it detected symbols in that file that indicate the compiler has already generated the information.
2141	Warning .fsize directive causing info specified by .frameinfo to be discarded
2142	Warning use of deprecated .hidemacro. This feature will be removed shortly!!!
2143	Warning questionable assignment of pointer value to "xxxx" field
2144	Warning questionable assignment of non-zero integer value to "xxxx" field
2145	Warning Ignoring unknown section attribute
2146	Warning Truncating to -1
2147	Non-Fatal Error .thumb not supported with this configuration
2148	Non-Fatal Error .thumb2 not supported with this configuration
2149	Non-Fatal Error .nothumb not supported with this configuration
2150	Non-Fatal Error invalid aligned-data directive
2151	Non-Fatal Error AREA cannot be both READONLY and READWRITE
2152	Non-Fatal Error AREA cannot be both CODE and DATA

2153	Non-Fatal Error AREA both CODE and NOINIT not supported
2154	Non-Fatal Error AREA both READONLY and NOINIT not supported
2155	Non-Fatal Error expected string or constant expression
2156	Non-Fatal Error bad expression
2157	Non-Fatal Error expected [WEAK]
2158	Non-Fatal Error invalid symbol
2159	Non-Fatal Error Too late to ban floating point instructions A directive was used to disable the use of floating-point instructions after at least one such instruction had already been seen.
2160	Non-Fatal Error invalid parameter (0 <= OPT parameter < 65536)
2161	Non-Fatal Error unmatched preprocessor directive
2162	Non-Fatal Error invalid ARM renaming directive
2163	Non-Fatal Error invalid register
2164	Non-Fatal Error jtdispatch only supported in V4 and above
2165	Non-Fatal Error register out of bounds
2166	Non-Fatal Error no jtentry table after previous/only jtdispatch
2167	Non-Fatal Error jtdispatch: invalid parameter(s)

2168	Non-Fatal Error label has been previously defined
2169	Non-Fatal Error symbol may not be equated to expression using dot operator
2170	Non-Fatal Error attempt to redefine to a different value
2173	Non-Fatal Error unsupported directive
2174	Non-Fatal Error no corresponding jtentry lines with data
2175	Non-Fatal Error bad/no corresponding jtdispatch
2176	Fatal Error cannot find file "xxxx" referenced in INCBIN directive
2177	Non-Fatal Error Overlapping IT instructions
2178	Non-Fatal Error Invalid condition code
2179	Fatal Error unexpected token type (xxxx) encountered; expected type (xxxx)
2180	Non-Fatal Error undeclared substituted variable
2181	Non-Fatal Error Invalid 0-length variable (\$ at end of id/string)
2182	Non-Fatal Error Invalid substituted variable (or \$ in id/string)
2183	Non-Fatal Error local label outside any routine or area scope
2184	Non-Fatal Error local label routine-name mismatches current routine

2185	Non-Fatal Error invalid local label (post-first-pass)
2186	Non-Fatal Error local label must begin with a number (after '%' and flags)
2187	Non-Fatal Error local label ref outside routine or area scope
2188	Non-Fatal Error local label ref routine-name mismatches current routine
2189	Non-Fatal Error local label not found
2190	Non-Fatal Error Cannot mix Arm UK and GHS macro syntax in the same file.
2191	Non-Fatal Error Arm UK-style label parameters to macros must start with \$
2192	Non-Fatal Error function/proc directive must be preceded by a label
2193	Non-Fatal Error cannot nest function/proc directives
2194	Non-Fatal Error no corresponding function/proc directive
2195	Non-Fatal Error frame directive must be within proc/endp directives
2196	Non-Fatal Error expected number or register list
2197	Non-Fatal Error expected register list
2198	Non-Fatal Error invalid frame state operation
2199	Non-Fatal Error invalid frame operation

Diagnostics 2200 to 2299

2200	Non-Fatal Error ROUT: may only be preceded by a label
2201	Non-Fatal Error MAP directive expected absolute or section-relative parameter
2202	Non-Fatal Error MAP directive expected register as second parameter
2203	Non-Fatal Error MAP directive: register-base cannot have section-relative offset
2204	Non-Fatal Error FIELD directive without MAP directive
2205	Fatal Error cannot find file "xxxx" referenced in .inspect directive
2207	Non-Fatal Error a variable and an EQU definition cannot share names
2208	Non-Fatal Error undeclared variable
2209	Non-Fatal Error type mismatch
2210	Non-Fatal Error unterminated string constant
2211	Non-Fatal Error non-void .scall directive used after void .scall directive Encountered a .scall directive indicating that a function makes a static call after an earlier directive indicated that the same function makes no calls.
2212	Non-Fatal Error void .scall directive used after non-void .scall directive Encountered a .scall directive indicating that a function makes no static calls after an earlier directive indicated that the same function makes at least one call.
2213	Non-Fatal Error section stack empty

2214	Non-Fatal Error illegal macro redefinition
2215	Non-Fatal Error label parameters to macros not supported
2216	Non-Fatal Error default values for macro parameters not supported Default values for macro parameters are not supported when not in -armuk mode. This error is specific to the ARM target architecture.
2217	Non-Fatal Error Only one use of <code>.macronextline</code> per macro allowed
2218	Non-Fatal Error expected <code>.assert constant_expr [, "message"]</code>
2219	Non-Fatal Error unexpected <code>.else</code>
2220	Non-Fatal Error unexpected <code>.elseif</code>
2221	Non-Fatal Error macro doesn't exist
2222	Non-Fatal Error illegal redefinition
2223	Non-Fatal Error <code>.radix</code> operand must be B, Q, D, or H
2224	Non-Fatal Error expected filename in quotes
2225	Non-Fatal Error expected comma or end-of-line
2226	Non-Fatal Error expected struct type name followed by variable name
2227	Non-Fatal Error Expected struct keyword
2228	Non-Fatal Error Expected struct name in <code>.extern struct</code>

2229	Non-Fatal Error Expected struct variable name in .extern struct
2230	Non-Fatal Error bad directive This error is given in various cases where a supported assembler directive is used incorrectly. See the documentation for the offending directive for information about its proper usage and syntax.
2231	Non-Fatal Error label undefined
2232	Non-Fatal Error expected 'mod'
2233	Non-Fatal Error expected 0..31
2234	Non-Fatal Error unknown type
2235	Non-Fatal Error do not allow nested .dsect blocks
2236	Non-Fatal Error unexpected in .dsect block
2237	Non-Fatal Error Cannot set global symbol to RHS not defined in this file
2238	Non-Fatal Error RHS must be defined in this file
2239	Non-Fatal Error Expected 32-bit value
2240	Non-Fatal Error Failed to find function name for .fsize Unable to match a .fsize directive to a specific function. Only happens on targets where the function is not a required argument to the directive.
2241	Non-Fatal Error Failed to find source function name for .scall Unable to match a .scall directive to a specific function. Only happens on targets where the caller is not a required argument to the directive.

2242	Non-Fatal Error Cannot nest
2243	Non-Fatal Error Not allowed inside of a macro
2244	Non-Fatal Error Line number too large
2245	Non-Fatal Error Scope number too large
2246	Non-Fatal Error Unmatched directive
2247	Non-Fatal Error Value too large
2248	Non-Fatal Error unhandled directive
2249	Non-Fatal Error syntax error in sizeof() expression
2250	Non-Fatal Error syntax error in offsetof() expression
2251	Fatal Error expected expression
2252	Fatal Error expected absolute expression
2253	Fatal Error expected constant expression
2254	Fatal Error expected boolean expression
2255	Fatal Error expected string expression
2256	Fatal Error the predicate parser failed

2257	Non-Fatal Error numeric/temporary labels are obsolete use <code>.macrolocal</code> instead or pass <code>-temporary_labels</code> for transition mode support
2258	Non-Fatal Error initializer data overlaps
2259	Non-Fatal Error A value of type "xxxx" cannot be used to initialize a field of type "xxxx"
2260	Non-Fatal Error more initializers than array elements
2261	Non-Fatal Error expected ',' or '}' in array initializer
2262	Non-Fatal Error expected at least one initializer in array initializer
2263	Non-Fatal Error struct/class/union "xxxx" has no field "xxxx"
2264	Non-Fatal Error field name must be specified after nested field designator is used
2265	Non-Fatal Error too many field initializer values
2266	Non-Fatal Error bitfields cannot be initialized The assembler does not currently support initializing bitfields in <code>.struct</code> directives.
2267	Non-Fatal Error expected ',' or '}' in struct initializer
2268	Non-Fatal Error string literal cannot initialize a field of type "xxxx"
2269	Non-Fatal Error aggregate initializer expected

2270	Non-Fatal Error floating point fields cannot be initialized The assembler does not currently support initializing floating-point fields in <code>.struct</code> directives.
2271	Non-Fatal Error cannot initialize field of "xxxx" type with pointer value
2272	Non-Fatal Error cannot initialize field of "xxxx" type with value of "int" type
2273	Non-Fatal Error unable to initialize field to that integer type Encountered an initializer in a <code>.struct</code> directive for an integer type whose size is not 1, 2, 4, or 8 bytes.
2274	Non-Fatal Error syntax error in initializer
2275	Non-Fatal Error expected array initializer
2276	Non-Fatal Error redefinition of "xxxx" as "struct xxxx", previously "struct xxxx"
2277	Non-Fatal Error unknown struct "xxxx"
2278	Non-Fatal Error name "xxxx" refers to type "xxxx", not a struct/class/union type
2279	Non-Fatal Error syntax error in field selection
2280	Non-Fatal Error left hand side of field selection operator is a type, not a variable
2281	Non-Fatal Error could not create label
2282	Non-Fatal Error syntax error in array length expression

2283	Non-Fatal Error expected struct initializer or ';'
2284	Non-Fatal Error initializer required when unspecified-length array is declared
2285	Non-Fatal Error relocatable expected
2286	Fatal Error different numbers of macro parameter names and values
2287	Fatal Error symbol table too large The symbol table contains too many entries to be written in the ELF file format.
2288	Fatal Error Offset of section name in string table must fit in 32 bits
2289	Fatal Error unknown construct encountered Encountered a construct that was not recognized as a legal directive, macro, label, or instruction.
2290	Fatal Error unable to create dir "xxxx" for source listing
2291	Fatal Error more tokens expected
2292	Fatal Error can't parse pool expression
2293	Fatal Error unexpected tokens after ldr <register>,<expression> pseudoinstruction
2294	Fatal Error can't evaluate pool expression
2295	Non-Fatal Error directive not supported without -asm3g option
2296	Non-Fatal Error directive not supported by the current target configuration

2297	Non-Fatal Error unable to process import file "xxxx"
2298	Non-Fatal Error unable to write to temp file "xxxx" A problem occurred while attempting to write to a temporary file as part of handling a .inspect directive.
2299	Non-Fatal Error could not close dependencies file

Diagnostics 2300 to 2399

2300	Non-Fatal Error unknown object "xxxx"
2301	Non-Fatal Error struct "xxxx" has no field "xxxx"
2302	Non-Fatal Error object "xxxx" does not have struct/class/union type
2303	Non-Fatal Error field "xxxx" in struct "xxxx" does not have struct/class/union type
2304	Fatal Error failed to open file: xxxx
2305	Non-Fatal Error xxxx ####: memory address (0x####) exceeded the maximum available address (0x####)
2306	Warning unrecognized output format: xxxx
2307	Fatal Error relocation of address counter to (0x####) overwrites previously assembled results
2308	Fatal Error address counter relocation (0x####) not multiples of 4

2309	Warning include file not specified for .cinclude
2310	Non-Fatal Error bad width, must be less than or equal to instruction width, which is 32
2311	Fatal Error address counter relocation not multiples of 4
2312	Non-Fatal Error the expression value cannot be represented by 32 bits
2313	Non-Fatal Error cannot overwrite a previously defined label or variable
2314	Fatal Error relocation of address counter overwrites previously assembled results
2315	Non-Fatal Error character not allowed in an option
2316	Non-Fatal Error the .cmdline directive is only allowed as a first statement of the source file
2317	Non-Fatal Error cannot overwrite a previously defined label
2318	Non-Fatal Error the expression value cannot be represented within the specified width
2319	Non-Fatal Error cannot overwrite a register symbol
2320	Warning .warning
2321	Non-Fatal Error .error
2322	Non-Fatal Error File error opening blacklist file xxxx; skipping blacklist

2323	Non-Fatal Error Blacklisted symbol xxxx is referenced
2324	Non-Fatal Error Blacklisted symbol xxxx is declared
2325	Non-Fatal Error INTEGRITY TimeMachine instrumentation: difference of two labels not allowed
2326	Non-Fatal Error INTEGRITY TimeMachine instrumentation (line ####): unsupported instruction
2327	Non-Fatal Error mismatched parentheses
2328	Fatal Error couldn't open file xxxx
2329	Fatal Error Unable to create dir "xxxx" for header file
2330	Non-Fatal Error Explicit S-bit instruction used in IT block
2331	Non-Fatal Error .ghsnote version must be at least 19 when setting the GP_FIX, GP_NONFIX, EP_FIX, EP_NONFIX, TP_FIX, TP_NONFIX, REG2_RESERVE, or REG2_NONRESERVE RH850 flags
2332	Fatal Error matching register is undefined
2333	Warning DWARF generation not supported for assembly files originating from source files compiled with -g
2334	Non-Fatal Error .offset directive cannot decrease current offset
2335	Fatal Error expected '-' while parsing entry ID range
2336	Warning expected eID1 <= eID2

2337	Fatal Error expected an entry ID in the format eN (0<=N<=31)
2338	Non-Fatal Error macro recursion maximum depth exceeded
2339	Non-Fatal Error replay not enabled
2340	Non-Fatal Error .rplinst overflow
2341	Non-Fatal Error .norplinst not matched with .rplinst
2342	Non-Fatal Error option stack empty
2343	Warning unknown option directive
2344	Warning unrecognized abi type: xxxx
2345	Fatal Error RISC-V architecture must be specified with -riscv_arch
2346	Warning unknown attribute name
2347	Non-Fatal Error expression is too complicated

