

Default Compiler Warnings

The diagnostic flags in the compiler enabled by default.

They include warnings and some errors.

Checks

Check ID	Check Name	Supported	Severity
CPP_WARN_ABSOLUTE_VALUE	Absolute Value Proper Usage	Yes	
CPP_WARN_ABSTRACT_FINAL_CLASS	Abstract Classes Should Not Be Final or Sealed	Yes	
CPP_WARN_ADDRESS_OF_PACKED_MEMBER	Do Not Take the Address of Packed Members	Yes	
CPP_WARN_ADDRESS_OF_TEMPORARY	Do Not Take the Address of Temporary Objects	Yes	High
CPP_WARN_AIX_COMPAT	IBM AIX Compatibility with Byte Alignment	Yes	
CPP_WARN_ALIGN_MISMATCH	Match Byte Alignment of Arguments	Yes	
CPP_WARN_ALLOCA_WITH_ALIGN_ALIGNOF	Correct Usage of Second Argument of Certain Allocation Functions	Yes	
CPP_WARN_ALWAYS_INLINE_COROUTINE	Always Inline Coroutine Functions	Yes	
CPP_WARN_AMBIGUOUS_DELETE	Ambiguous Delete	Yes	
CPP_WARN_AMBIGUOUS_ELLIPSIS	Ambiguous Ellipsis	Yes	
CPP_WARN_AMBIGUOUS_MACRO	Ambiguous Macro	Yes	
CPP_WARN_AMBIGUOUS_MEMBER_TEMPLATE	Ambiguous Member Template	Yes	
CPP_WARN_AMBIGUOUS_REVERSED_OPERATOR	Ambiguous Reversed Operator	Yes	
CPP_WARN_ANALYZER_INCOMPATIBLE_PLUGIN	Analyzer Incompatible Plugin	Yes	
CPP_WARN_ANONYMOUS_PACK_PARENTHESES	Anonymous Pack Parentheses	Yes	
CPP_WARN_ARC_BRIDGE_CASTS_DISALLOWED_IN_NONARC	ARC (Automatic Reference Counting) Bridge Casts Disallowed in Non-ARC	Yes	

Check ID	Check Name	Supported	Severity
CPP_WARN_ARC_RETAIN_CYCLES	ARC Retain Cycles	Yes	
CPP_WARN_ARC_UNSAFE_RETAINED_ASSIGN	ARC Unsafe Retained Assign	Yes	
CPP_WARN_ARGUMENT_OUTSIDE_RANGE	Argument Outside Range	Yes	
CPP_WARN_ARGUMENT_UNDEFINED_BEHAVIOUR	Argument Undefined Behaviour	Yes	
CPP_WARN_ARRAY_BOUNDS	Array Bounds	Yes	High
CPP_WARN_ASM_OPERAND_WIDTHS	Assembly Operand Widths	Yes	
CPP_WARN_ASSUME	Discarded Side Effects to __assume Function	Yes	
CPP_WARN_ATOMIC_ACCESS	Atomic Access	Yes	
CPP_WARN_ATOMIC_ALIGNMENT	Atomic Alignment	Yes	
CPP_WARN_ATOMIC_MEMORY_ORDERING	Atomic Memory Ordering	Yes	
CPP_WARN_AUTO_DISABLE_VIRTUAL_POINTER_SANITIZER	Auto Disable Virtual Pointer Sanitizer	Yes	
CPP_WARN_AUTO_STORAGE_CLASS	Auto Storage Class	Yes	
CPP_WARN_AVAILABILITY	Availability Attribute	Yes	High
CPP_WARN_AVR_RT_LIB_LINKING_QUIRKS	AVR RTLIB (Real-Time Library) Linking Quirks	Yes	
CPP_WARN_BACKEND_PLUGIN	Backend Plugin	Yes	
CPP_WARN_BACKSLASH_NEWLINE_ESCAPE	Backslash Newline Escape	Yes	High
CPP_WARN_BINDING_IN_CONDITION	Binding in Condition	Yes	
CPP_WARN_BITFIELD_CONSTANT_CONVERSION	Bitfield Constant Conversion	Yes	High
CPP_WARN_BITFIELD_WIDTH	Do Not Exceed Bit-Field Width	Yes	High
CPP_WARN_BITWISE_CONDITIONAL_PARENTHESES	Bitwise Conditional Parentheses	Yes	
CPP_WARN_BOOL_CONVERSION	Bool Conversion	Yes	High
CPP_WARN_BRACED_SCALAR_INIT	Braced Scalar Init	Yes	

Check ID	Check Name	Supported	Severity
CPP_WARN_BRANCH_PROTECTION	Branch Protection	Yes	
CPP_WARN_BUILTIN_ASSUME_ALIGNED_ALIGNMENT	Builtin Assume Aligned Alignment	Yes	
CPP_WARN_BUILTIN_MACRO_REDEFINED	Builtin Macro Redefined	Yes	High
CPP_WARN_BUILTIN_MEMCPY_CHK_SIZE	Builtin Malloc Check Size	Yes	High
CPP_WARN_BUILTIN_REQUIRE_HEADERS	Builtin Requires Header	Yes	
CPP_WARN_C2X_EXTENSIONS	C2X Extensions	Yes	
CPP_WARN_CALL_TO_PURE_VIRTUAL_FROM_CONSTRUCTOR_OR_DESTRUCTOR	Call to Pure Virtual from Constructor or Destructor	Yes	High
CPP_WARN_CAST_CALLING_CONVENTION	Cast Calling Convention	Yes	
CPP_WARN_CAST_QUAL_UNRELATED	Cast Qualifiers Unrelated	Yes	High
CPP_WARN_CLANG_CL_PCH_HEADERS	Clang-CL Precompiled Headers	Yes	
CPP_WARN_CLASS_CONVERSION	Class Conversion	Yes	High
CPP_WARN_CMSE_UNION_LEAK	CMSE (Cortex-M Support for Security Extension) Union Leak	Yes	
CPP_WARN_COMPARE_DISTINCT_POINTER_TYPES	Compare Distinct Pointer Types	Yes	High
CPP_WARN_COMPOUND_TOKEN_SPLIT_BY_MACRO	Compound Token Split by Macro	Yes	High
CPP_WARN_CONDITIONAL_TYPE_MISMATCH	Conditional Type Mismatch	Yes	High
CPP_WARN_CONSTANT_CONVERSION	Constant Conversion	Yes	High
CPP_WARN_CONSTANT_EVALUATED	Constant Evaluated	Yes	
CPP_WARN_CONSTANT_LOGICAL_OPERAND	Constant Logical Operand	Yes	High
CPP_WARN_CONSTEXPR_NOT_CONST	Constexpr Not Const	Yes	
CPP_WARN_COROUTINE	Coroutine Return Type	Yes	
CPP_WARN_COROUTINE_MISSING_UNHANDLED_EXCEPTION	Coroutine Missing Unhandled Exception	Yes	

Check ID	Check Name	Supported	Severity
CPP_WARN_CPP2B_EXTENSIONS	C++2B Extensions	Yes	
CPP_WARN_CPP11_COMPAT_DEPRECATED_STRINGS	C++11 Compatibility Deprecated Writable Strings	Yes	High
CPP_WARN_CPP11_INLINE_NAMESPACE	C++11 Inline Namespace	Yes	
CPP_WARN_CPP17_COMPAT_MANGLING	C++17 Compatibility Mangling	Yes	
CPP_WARN_CXX_ATTRIBUTE_EXTENSION	C++ Attribute Extension	Yes	
CPP_WARN_DANGLING	Dangling Pointers	Yes	High
CPP_WARN_DANGLING_ELSE	Dangling Else	Yes	
CPP_WARN_DANGLING_FIELD	Dangling Field	Yes	High
CPP_WARN_DANGLING_GSL	Dangling Pointers Found by Guidelines Support Library	Yes	High
CPP_WARN_DANGLING_INITIALIZER_LIST	Dangling Initializer List	Yes	High
CPP_WARN_DARWIN_SDK_SETTINGS	Darwin SDK Settings	Yes	
CPP_WARN_DEALLOC_IN_CATEGORY	Dealloc in Category	Yes	
CPP_WARN_DEBUG_COMPRESSION_UNAVAILABLE	Debug Compression Unavailable	Yes	
CPP_WARN_DEFAULTED_FUNCTION_DELETED	Defaulted Function Deleted	Yes	High
CPP_WARN_DELEGATING_CONSTRUCTOR_CYCLES	Delegating Constructor Cycles	Yes	High
CPP_WARN_DELETE_ABSTRACT_NON_VIRTUAL_DTOR	Delete Abstract Non-Virtual Destructor	Yes	High
CPP_WARN_DELETE_INCOMPLETE	Delete Incomplete	Yes	High
CPP_WARN_DEPRECATED_ALTIVEC_SRC_COMPAT	Deprecated AltiVec Instruction Set Source Compatibility	Yes	
CPP_WARN_DEPRECATED_ANON_ENUM_CONVERSION	Deprecated Anon-Enum, Enum Conversion	Yes	
CPP_WARN_DEPRECATED_ARRAY_COMPARE	Deprecated Array Compare	Yes	
CPP_WARN_DEPRECATED_ATTRIBUTES	Deprecated Attributes	Yes	

Check ID	Check Name	Supported	Severity
RIBUTES			
CPP_WARN_DEPRECATED_BUILTINS	Deprecated Builtins	Yes	High
CPP_WARN_DEPRECATED_COMMA_SUBSCRIPT	Deprecated Comma Subscript	Yes	
CPP_WARN_DEPRECATED_COROUTINE	Deprecated Coroutine	Yes	
CPP_WARN_DEPRECATED_DECLARATIONS	Deprecated Declarations	Yes	High
CPP_WARN_DEPRECATED_EXPERIMENTAL_COROUTINE	Deprecated Experimental Coroutine	Yes	
CPP_WARN_DEPRECATED_INCREMENT_BOOL	Deprecated Increment Bool	Yes	High
CPP_WARN_DEPRECATED_NON_PROTOTYPE	Deprecated Non-Prototype	Yes	High
CPP_WARN_DEPRECATED_REGISTER	Deprecated Register	Yes	High
CPP_WARN_DEPRECATED_STATIC_ANALYZER_FLAG	Deprecated Static Analyzer Flag	Yes	
CPP_WARN_DEPRECATED_TYPE	Deprecated Type	Yes	
CPP_WARN_DEPRECATED_VOLATILE	Deprecated Volatile	Yes	High
CPP_WARN_DIVISION_BY_ZERO	Division by Zero	Yes	High
CPP_WARN_DLL_ATTRIBUTE_ON_REDECLARATION	DLL Attribute on Re-Declaration	Yes	
CPP_WARN_DLLEXPORT_EXPLICIT_INSTANTIATION_DECL	DLlexport Explicit Instantiation Decl	Yes	
CPP_WARN_DLLIMPORT_STATIC_FIELD_DEF	DLLimport Static Field Def	Yes	
CPP_WARN_DTOR_TYPEDEF	Destructor Typedef	Yes	
CPP_WARN_DUPLICATE_PROTOCOL	Duplicate Protocol	Yes	
CPP_WARN_DYNAMIC_CLASS_MEMORY_ACCESS	Dynamic Class Memory Access	Yes	High
CPP_WARN_ELABORATED_ENUM_BASE	Elaborated Enum Base	Yes	
CPP_WARN_ELABORATED_ENUM_CLASS	Elaborated Enum Class	Yes	

Check ID	Check Name	Supported	Severity
CPP_WARN_EMPTY_BODY	Control Loop Shall Not Have Empty Body	Yes	
CPP_WARN_EMPTY_DECOMPOSITION	Decomposition Group Shall Not Be Empty	Yes	
CPP_WARN_ENUM_COMPARE	Enum Compare	Yes	High
CPP_WARN_ENUM_COMPARE_SWITCH	Enum Compare Switch	Yes	High
CPP_WARN_ENUM_TOO_LARGE	Enum Too Large	Yes	
CPP_WARN_EXCEPTIONS	Exceptions	Yes	High
CPP_WARN_EXCESS_INITIALIZERS	Excess Initializers	Yes	
CPP_WARN_EXPORT_UNNAMED	Export Unnamed	Yes	
CPP_WARN_EXPORT_USING_DIRECTIVE	Export Using Directive	Yes	
CPP_WARN_EXTERN_C_COMPAT	Extern C Compatibility	Yes	High
CPP_WARN_EXTERN_INITIALIZER	Extern Initializer	Yes	High
CPP_WARN_EXTRA_QUALIFICATION	Extra Qualification	Yes	High
CPP_WARN_EXTRA_TOKENS	Extra Tokens	Yes	
CPP_WARN_FINAL_DTOR_NON_FINAL_CLASS	Final Destructor Non-Final Class	Yes	
CPP_WARN_FINAL_MACRO	Final Macros Should Not Be Redefined	Yes	
CPP_WARN_FIXED_POINT_OVERFLOW	Fixed Point Overflow	Yes	High
CPP_WARN_FLAG_ENUM	Flag Enum	Yes	High
CPP_WARN_FORMAT	Format String	Yes	High
CPP_WARN_FORMAT_EXTRA_ARGS	Format Extra Args	Yes	High
CPP_WARN_FORMAT_INSUFFICIENT_ARGS	Format Insufficient Args	Yes	High
CPP_WARN_FORMAT_INVALID_SPECIFIER	Format Invalid Specifier	Yes	High
CPP_WARN_FORMAT_SECURITY	Format Security	Yes	High
CPP_WARN_FORMAT_ZERO_LENGTH	Format Zero Length	Yes	High

Check ID	Check Name	Supported	Severity
ENGTH			
CPP_WARN_FORTIFY_SOURCE	Fortify Source	Yes	High
CPP_WARN_FREE_NONHEAP_OBJECT	Free Non-Heap Object	Yes	High
CPP_WARN_FUNCTION_MULTI_VERSION	Function Multi-Version	Yes	
CPP_WARN_GLOBAL_ISEL	GlobalISel (Global Instruction Selection) Framework	Yes	
CPP_WARN_GNU_ALIGNOF_EXPRESSION	GNU Alignof Expression	Yes	
CPP_WARN_GNU_ARRAY_MEMBER_PAREN_INIT	GNU Array Member Parentheses Init	Yes	
CPP_WARN_GNU_INLINE_CPP_WITHOUT_EXTERN	GNU Inline Cpp Without Extern	Yes	
CPP_WARN_GNU_STATIC_FLOAT_INIT	GNU Static Float Init	Yes	
CPP_WARN_GNU_STRING_LITERAL_OPERATOR_TEMPLATE	GNU String Literal Operator Template	Yes	
CPP_WARN_GNU_VARIABLE_SIZED_TYPE_NOT_AT_END	GNU Variable Sized Type Not at End	Yes	
CPP_WARN_HEADER_GUARD	Header Guard	Yes	High
CPP_WARN_IGNORED_ATTRIBUTES	Ignored Attributes	Yes	High
CPP_WARN_IGNORED_AVAILABILITY_WITHOUT_SDK_SETTINGS	Ignored Availability Without Sdk Settings	Yes	
CPP_WARN_IGNORED_OPTIMIZATION_ARGUMENT	Ignored Optimization Argument	Yes	
CPP_WARN_IGNORED_PRAGMA_INTRINSIC	Ignored Pragma Intrinsic	Yes	
CPP_WARN_IGNORED_PRAGMA_AS	Ignored Pragmas	Yes	
CPP_WARN_IGNORED_REFERENCE_QUALIFIERS	Ignored Reference Qualifiers	Yes	High
CPP_WARN_IMPLICIT_CONST_INT_FLOAT_CONVERSION	Implicit Const Int Float Conversion	Yes	High
CPP_WARN_IMPLICIT_CONVERSION_FLOATING_POINT_TO_BOOL	Implicit Conversion Floating Point to Bool	Yes	High
CPP_WARN_IMPLICIT_EXCEPTION_SPEC	Implicit Exception Spec	Yes	High

Check ID	Check Name	Supported	Severity
ION_SPEC_MISMATCH	Mismatch		
CPP_WARN_IMPLICIT_FIXED_POINT_CONVERSION	Implicit Fixed Point Conversion	Yes	High
CPP_WARN_IMPLICITLY_UNSIGNED_LITERAL	Implicitly Unsigned Literal	Yes	High
CPP_WARN_INACCESSIBLE_BASE	Inaccessible Base	Yes	High
CPP_WARN_INCLUDE_NEXT_ABSOLUTE_PATH	Include Next Absolute Path	Yes	
CPP_WARN_INCLUDE_NEXT_OUTSIDE_HEADER	Include Next Outside Header	Yes	
CPP_WARN_INCOMPATIBLE_EXCEPTION_SPEC	Incompatible Exception Spec	Yes	High
CPP_WARN_INCOMPATIBLE_FUNCTION_POINTER_TYPES	Incompatible Function Pointer Types	Yes	
CPP_WARN_INCOMPATIBLE_LIBRARY_REDECLARATION	Incompatible Library Redclaration	Yes	High
CPP_WARN_INCOMPATIBLE_MICROSOFT_STRUCT	Incompatible Microsoft Struct	Yes	
CPP_WARN_INCOMPATIBLE_POINTER_TYPES	Incompatible Pointer Types	Yes	High
CPP_WARN_INCOMPATIBLE_POINTER_TYPES_DISCARDS_QUALIFIERS	Incompatible Pointer Types Discards Qualifiers	Yes	High
CPP_WARN_INCOMPATIBLE_SYSROOT	Incompatible Sysroot	Yes	
CPP_WARN_INCOMPLETE_IMPLEMENTATION	Incomplete Implementation	Yes	
CPP_WARN_INCOMPLETE_SETJMP_DECLARATION	Incomplete Setjmp Declaration	Yes	
CPP_WARN_INCONSISTENT_DLLIMPORT	Inconsistent DLLimport	Yes	
CPP_WARN_INCONSISTENT_MISSING_OVERRIDE	Inconsistent Missing Override	Yes	High
CPP_WARN_INCREMENT_BOOL	Increment Bool	Yes	High
CPP_WARN_INITIALIZER_OVERRIDES	Initializer Overrides	Yes	
CPP_WARN_INJECTED_CLASS_NAME	Injected Class Name	Yes	High

Check ID	Check Name	Supported	Severity
CPP_WARN_INLINE_ASM	Inline Assembly	Yes	
CPP_WARN_INLINE_NAMESPA CE_REOPENED_NONINLINE	Inline Namespace Reopened Non-Inline	Yes	High
CPP_WARN_INLINE_NEW_DEL ETE	Inline New Delete	Yes	
CPP_WARN_INSTANTIATION_A FTER_SPECIALIZATION	Instantiation After Specialization	Yes	High
CPP_WARN_INT_CONVERSION	Int Conversion	Yes	
CPP_WARN_INT_TO_POINTER _CAST	Int to Pointer Cast	Yes	High
CPP_WARN_INT_TO_VOID_POI NTER_CAST	Int to Void Pointer Cast	Yes	High
CPP_WARN_INTEGER_OVERFL OW	Integer Overflow	Yes	High
CPP_WARN_INTERRUPT_SERV ICE_ROUTINE	Interrupt Service Routine	Yes	
CPP_WARN_INVALID_COMMA ND_LINE_ARGUMENT	Invalid Command Line Argument	Yes	
CPP_WARN_INVALID_CONSTE XPR	Invalid Constexpr	Yes	
CPP_WARN_INVALID_IBOUTLE T	Invalid IBOutletCollection (Interface Builder Outlet Collection)	Yes	
CPP_WARN_INVALID_INITIALIZ ER_FROM_SYSTEM_HEADER	Invalid Initializer from System Header	Yes	
CPP_WARN_INVALID_IOS_DEP LOYMENT_TARGET	Invalid iOS Deployment Target	Yes	
CPP_WARN_INVALID_NO_BUIL TIN_NAMES	Invalid No Builtin Names	Yes	High
CPP_WARN_INVALID_NORETU RN	Invalid Noreturn Attribute	Yes	High
CPP_WARN_INVALID_OFFSET OF	Invalid Offsetof	Yes	High
CPP_WARN_INVALID_PARTIAL _SPECIALIZATION	Invalid Partial Specialization	Yes	
CPP_WARN_INVALID_PP_TOKE N	Invalid Preprocessor Token	Yes	High
CPP_WARN_INVALID_SOURCE _ENCODING	Invalid Source Encoding	Yes	
CPP_WARN_INVALID_TOKEN_ _	Invalid Token Paste	Yes	

Check ID	Check Name	Supported	Severity
PASTE			
CPP_WARN_JUMP_SEH_FINAL	Jump SEH (Structured Exception Handling) Finally	Yes	
CPP_WARN_KEYWORD_COMPAT	Keyword Compatibility	Yes	
AT			
CPP_WARN_KNR_PROMOTED_PARAMETER	K&R Promoted Parameter	Yes	
CPP_WARN_LARGE_BY_VALUE_COPY	Large by Value Copy	Yes	High
CPP_WARN_LINKER_WARNINGS	Linker Warnings	Yes	
S			
CPP_WARN_LITERAL_CONVERSION	Literal Conversion	Yes	High
CPP_WARN_LITERAL_RANGE	Literal Range	Yes	High
CPP_WARN_LOGICAL_NOT_PARENTHESES	Logical Not Parentheses	Yes	High
CPP_WARN_MACRO_REDEFINED	Macro Redefined	Yes	High
ED			
CPP_WARN_MAIN_RETURN_TYPE	Main Return Type	Yes	High
CPP_WARN_MALFORMED_WARNING_CHECK	Malformed Warning Check	Yes	
CPP_WARN_MANY_BRACES_AROUND_SCALAR_INIT	Many Braces Around Scalar Init	Yes	High
CPP_WARN_MAX_UNSIGNED_ZERO	Max Unsigned Zero	Yes	High
CPP_WARN_MEMSET_TRANSPOSED_ARGS	Memset Transposed Args	Yes	High
CPP_WARN_MEMSIZE_COMPARISON	Memsized Comparison	Yes	High
CPP_WARN_MICROSOFT_ABSTRACT	Microsoft Abstract	Yes	
TRACT			
CPP_WARN_MICROSOFT_CAST	Microsoft Cast	Yes	
T			
CPP_WARN_MICROSOFT_CONST_INIT	Microsoft Const Init	Yes	
CPP_WARN_MICROSOFT_DEFAULT_ARG_REDEFINITION	Microsoft Default Arg Redefinition	Yes	
CPP_WARN_MICROSOFT_DIRECTIVE_SECTION	Microsoft Directive Section	Yes	

Check ID	Check Name	Supported	Severity
CPP_WARN_MICROSOFT_ENUM_FORWARD_REFERENCE	Microsoft Enum Forward Reference	Yes	
CPP_WARN_MICROSOFT_EXISTS_TS	Microsoft Exists TS	Yes	
CPP_WARN_MICROSOFT_EXPLICIT_CONSTRUCTOR_CALL	Microsoft Explicit Constructor Call	Yes	
CPP_WARN_MICROSOFT_EXTRA_QUALIFICATION	Microsoft Extra Qualification	Yes	
CPP_WARN_MICROSOFT_GOTO	Microsoft Goto	Yes	
CPP_WARN_MICROSOFT_INACCESSIBLE_BASE	Microsoft Inaccessible Base	Yes	
CPP_WARN_MICROSOFT_INCLUDE_UDE	Microsoft Include UDE	Yes	
CPP_WARN_MICROSOFT_MUTABLE_REFERENCE	Microsoft Mutable Reference	Yes	
CPP_WARN_MICROSOFT_PURE_DEFINITION	Microsoft Pure Definition	Yes	
CPP_WARN_MICROSOFT_SEALED_LED	Microsoft Sealed LED	Yes	
CPP_WARN_MICROSOFT_STATIC_ASSERT	Microsoft Static Assert	Yes	
CPP_WARN_MICROSOFT_TEMPLATE_PLATE	Microsoft Template Plate	Yes	
CPP_WARN_MICROSOFT_TEMPLATE_SHADOW_PLATE	Microsoft Template Shadow Plate	Yes	
CPP_WARN_MICROSOFT_UNION_MEMBER_REFERENCE	Microsoft Union Member Reference	Yes	
CPP_WARN_MICROSOFT_UNQUALIFIED_FRIEND	Microsoft Unqualified Friend	Yes	
CPP_WARN_MICROSOFT_USING_DECL	Microsoft Using Decl	Yes	
CPP_WARN_MICROSOFT_VOID_PSEUDO_DTOR	Microsoft Void Pseudo Destructor	Yes	
CPP_WARN_MISEXPECT	Misuse of __builtin_expect()	Yes	
CPP_WARN_MISMATCHED_NEW_DELETE	Mismatched New Delete	Yes	High
CPP_WARN_MISSING_CONSTINIT	Missing Constinit	Yes	
CPP_WARN_MISSING_DECLARATIONS	Missing Declarations	Yes	High

Check ID	Check Name	Supported	Severity
ATIONS			
CPP_WARN_MISSING_EXCEPTION_SPEC	Missing Exception Specification	Yes	High
CPP_WARN_MISSING_PROTOTYPE_FOR_CALLING_CONVENTION	Missing Prototype for Calling Convention	Yes	
CPP_WARN_MISSING_SELECTOR_NAME	Missing Selector Name	Yes	
CPP_WARN_MISSING_SYSROOT	Missing Sysroot	Yes	
CPP_WARN_MISSPELLED_ASSUMPTION	Misspelled Assumption	Yes	
CPP_WARN_MODULE_CONFLICT	Module Conflict	Yes	
CPP_WARN_MODULE_FILE_CONFIG_MISMATCH	Module File Config Mismatch	Yes	
CPP_WARN_MODULE_FILE_EXTENSION	Module File Extension	Yes	
CPP_WARN_MODULE_IMPORT_IN_EXTERN_C	Module Import in Extern C	Yes	
CPP_WARN_MODULES_AMBIGUOUS_INTERNAL_LINKAGE	Modules Ambiguous Internal Linkage	Yes	
CPP_WARN_MODULES_IMPORT_NESTED_REDUNDANT	Modules Import Nested Redundant	Yes	
CPP_WARN_MSVC_NOT_FOUND	MSVC Not Found	Yes	
CPP_WARN_MULTICHAR	Multiple Characters in Character Literal	Yes	High
CPP_WARN_MULTIPLE_MOVE_VIRTUAL_BASE	Multiple Move Virtual Base	Yes	High
CPP_WARN_NEW_RETURNS_NULL	New Returns Null	Yes	High
CPP_WARN_NODEREF	Noderef Attribute	Yes	High
CPP_WARN_NON_C_TYPEDEF_FOR_LINKAGE	Non-C Typedef for Linkage	Yes	High
CPP_WARN_NON_LITERAL_NULL_CONVERSION	Non-Literal Null Conversion	Yes	High
CPP_WARN_NON_POD_VARIADIC_ARGUMENTS	Non-POD (Plain Old Data) Variadic Arguments	Yes	High
CPP_WARN_NON_POWER_OF_TWO_ALIGNMENT	Non-Power of Two Alignment	Yes	High

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CPP_WARN_NONNULL	Null as an Argument	Yes	High
CPP_WARN_NONPORTABLE_INCLUDE_PATH	Non-Portable Include Path	Yes	High
CPP_WARN_NONPORTABLE_VECTOR_INITIALIZER_INITIALIZATION	Non-Portable Vector Initialization	Yes	
CPP_WARN_NONTRIVIAL_MEMORY_ACCESS	Nontrivial Memory Access	Yes	High
CPP_WARN_NULL_ARITHMETIC	Null Arithmetic	Yes	High
CPP_WARN_NULL_CHARACTER	Null Character	Yes	High
CPP_WARN_NULL_CONVERSION	Null Conversion	Yes	High
CPP_WARN_NULL_DEREFERENCE	Null Dereference	Yes	High
CPP_WARN_OBJC_BOOL_CONSTANT_CONVERSION	Objective-C Bool Constant Conversion	Yes	
CPP_WARN_OBJC_CIRCULAR_CONTAINER	Objective-C Circular Container	Yes	
CPP_WARN_OBJC_MULTIPLE_METHOD_NAMES	Objective-C Multiple Method Names	Yes	
CPP_WARN_OBJC_READONLY_WITH_SETTER_PROPERTY	Objective-C Readonly with Setter Property	Yes	
CPP_WARN_OBJC_SIGNED_CHAR_BOOL_IMPLICIT_FLOAT_CONVERSION	Objective-C Signed Char Bool Implicit Float Conversion	Yes	
CPP_WARN_ODR	One Definition Rule	Yes	High
CPP_WARN_OPENMP_51_EXTENSIONS	OpenMP 51 Extensions	Yes	
CPP_WARN_OPENMP_CLAUSES	OpenMP Clauses	Yes	
CPP_WARN_OPENMP_LOOP_FORM	OpenMP Loop Form	Yes	
CPP_WARN_OPENMP_MAPPING	OpenMP Mapping	Yes	
CPP_WARN_OPENMP_TARGET	OpenMP Target	Yes	
CPP_WARN_OPTION_IGNORED	Option Ignored	Yes	
CPP_WARN_ORDERED_COMPARE_FUNCTION_POINTERS	Ordered Compare Function Pointers	Yes	High

Check ID	Check Name	Supported	Severity
CPP_WARN_OUT_OF_LINE_DECLARATION	Out of Line Declaration	Yes	
CPP_WARN_OUT_OF_SCOPE_FUNCTION	Out of Scope Function	Yes	High
CPP_WARN_OVERLOADED_SHIFT_OPERATOR_PARENTHESSES	Overloaded Shift Operator Parentheses	Yes	High
CPP_WARN_OVERRIDE_MODULE	Override Module	Yes	
CPP_WARN_OVERRIDING_SLASH_T_OPTION	Overriding Slash T Option	Yes	
CPP_WARN_PARENTHESSES	Parentheses	Yes	
CPP_WARN_PARENTHESSES_EQUALITY	Parentheses Equality	Yes	High
CPP_WARN_PASS_FAILED	Pass Failed	Yes	
CPP_WARN_PCH_DATE_TIME	PCH (Precompiled Header) Date Time	Yes	
CPP_WARN_POINTER_ARITH	Pointer Arithmetic	Yes	High
CPP_WARN_POINTER_BOOL_CONVERSION	Pointer Bool Conversion	Yes	High
CPP_WARN_POINTER_COMPARE	Pointer Compare	Yes	High
CPP_WARN_POINTER_INTEGER_COMPARE	Pointer Integer Compare	Yes	High
CPP_WARN_POINTER_SIGN	Pointer Sign	Yes	High
CPP_WARN_POINTER_TO_ENUM_CAST	Pointer to Enum Cast	Yes	High
CPP_WARN_POINTER_TO_INT_CAST	Pointer to Int Cast	Yes	High
CPP_WARN_POINTER_TYPE_MISMATCH	Pointer Type Mismatch	Yes	High
CPP_WARN_POTENTIALLY_EVALUATED_EXPRESSION	Potentially Evaluated Expression	Yes	High
CPP_WARN_PRAGMA_CLANG_ATTRIBUTE	Pragma Clang Attribute	Yes	
CPP_WARN_PRAGMA_MESSAGES	Preprocessor #Pragma Messages	Yes	
CPP_WARN_PRAGMA_ONCE_OUTSIDE_HEADER	Pragma once Outside Header	Yes	High
CPP_WARN_PRAGMA_SYSTEM_HEADER_OUTSIDE_HEADER	Pragma System Header Outside Header	Yes	

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CPP_WARN_PREDEFINED_IDENTIFIER_OUTSIDE_FUNCTION	Predefined Identifier Outside Function	Yes	
CPP_WARN_PRIVATE_EXTERN	Private Extern	Yes	
CPP_WARN_PRIVATE_HEADER	Private Header	Yes	
CPP_WARN_PROFILE_INSTRUMENTED_CODE_OUT_OF_DATE	Profile Instrumented Code Out of Date	Yes	
CPP_WARN_PROFILE_INSTRUMENTED_CODE_UNPROFIED	Profile Instrumented Code Unprofiled	Yes	
CPP_WARN_PSABI	PSABI (Processor-Specific Application Binary Interface)	Yes	
CPP_WARN_QUALIFIED_VOID_RETURN_TYPE	Qualified Void Return Type	Yes	High
CPP_WARN_REDECLARED_CLASS_MEMBER	Re-Declared Class Member	Yes	High
CPP_WARN_REDUNDANT_CONSTEVAL_IF	Redundant Consteval If	Yes	High
CPP_WARN_REGISTER	Register Keyword	Yes	
CPP_WARN_REINTERPRET_BASE_CLASS	Reinterpret Base Class	Yes	High
CPP_WARN_REORDER_INITIALIZER_LIST	Reorder Initializer List	Yes	High
CPP_WARN_RESTRICT_EXPANSION	Restrict Expansion	Yes	
CPP_WARN_RETURN_STACK_ADDRESS	Return Stack Address	Yes	High
CPP_WARN_RETURN_TYPE	Return Type	Yes	High
CPP_WARN_RETURN_TYPE_C_LINKAGE	Return Type C Linkage	Yes	High
CPP_WARN_REWRITE_NOT_BOOL	Rewrite Not Bool	Yes	
CPP_WARN_RTTI	Run-Time Type Information	Yes	
CPP_WARN_SARIF_FORMAT_UNSTABLE	SARIF Format Unstable	Yes	
CPP_WARN_SECTION	Section Attributes	Yes	
CPP_WARN_SELF_ASSIGN_FIELD	Self Assign Field	Yes	High
CPP_WARN_SENTINEL	Sentinel Attribute	Yes	
CPP_WARN_SERIALIZED_DIAGNOSTICS	Serialized Diagnostics	Yes	
CPP_WARN_SHIFT_COUNT_NEGATIVE	Shift Count Negative	Yes	High

Check ID	Check Name	Supported	Severity
GATIVE			
CPP_WARN_SHIFT_COUNT_OVERFLOW	Shift Count Overflow	Yes	High
CPP_WARN_SHIFT_NEGATIVE_VALUE	Shift Negative Value	Yes	High
CPP_WARN_SHIFT_OP_PARENTHESES	Shift Operator Parentheses	Yes	High
CPP_WARN_SHIFT_OVERFLOW	Shift Overflow	Yes	High
CPP_WARN_SIGNED_UNSIGNED_WCHAR_D_WCHAR	Signed Unsigned Wchar	Yes	
CPP_WARN_SINGLE_BIT_BITFIELD_CONSTANT_CONVERSION	Single Bit Bitfield Constant Conversion	Yes	High
CPP_WARN_SIZEOF_ARRAY_ARGUMENT	Sizeof Array Argument	Yes	High
CPP_WARN_SIZEOF_ARRAY_DECAY	Sizeof Array Decay	Yes	High
CPP_WARN_SIZEOF_ARRAY_DIVISION	Sizeof Array Division	Yes	High
CPP_WARN_SIZEOF_POINTER_DIV	Sizeof Pointer Division	Yes	High
CPP_WARN_SIZEOF_POINTER_MEMORY_ACCESS	Sizeof Pointer Memory Access	Yes	High
CPP_WARN_SLASH_U_FILENAME	Slash U Filename	Yes	
CPP_WARN_SLH_ASM_GOTO	SLH (Speculative Load Hardening) Assembly Goto	Yes	
CPP_WARN_STACK_EXHAUSTED	Stack Exhausted	Yes	
CPP_WARN_STACK_PROTECTOR	Stack Protector	Yes	
CPP_WARN_STATIC_FLOAT_INIT	Static Float Init	Yes	
CPP_WARN_STATIC_INLINE_EXPLICIT_INSTANTIATION	Static Inline Explicit Instantiation	Yes	High
CPP_WARN_STATIC_LOCAL_INLINE	Static Local in Inline	Yes	High
CPP_WARN_STATIC_SELF_INIT	Static Self Init	Yes	High
CPP_WARN_STDLIBCXX_HEADERS_NOT_FOUND	LibStdC++ Headers Not Found	Yes	

Check ID	Check Name	Supported	Severity
CPP_WARN_STRING_COMPARE	String Compare	Yes	High
CPP_WARN_STRING_PLUS_CHAR	String Plus Char	Yes	High
CPP_WARN_STRING_PLUS_INT	String Plus Int	Yes	High
CPP_WARN_STRLCPY_STRLCAT_SIZE	Strncpy Strlcat Size	Yes	High
CPP_WARN_STRNCAT_SIZE	Strncat Size	Yes	High
CPP_WARN_SUSPICIOUS_BZERO	Suspicious Argument for Bzero Function	Yes	
CPP_WARN_SWITCH	Switch Statements	Yes	High
CPP_WARN_SWITCH_BOOL	Switch Bool	Yes	High
CPP_WARN_SYNC_FETCH_AND_NAND	Sync Fetch And Nand	Yes	
D_NAND_SEMANTICS_CHANGED	Semantics Changed		
CPP_WARN_TARGET_CLONES_MIXED_SPECIFIERS	Target Clones Mixed Specifiers	Yes	
CPP_WARN_TAUTOLOGICAL_CONSTANT_COMPARE	Tautological Constant Compare	Yes	High
CPP_WARN_TAUTOLOGICAL_CONSTANT_OUT_OF_RANGE_COMPARE	Tautological Constant Out of Range Compare	Yes	High
CPP_WARN_TAUTOLOGICAL_POINTER_COMPARE	Tautological Pointer Compare	Yes	High
CPP_WARN_TAUTOLOGICAL_UNDEFINED_COMPARE	Tautological Undefined Compare	Yes	High
CPP_WARN_TCB_ENFORCEMENT	TCB (Trusted Computing Base) Enforcement	Yes	
CPP_WARN_TENTATIVE_DEFINITION_INCOMPLETE_TYPE	Tentative Definition Incomplete Type	Yes	High
CPP_WARN_TRIGRAPHS	Trigraphs	Yes	High
CPP_WARN_TYPE_SAFETY	Type Safety	Yes	High
CPP_WARN_TYPEDEF_REDEFINITION	Typedef Redefinition	Yes	High
CPP_WARN_TYPENAME_MISSING	Typename Missing	Yes	High
CPP_WARN_UNABLE_TO_OPEN_STATS_FILE	Unable to Open Stats File	Yes	
CPP_WARN_UNALIGNED_QUALIFIER_IMPLICIT	Unaligned Qualifier Implicit	Yes	

Check ID	Check Name	Supported	Severity
LIFIER_IMPLICIT_CAST	Cast		
CPP_WARN_UNDEFINED_BOOL_CONVERSION	Undefined Bool Conversion	Yes	High
CPP_WARN_UNDEFINED_INLINE	Undefined Inline	Yes	High
CPP_WARN_UNDEFINED_INTERNAL	Undefined Internal	Yes	High
CPP_WARN_UNDEFINED_VAR_TEMPLATE	Undefined Var Template	Yes	High
CPP_WARN_UNDERALIGNED_EXCEPTION_OBJECT	Underaligned Exception Object	Yes	
CPP_WARN_UNEVALUATED_EXPRESSION	Unevaluated Expression	Yes	High
CPP_WARN_UNGUARDED_AVAILABILITY_NEW	Unguarded Availability New	Yes	High
CPP_WARN_UNICODE_ESCAPE_SEQUENCES	Unicode Escape Sequences	Yes	High
CPP_WARN_UNICODE_HOMOGlyph	Unicode Homoglyph	Yes	High
CPP_WARN_UNICODE_WHITESPACE	Unicode Whitespace	Yes	High
CPP_WARN_UNICODE_ZERO_WIDTH	Unicode Zero Width	Yes	High
CPP_WARN_UNKNOWN_ARGUMENT	Unknown Argument	Yes	
CPP_WARN_UNKNOWN_ASSUMPTION	Unknown Assumption	Yes	
CPP_WARN_UNKNOWN_ATTRIBUTES	Unknown Attributes	Yes	
CPP_WARN_UNKNOWN_DIRECTIVES	Unknown Directives	Yes	High
CPP_WARN_UNKNOWN_ESCAPE_SEQUENCE	Unknown Escape Sequence	Yes	High
CPP_WARN_UNKNOWN_SANITIZERS	Unknown Sanitizers	Yes	
CPP_WARN_UNKNOWN_WARNING_OPTION	Unknown Warning Option	Yes	
CPP_WARN_UNQUALIFIED_STANDARD_CAST_CALL	Unqualified Standard Cast Call	Yes	High
CPP_WARN_UNREACHABLE_CODE_GENERIC_ASSOC	Unreachable Code Generic Assoc	Yes	

Check ID	Check Name	Supported	Severity
CPP_WARN_UNSEQUENCED	Unsequenced Modifications	Yes	High
CPP_WARN_UNSUPPORTED_ABI	Unsupported ABI (Application Binary Interface)	Yes	
CPP_WARN_UNSUPPORTED_ABS	Unsupported Absolute Value Argument	Yes	
CPP_WARN_UNSUPPORTED_AVAILABILITY_GUARD	Unsupported Availability Guard	Yes	High
CPP_WARN_UNSUPPORTED_COMPACT_B	Unsupported Compact Branches	Yes	
CPP_WARN_UNSUPPORTED_FLOATING_POINT_OPT	Unsupported Floating Point Option	Yes	
CPP_WARN_UNSUPPORTED_FRIEND	Unsupported Friend	Yes	High
CPP_WARN_UNSUPPORTED_GPOPT	Unsupported GPopt (Gaussian Process Optimization)	Yes	
CPP_WARN_UNSUPPORTED_NAN	Unsupported Nan Argument	Yes	
CPP_WARN_UNSUPPORTED_TARGET_OPT	Unsupported Target Option	Yes	
CPP_WARN_UNSUPPORTED_VISIBILITY	Unsupported Visibility	Yes	
CPP_WARN_UNUSABLE_PARTIAL_SPECIALIZATION	Unusable Partial Specialization	Yes	
CPP_WARN_UNUSED_COMMAND_LINE_ARGUMENT	Unused Command Line Argument	Yes	
CPP_WARN_UNUSED_COMPARISON	Unused Comparison	Yes	High
CPP_WARN_UNUSED_GETTER_RETURN_VALUE	Unused Getter Return Value	Yes	
CPP_WARN_UNUSED_RESULT	Unused Result	Yes	High
CPP_WARN_UNUSED_VALUE	Unused Value	Yes	High
CPP_WARN_UNUSED_VOLATILE_LVALUE	Unused Volatile Lvalue	Yes	High
CPP_WARN_USER_DEFINED_LITERAL	User Defined Literals	Yes	High
CPP_WARN_USER_DEFINED_WARNINGS	User Defined Warnings	Yes	
CPP_WARN_VARARGS	Variadic Arguments	Yes	High
CPP_WARN_VEC_ELEM_SIZE	Vector Element Size	Yes	
CPP_WARN_VEXING_PARSE	Vexing Parse Occurrences	Yes	High

Check ID	Check Name	Supported	Severity
CPP_WARN_VISIBILITY	Visibility of Declarations	Yes	High
CPP_WARN_VOID_POINTER_TO_ENUM_CAST	Void Pointer to Enum Cast	Yes	High
CPP_WARN_VOID_POINTER_TO_INT_CAST	Void Pointer to Int Cast	Yes	High
CPP_WARN_VOID_PTR_DEREFERENCE	Void Pointer Dereference	Yes	High
CPP_WARN_WARNINGS	Preprocessor #Warnings	Yes	
CPP_WARN_WASM_EXCEPTION_SPEC	Wasm Exception Spec	Yes	
CPP_WARN_WRITABLE_STRINGS	Writable Strings	Yes	High
CPP_WARN_XOR_USED_AS_POWER_OF_TWO	Xor Used as Power	Yes	High
CWE-119B	Improper Restriction of Operations within the Bounds of a Memory Buffer(Part B: Write)	Yes	
CWE-787	Out-of-bounds Write	Yes	