C++ compiler support

> ℹ️ This page is maintained as best-effort and may lag behind most recent compiler releases. If you see something is out-of-date, please help us by updating it!

The following table presents compiler support for new C++ features. These include C++11, C++14, C++17, and later accepted revisions (C++20/C++2a) to the standard, as well as various technical specifications.

C++2a features

Note that this list may change, as the draft C++2a standard evolves.

C++2a feature	Paper(s)	Version	GCC	Clang	MSVC	EDG eccp	Intel C++	IBM XLC++	Sun/Oracle C++	Embarcadero C++ Builder	Cray	Portland Group (PGI)	[Collapse]
Concepts	P0734R0 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0734r0.pdf)	c++2a-lang	6 (TS only)										
Contracts	P0542R5 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p0542r5.html)	c++2a-lang											
Default member initializers for bit-fields	P0683R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0683r1.html)	c++2a-lang	8	6									
const&-qualified pointers to members	P0704R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0704r1.html)	c++2a-lang	8	6									
Allow lambda-capture [=, this]	P0409R2 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0409r2.html)	c++2a-lang	8	6									
__VA_OPT__	P0306R4 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0306r4.html)	c++2a-lang	8 (partial)*	6									
Designated initializers	P0329R4 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0329r4.pdf)	c++2a-lang	4.7 (partial)* 8	3.0 (partial)*									
template-parameter-list for generic lambdas	P0428R2 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0428r2.pdf)	c++2a-lang	8										
Simplifying implicit lambda capture	P0588R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0588r1.html)	c++2a-lang	8										
ADL and function templates that are not visible	P0846R0 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0846r0.html)	c++2a-lang	9										
const mismatch with defaulted copy constructor	P0641R2 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0641r2.html)	c++2a-lang	9	8									
Initializer list constructors in class template argument deduction	P0702R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0702r1.html)	c++2a-lang	8	6									
init-statements for range-based for	P0614R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0614r1.html)	c++2a-lang	9	8									
Three-way comparison operator	P0515R0 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0515r0.pdf)	c++2a-lang		8 (partial)*									
attribute [[no_unique_address]]	P0840R2 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p0840r2.html)	c++2a-lang	9										
attributes [[likely]] and [[unlikely]]	P0479R5 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2018/p0479r5.html)	c++2a-lang	9										
typename optional	P0634R3 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2018/p0634r3.html)	c++2a-lang	9										
Less eager instantiation of constexpr functions	P0859R0 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0859r0.html)	c++2a-lang	5.2 (partial)* 9										
Class types in non-type template parameters	P0732R2 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p0732r2.pdf)	c++2a-lang	9										
explicit(bool)	P0892R2 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p0892r2.html)	c++2a-lang	9										
constexpr virtual function	P1064R0 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p1064r0.html)	c++2a-lang	9										
Prohibit aggregates with user-declared constructors	P1008R1 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p1008r1.html)	c++2a-lang	9	8									
Efficient sized delete for variable sized classes	P0722R3 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p0722r3.html)	c++2a-lang	9	6 (partial)*									
Access checking on specializations	P0692R1 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2017/p0692r1.html)	c++2a-lang	Yes	8 (partial)*									
Integrating our feature-test macros	P0941R2 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p0941r2.html)	c++2a-lang	5	3.4	19.15*								
Pack expansion in lambda init-capture	P0780R2 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p0780r2.html)	c++2a-lang	9										
Default constructible and assignable stateless lambdas	P0624R2 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0624r2.pdf)	c++2a-lang	9	8									
Lambdas in unevaluated contexts	P0315R4 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0315r4.pdf)	c++2a-lang	9										
Concepts library	P0898R3 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p0898r3.pdf)	c++2a											
Three-way comparison operator support <compare>	P0515R3 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0515r3.pdf)	c++2a		7									
std::endian	P0463R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0463r1.html)	c++2a	8	7									

C++2a feature	Paper(s)	Version	GCC	Clang	MSVC	EDG eccp	Intel C++	IBM XLC++	Sun/Oracle C++	Embarcadero C++ Builder	Cray	Portland Group (PGI)
	std.org/jtc1/sc22/wg21/docs/papers/2017/p0135r1.html)											
std::atomic_ref	P0019R8 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p0019r8.html)	c++2a										
std::bit_cast	P0476R2 (http://open-std.org/JTC1/SC22/WG21/docs/papers/2018/p0476r2.html)	c++2a										
Extending std::make_shared to support arrays	P0674R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0674r1.html)	c++2a										
Calendar and timezone	P0355R7 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2018/p0355r7.html)	c++2a		7								
std::span	P0122R7 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2018/p0122r7.pdf)	c++2a		7								
Floating point atomic	P0020R6 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0020r6.html)	c++2a										
Synchronized buffered ostream	P0053R7 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0053r7.pdf)	c++2a										
constexpr for <algorithm> and <utility>	P0202R3 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0202r3.html)	c++2a		8								
More constexpr for <complex>	P0415R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0415r1.html)	c++2a	9									
std::remove_cvref	P0550R2 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0550r2.pdf)	c++2a	9	6								
String prefix and suffix checking	P0457R2 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0457r2.html)	c++2a		6								
Utility to convert a pointer to a raw pointer	P0653R2 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0653r2.html)	c++2a	8	6								
<version>	P0754R2 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2018/p0754r2.pdf)	c++2a	9	7								

C++17 features

C++17 feature	Paper(s)	Version	GCC	Clang	MSVC	EDG eccp	Intel C++	IBM XLC++	Sun/Oracle C++	Embarcadero C++ Builder	Cray	Portland Group (PGI)	[Collapse]
New auto rules for direct-list-initialization	N3922 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n3922.html)	c++17-lang	5	3.8	19.0*	4.10.1	17.0					17.7	
static_assert with no message	N3928 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n3928.pdf)	c++17-lang	6	2.5	19.10*	4.12	18.0					17.7	
typename in a template template parameter	N4051 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n4051.html)	c++17-lang	5	3.5	19.0*	4.10.1	17.0					17.7	
Removing trigraphs	N4086 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n4086.html)	c++17-lang	5	3.5	16.0*	5.0							
Nested namespace definition	N4230 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n4230.html)	c++17-lang	6	3.6	19.0*	4.12	17.0					17.7	
Attributes for namespaces and enumerators	N4266 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n4266.html)	c++17-lang	4.9 (namespaces) / 6 (enumerators)	3.6	19.0*	4.11	17.0					17.7	
u8 character literals	N4267 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n4267.html)	c++17-lang	6	3.6	19.0*	4.11	17.0					17.7	
Allow constant evaluation for all non-type template arguments	N4268 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n4268.html)	c++17-lang	6	3.6	19.12*	5.0							
Fold Expressions	N4295 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n4295.html)	c++17-lang	6	3.6	19.12*	4.14	19.0					18.1	
Remove Deprecated Use of the register Keyword	P0001R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2015/p0001r1.html)	c++17-lang	7	3.8	19.11*	4.13	18.0					17.7	
Remove Deprecated operator++(bool)	P0002R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2015/p0002r1.html)	c++17-lang	7	3.8	19.11*	4.13	18.0					17.7	
Removing Deprecated Exception Specifications from C++17	P0003R5 (http://wg21.link/p0003r5)	c++17-lang	7	4	19.10*	4.14	19.0						
Make exception specifications part of the type system	P0012R1 (http://wg21.link/p0012r1)	c++17-lang	7	4	19.12*	4.14	19.0						
Aggregate initialization of classes with base classes	P0017R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2015/p0017r1.html)	c++17-lang	7	3.9	19.14*	5.0							
Lambda capture of *this	P0018R3 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2016/p0018r3.html)	c++17-lang	7	3.9	19.11*	4.14	19.0					18.1	
Using attribute namespaces without repetition	P0028R4 (http://wg21.link/p0028r4)	c++17-lang	7	3.9	19.11*	4.13	18.0					17.7	
Dynamic memory allocation for over-aligned data	P0035R4 (http://wg21.link/p0035r4)	c++17-lang	7	4	19.12*	4.14							
Unary fold expressions and empty parameter packs	P0036R0 (http://wg21.link/p0036r0)	c++17-lang	6	3.9	19.12*	4.14							
__has_include in preprocessor conditionals	P0061R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2015/p0061r1.html)	c++17-lang	5	Yes	19.11*	4.13	18.0					17.7	
Template argument deduction for class templates	P0091R3 (http://wg21.link/p0091r3)	c++17-lang	7	5	19.14*	5.0							

C++17 feature	Paper(s)	Version	GCC	Clang	MSVC	EDG eccp	Intel C++	IBM XLC++	Sun/Oracle C++	Embarcadero C++ Builder	Cray	Portland Group (PGI)
Non-type template parameters with auto type	P0127R2 (http://wg21.link/p0127r2)	c++17-lang	7	4	19.14*	5.0						
Guaranteed copy elision	P0135R1 (http://wg21.link/p0135r1)	c++17-lang	7	4	19.13*	5.0						
New specification for inheriting constructors (DR1941 et al)	P0136R1 (http://wg21.link/p0136r1)	c++17-lang	7	3.9	19.14*							
Replacement of class objects containing reference members	P0137R1 (http://wg21.link/p0137r1)	c++17-lang	7	6	19.14*	5.0						
Direct-list-initialization of enumerations	P0138R2 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2016/p0138r2.pdf)	c++17-lang	7	3.9	19.11*	4.14	18.0					
Stricter expression evaluation order	P0145R3 (http://wg21.link/p0145r3)	c++17-lang	7	4	19.14*	5.0						
constexpr lambda expressions	P0170R1 (http://wg21.link/p0170r1)	c++17-lang	7	5	19.11*	4.14	19.0					18.1
Differing begin and end types in range-based for	P0184R0 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2016/p0184r0.html)	c++17-lang	6	3.9	19.10*	4.12	18.0					17.7
[[fallthrough]] attribute	P0188R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2016/p0188r1.pdf)	c++17-lang	7	3.9	19.10*	4.13	18.0					17.7
[[nodiscard]] attribute	P0189R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2016/p0189r1.pdf)	c++17-lang	7	3.9	19.11*	4.13	18.0					17.7
Pack expansions in using-declarations	P0195R2 (http://wg21.link/p0195r2)	c++17-lang	7	4	19.14*	5.0						
[[maybe_unused]] attribute	P0212R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2016/p0212r1.pdf)	c++17-lang	7	3.9	19.11*	4.13	18.0					17.7
Structured Bindings	P0217R3 (http://wg21.link/p0217r3)	c++17-lang	7	4	19.11*	4.14	19.0					18.1
Hexadecimal floating-point literals	P0245R1 (http://wg21.link/p0245r1)	c++17-lang	3.0	Yes	19.11*	4.13	18.0					17.7
Ignore unknown attributes	P0283R2 (http://wg21.link/p0283r2)	c++17-lang	Yes	3.9	19.11*	4.13	18.0					17.7
constexpr if statements	P0292R2 (http://wg21.link/p0292r2)	c++17-lang	7	3.9	19.11*	4.14	19.0					18.1
init-statements for if and switch	P0305R1 (http://wg21.link/p0305r1)	c++17-lang	7	3.9	19.11*	4.14	18.0					18.1
Inline variables	P0386R2 (http://wg21.link/p0386r2)	c++17-lang	7	3.9*	19.12*	4.14	19.0					18.1
DR: Matching of template template-arguments excludes compatible templates	P0522R0 (http://wg21.link/p0522r0)	c++17-lang	7	4	19.12*	5.0						
std::uncaught_exceptions()	N4259 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n4259)	c++17	6	3.7	19.0*	N/A	N/A					N/A
Improving std::pair and std::tuple	N4387 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2015/n4387.html)	c++17	6	4	19.0*	N/A	N/A					N/A
std::any	P0220R1 (http://wg21.link/p0220r1)	c++17	7	4	19.10*	N/A	N/A					N/A
std::variant	P0088R3 (http://wg21.link/p0088r3)	c++17	7	4	19.10*	N/A	N/A					N/A
std::optional	P0220R1 (http://wg21.link/p0220r1)	c++17	7	4	19.10*	N/A	N/A					N/A
std::shared_mutex (untimed)	N4508 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2015/n4508.html)	c++17	6	3.7	19.0*	N/A	N/A					N/A
std::string_view	N3921 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2014/n3921.html)	c++17	7	4	19.10*	N/A	N/A					N/A
Standardization of Parallelism TS	P0024R2 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2016/p0024r2.html)	c++17			19.14*	N/A	18.0*					N/A
Elementary string conversions	P0067R5 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2016/p0067r5.html)	c++17	8 (no FP)		19.14* (no FP) 19.15*	N/A	N/A					N/A
Mathematical special functions	P0226R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2016/p0226r1.pdf)	c++17	7		19.14*	N/A	N/A					N/A
Splicing Maps and Sets	P0083R3 (http://wg21.link/p0083r3)	c++17	7	8	19.12*	N/A	N/A					N/A
Hardware interference size	P0154R1 (http://wg21.link/p0154r1)	c++17			19.11*	N/A	N/A					N/A
std::filesystem	P0218R1 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2016/p0218r1.html)	c++17	8	7	19.14*	N/A	N/A					N/A
std::byte	P0298R3 (http://wg21.link/p0298r3)	c++17	7	5	19.11*	N/A	N/A					N/A
C++17 feature	**Paper(s)**	**Version**	**GCC**	**Clang**	**MSVC**	**EDG eccp**	**Intel C++**	**IBM XLC++**	**Sun/Oracle C++**	**Embarcadero C++ Builder**	**Cray**	**Portland Group (PGI)**

C++14 features

C++14 feature	Paper(s)	Version	GCC	Clang	MSVC	EDG eccp	Intel C++	IBM XLC++	Sun/Oracle C++	Embarcadero C++ Builder	Cray	Portland Group (PGI)	[Collapse]
Tweaked wording for contextual conversions	N3323 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2012/n3323.pdf)	c++14-lang	4.9	3.4	18.0*	4.9	16.0	13.1.2*	5.15		8.6	16.1	
Binary literals	N3472 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2012/n3472.pdf)	c++14-lang	4.3/4.9	2.9	19.0*	4.10	11.0	13.1.2*	5.14		8.6	2015	
decltype(auto), Return type deduction for normal functions	N3638 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3638.html)	c++14-lang	4.8/4.9	3.3/3.4	19.0*	4.9	15.0	13.1.2*	5.15		8.6	16.1	
Initialized/Generalized lambda captures (init-capture)	N3648 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3648.html)	c++14-lang	4.5/4.9	3.4	19.0*	4.10	15.0		5.15		8.6	16.1	

C++14 feature	Paper(s)	Version	GCC	Clang	MSVC	EDG eccp	Intel C++	IBM XLC++	Sun/Oracle C++	Embarcadero C++ Builder	Cray	Portland Group (PGI)
Generic (polymorphic) lambda expressions	N3649 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3649.html)	c++14-lang	4.9	3.4	19.0*	4.10	16.0	13.1.2*	5.15		8.6	16.1
Variable templates	N3651 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3651.pdf)	c++14-lang	5	3.4	19.0*	4.11	17.0	13.1.2*	5.15		8.6	17.4
Extended constexpr	N3652 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3652.html)	c++14-lang	5	3.4	19.10*	4.11	17.0	13.1.2*	5.15		8.6	17.4
Member initializers and aggregates (NSDMI)	N3653 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3653.html)	c++14-lang	5	3.3	19.10*	4.9	16.0		5.14		8.6	16.1
Clarifying memory allocation (avoiding/fusing allocations)	N3664 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3664.html)	c++14-lang	N/A	3.4	N/A	N/A			N/A		8.6	17.4
[[deprecated]] attribute	N3760 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3760.html)	c++14-lang	4.9	3.4	19.0*	4.9	15.0* 16.0	13.1.2*	5.14		8.6	16.1
Sized deallocation	N3778 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3778.html)	c++14-lang	5	3.4	19.0*	4.10.1	17.0		5.14		8.6	16.1
Single quote as digit separator	N3781 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3781.pdf)	c++14-lang	4.9	3.4	19.0*	4.10	16.0	13.1.2*	5.14		8.6	2015
std::result_of and SFINAE	N3462 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2012/n3462.html)	c++14	5	Yes	19.0*	N/A	N/A		5.15	Yes	8.6	N/A
constexpr for <complex>	N3302 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2011/n3302.html)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
constexpr for <chrono>	N3469 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2012/n3469.html)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
constexpr for <array>	N3470 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2012/n3470.html)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
constexpr for <initializer_list>, <utility> and <tuple>	N3471 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2012/n3471.html)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
Improved std::integral_constant	N3545 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3545.pdf)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
User-defined literals for <chrono> and <string>	N3642 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3642.pdf)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
Null forward iterators	N3644 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3644.pdf)	c++14	5*	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
std::quoted	N3654 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3654.html)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
Heterogeneous associative lookup	N3657 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3657.htm)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
std::integer_sequence	N3658 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3658.html)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
std::shared_timed_mutex	N3659 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3659.html)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
std::exchange	N3668 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3668.html)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
fixing constexpr member functions without const	N3669 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3669.pdf)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
std::get<T>()	N3670 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3670.html)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A
Dual-Range std::equal, std::is_permutation, std::mismatch	N3671 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2013/n3671.html)	c++14	5	3.4	19.0*	N/A	N/A		5.15		8.6	N/A

C++11 features

C++11 feature	Paper(s)	Version	GCC	Clang	MSVC	EDG eccp	Intel C++	IBM XLC++	Sun/Oracle C++	Embarcadero C++ Builder	Cray	Portland Group (PGI)	HP aCC	Digital Mars C++	[Collapse]
alignas	N2341 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2341.pdf)	c++11	4.8	3.0	19.0*	4.8	15.0	13.1.2*	5.13	Yes	8.6	2015			
alignof	N2341 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2341.pdf)	c++11	4.5	2.9	19.0*	4.8	15.0	13.1.2*	5.13	Yes	8.4	2015			
Atomic operations	N2427 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2427.html)	c++11	4.4	3.1	17.0*	Yes	13.0	13.1.2*	5.14	Yes	8.4	2015			
auto	N1984(v1.0) (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2006/n1984.pdf)	c++11	4.4(v1.0)	Yes	16.0*	4.1(v0.9)	11.0(v0.9) 12.0(v1.0)	11.1(v1.0)	5.13	Yes	8.4	2015	A.06.25		
C99 preprocessor	N1653 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2004/n1653.htm)	c++11	4.3	Yes	19.0* (partial - buggy variadic macros)	4.1	11.1	10.1	5.9	Yes	8.4	2015	A.06.25	Yes	
constexpr	N2235 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2235.pdf)	c++11	4.6	3.1	19.0* (partial)	4.6	13.0* 14.0	12.1* 13.1	5.13	Yes	8.4	2015	A.06.28		
decltype	v1.0: N2343 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2343.pdf) v1.1: N3276 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2011/n3276.pdf)	c++11	4.3(v1.0) 4.8.1(v1.1)	2.9	16.0*	4.1(v1.0)	11.0(v1.0) 12.0(v1.1)	11.1(v1.0)	5.13	Yes	8.4	2015	A.06.25	8.52(v1.0)	
Defaulted and deleted functions	N2346 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2346.htm)	c++11	4.4	3.0	18.0*	4.1	12.0	13.1	5.13	Yes	8.4	2015	A.06.25		
Delegating constructors	N1986 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2006/n1986.pdf)	c++11	4.7	3.0	18.0*	4.7	14.0	11.1	5.13	Yes	8.4	2015	A.06.28		
Explicit conversion operators	N2437 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2437.pdf)	c++11	4.5	3.0	18.0*	4.4	13.0	12.1	5.13	Yes	8.4	2015	A.06.27		

C++11 feature	Paper(s)	Version	GCC	Clang	MSVC	EDG eccp	Intel C++	IBM XLC++	Sun/Oracle C++	Embarcadero C++ Builder	Cray	Portland Group (PGI)	HP aCC	Digital Mars C++
Extended `friend` declarations	N1791 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2005/n1791.pdf)	c++11	4.7	2.9	16.0* (partial)	4.1	11.1* 12.0	11.1	5.13	Yes	8.4	2015	A.06.25	
`extern template`	N1987 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2006/n1987.htm)	c++11	3.3	Yes	12.0*	3.9	9.0	11.1	5.13	Yes	8.4	2015	A.06.25	
Forward `enum` declarations	N2764 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2764.pdf)	c++11	4.6	3.1	17.0*	4.5	11.1* 14.0	12.1	5.13	Yes	8.4	2015		
Inheriting constructors	N2540 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2540.htm)	c++11	4.8	3.3	19.0*	4.8	15.0	13.1.1*	5.13	Yes	8.4	2015		
Initializer lists	N2672 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2672.htm)	c++11	4.4	3.1	18.0*	4.5	13.0* 14.0	13.1.2*	5.13	Yes	8.4	2015	A.06.28	
Lambda expressions	v0.9: N2550 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2550.pdf) v1.0: N2658 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2658.pdf) v1.1: N2927 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2009/n2927.pdf)	c++11	4.5(v1.1)	3.1	16.0*(v1.0) 17.0*(v1.1)	4.1(v1.1)	12.0(v1.1)	13.1.2*	5.13	Yes	8.4	2015	A.06.25	
Local and unnamed types as template parameters	N2657 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2657.htm)	c++11	4.5	2.9	16.0*	4.2	12.0	13.1.2*	5.13	Yes	8.4	2015	A.06.27	
`long long`	N1811 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2005/n1811.pdf)	c++11	Yes	Yes	14.0*	Yes	Yes	Yes	Yes	Yes	8.4	2015	Yes	Yes
Inline namespaces	N2535 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2535.htm)	c++11	4.4	2.9	19.0*	4.5	14.0	11.1	5.13	Yes	8.4	2015	A.06.28	
New character types	N2249 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2249.html)	c++11	4.4	2.9	19.0*	4.4	12.1* 14.0	13.1.1*	5.13	Yes	8.4	2015	A.06.27	8.52
Trailing function return types	N2541 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2541.htm)	c++11	4.4	2.9	16.0*	4.1	12.0	12.1	5.13	Yes	8.4	2015	A.06.27	
`nullptr`	N2431 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2431.pdf)	c++11	4.6	2.9	16.0*	4.2	12.1	13.1	5.13	Yes	8.4	2015	A.06.27	8.52
Unicode string literals	N2442 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2442.htm)	c++11	4.4	3.0	19.0*	4.7	11.0*	10.1* 13.1.1*	5.7	Yes	8.4	2015	A.06.28	8.52
Raw string literals	N2442 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2442.htm)	c++11	4.5	Yes	18.0*	4.7	14.0	13.1.1*	5.13	Yes	8.4	2015	A.06.28	8.52
User-defined literals	N2765 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2765.pdf)	c++11	4.7	3.1	19.0*	4.8	15.0	13.1.2*	5.14	Yes	8.4	2015		
Right angle brackets	N1757 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2005/n1757.html)	c++11	4.3	Yes	14.0*	4.1	11.0	12.1	5.13	Yes	8.4	2015		
Rvalue references	v1.0: N2118 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2006/n2118.html) v2.0: N2844 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2009/n2844.html) v2.1: N2844+ (http://www.open-std.org/jtc1/sc22/wg21/docs/cwg_defects.html#1138) v3.0: N3053 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2010/n3053.html)	c++11	4.3(v1.0) 4.5(v2.1) 4.6(v3.0)	Yes	16.0*(v2.0) 17.0*(v2.1) 19.0*(v3.0)	4.5(v3.0)	11.1(v1.0) 12.0(v2.0) 14.0(v3.0)	12.1(v2.1)	5.13	Yes	8.4	2015	A.06.25	
`static_assert`	N1720 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2004/n1720.html)	c++11	4.3	2.9	16.0*	4.1	11.0	11.1	5.13	Yes	8.4	2015	A.06.25	8.52
Strongly-typed `enum`	N2347 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2347.pdf)	c++11	4.4	2.9	17.0*	4.0	13.0	12.1	5.13	Yes	8.4	2015	A.06.25	
Template aliases	N2258 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2258.pdf)	c++11	4.7	3.0	18.0*	4.2	12.1	13.1.1*	5.13	Yes	8.4	2015	A.06.27	
Thread-local storage	N2659 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2659.htm)	c++11	4.4* 4.8	3.3* 3.3	16.0* (partial) 19.0*	4.8	11.1* 15.0*	10.1* 13.1.2*	5.9*	Yes	8.4	2015		8.52*
Unrestricted unions	N2544 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2544.pdf)	c++11	4.6	3.0	19.0*	4.6	14.0*	13.1.2*	5.13	Yes	8.4	2015	A.06.28	
Type traits	N1836 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2005/n1836.pdf)	c++11	4.3	3.0	14.0*	4.0	10.0	13.1.3	5.13	Yes	8.4	2015	6.16	
Variadic templates	v0.9: N2242 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2242.pdf) v1.0: N2555 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2555.pdf)	c++11	4.3(v0.9) 4.4(v1.0)	2.9(v1.0)	18.0*	4.1(v0.9)	12.1(v1.0)	11.1(v0.9)	5.13	Yes	8.4	2015	A.06.27	
Range-for loop	N2930 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2009/n2930.html)	c++11	4.6	3.0	17.0*	4.5	13.0	13.1.2*	5.13	Yes	8.4	2015	A.06.28	
`override` and `final`	v0.8: N2928 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2009/n2928.htm) v0.9: N3206 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2010/n3206.htm) v1.0: N3272 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2011/n3272.htm)	c++11	4.7	2.9	14.0* (partial) 17.0*	4.8(v1.0)	12.0(v0.8) 14.0(v1.0)	13.1.1*	5.13	Yes	8.4	2015		
Attributes	N2761 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2761.pdf)	c++11	4.8	3.3	19.0*	4.2	12.1	13.1.1*	5.13	Yes	8.4	2015	A.06.27	
ref-qualifiers	N2439 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2007/n2439.htm)	c++11	4.8.1	2.9	19.0*	4.7	14.0	13.1.2*	5.13	Yes	8.4	2015	A.06.28	
Non-static data member initializers	N2756 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2756.htm)	c++11	4.7	3.0	18.0*	4.6	14.0	13.1.2*	5.13	Yes	8.4	2015	A.06.28	
Dynamic initialization and destruction with concurrency (magic statics)	N2660 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2660.htm)	c++11	4.3	2.9	19.0*	Yes	11.1*	13.1.2*	5.13	Yes	8.4	2015	A.06.25	
`noexcept`	N3050 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2010/n3050.html)	c++11	4.6	3.0	19.0*	4.5	14.0	13.1.1*	5.13	Yes	8.4	2015	A.06.28	
dynamic pointer safety (GC interface)	N2670 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2008/n2670.htm)	c++11				N/A	N/A					N/A		
Money, Time, and hexfloat I/O manipulators	Time: N2071 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2006/n2071.html) Money: N2072 (http://www.open-std.org/jtc1/sc22/wg21/docs/papers/2006/n2072.html)	c++11	5	3.8	19.0*	N/A	N/A		5.15			N/A		

C++11 feature	Paper(s)	Version									lder	0		

* - hover over the version number to see notes

References

Individual vendor compatibility checklists (these are more up-to-date than the table above)

- GCC (Updated 2018-11)

    - C++11 core language support status (https://gcc.gnu.org/projects/cxx-status.html#cxx11) (complete as of 4.8.1)
    - C++14 core language support status (https://gcc.gnu.org/projects/cxx-status.html#cxx14) (complete as of 5.1)
    - C++17 core language support status (https://gcc.gnu.org/projects/cxx-status.html#cxx17) (complete as of 7.1)
    - C++20 core language support status (https://gcc.gnu.org/projects/cxx-status.html#cxx2a)
    - C++11 library support status (https://gcc.gnu.org/onlinedocs/libstdc++/manual/status.html#status.iso.2011) (complete as of 5.1)
    - C++14 library support status (https://gcc.gnu.org/onlinedocs/libstdc++/manual/status.html#status.iso.2014) (complete as of 5.1)
    - C++17 library support status (https://gcc.gnu.org/onlinedocs/libstdc++/manual/status.html#status.iso.2017)
    - Technical Specifications support status (https://gcc.gnu.org/onlinedocs/libstdc++/manual/status.html#table.ts_status)

- Clang++ (Updated 2017-09)

    - C++11 core language support status (http://clang.llvm.org/cxx_status.html#cxx11) (complete as of 3.3)
    - C++11 library support status (complete as of 2012-07-29 (https://github.com/llvm-mirror/libcxx/commit/5fec82dc0db3623546038e4a86baa44f749e554f#diff-c330060c0d4b6fb493c2be0ff80a3f7e))
    - C++14 core language support status (http://clang.llvm.org/cxx_status.html#cxx14) (complete as of 3.4)
    - C++14 library support status (http://libcxx.llvm.org/cxx1y_status.html) (complete as of 3.5)
    - Technical Specifications support status (http://clang.llvm.org/cxx_status.html#ts)
    - C++17 core language support status (http://clang.llvm.org/cxx_status.html#cxx17) (complete as of 5.0)
    - C++17 library support status (http://libcxx.llvm.org/cxx1z_status.html)
    - C++20 core language support status (http://clang.llvm.org/cxx_status.html#cxx20)
    - C++20 library support status (http://libcxx.llvm.org/cxx2a_status.html)
    - Core language defect report status (http://clang.llvm.org/cxx_dr_status.html)

- Microsoft Visual Studio (updated 2018-09)

    - STL Features and Fixes in VS 2017 15.8 (https://blogs.msdn.microsoft.com/vcblog/2018/09/18/stl-features-and-fixes-in-vs-2017-15-8/)
    - C++17 Announcing: MSVC Conforms to the C++ Standard (https://blogs.msdn.microsoft.com/vcblog/2018/05/07/announcing-msvc-conforms-to-the-c-standard/) (complete as of 15.7)
    - C++17 Features And STL Fixes In VS 2017 15.5 (https://blogs.msdn.microsoft.com/vcblog/2017/12/19/c17-progress-in-vs-2017-15-5-and-15-6/)
    - C++17 Features And STL Fixes In VS 2017 15.3 (https://blogs.msdn.microsoft.com/vcblog/2017/08/11/c17-features-and-stl-fixes-in-vs-2017-15-3/)
    - C++11/C++14/C++17 core language and library status in VS2017.3 (https://blogs.msdn.microsoft.com/vcblog/2017/05/10/c17-features-in-vs-2017-3/)
    - C++11/C++14/C++17 core language support status

        - C++11/14/17 core language support status in VS2010, VS2012, VS2013, and VS2015 (http://msdn.microsoft.com/en-us/library/hh567368.aspx#featurelist)
        - VS2013 vs. VS2015 CTP0 (http://blogs.msdn.com/b/vcblog/archive/2013/12/02/c-11-14-core-language-features-in-vs-2013-and-the-nov-2013-ctp.aspx)
        - VS2013 vs. VS2015 CTP1 (http://blogs.msdn.com/b/vcblog/archive/2014/06/11/c-11-14-feature-tables-for-visual-studio-14-ctp1.aspx)
        - VS2013 vs. VS2015 CTP3 (http://blogs.msdn.com/b/vcblog/archive/2014/08/21/c-11-14-features-in-visual-studio-14-ctp3.aspx) (includes the roadmap table)
        - VS2015 ("VS14") preview (http://blogs.msdn.com/b/vcblog/archive/2014/11/17/c-11-14-17-features-in-vs-2015-preview.aspx)
        - VS2015 ("VS14") release candidate (http://blogs.msdn.com/b/vcblog/archive/2015/04/29/c-11-14-17-features-in-vs-2015-rc.aspx) (C++11 remains incomplete, but C++17 support appears)
        - VS2017 (https://docs.microsoft.com/en-us/cpp/visual-cpp-language-conformance)

    - C++11 and C++14 library support status (http://msdn.microsoft.com/en-us/library/hh567368.aspx#stl)
    - C++11/14/17 Features In VS 2015 RTM (http://blogs.msdn.com/b/vcblog/archive/2015/06/19/c-11-14-17-features-in-vs-2015-rtm.aspx) including core language and standard library (including technical specifications)
    - C++14/17 features in VS 2015 Update 2 standard library (http://blogs.msdn.com/b/vcblog/archive/2016/01/22/vs-2015-update-2-s-stl-is-c-17-so-far-feature-complete.aspx) library is feature complete up to current C++17 with few minor issues (some defect reports, some constexprs, etc)
    - C++14/17 Features and STL Fixes in VS "15" Preview 5 (https://blogs.msdn.microsoft.com/vcblog/2016/10/11/c1417-features-and-stl-fixes-in-vs-15-preview-5/) including a detailed C++17 status table

- Intel C++ (Updated 2017-11)

    - C++11 core language support status (https://software.intel.com/en-us/articles/c0x-features-supported-by-intel-c-compiler) (complete as of 15.0)
    - C++14 core language support status (https://software.intel.com/en-us/articles/c14-features-supported-by-intel-c-compiler) (functionally complete as of 17.0 - N3664 is an optimization)
    - C++17 core language support status (https://software.intel.com/en-us/articles/c17-features-supported-by-intel-c-compiler) (incomplete)
    - C++17 features of Intel 19.0 beta (https://software.intel.com/en-us/articles/intel-c-compiler-190-for-linux-release-notes-for-intel-parallel-studio-xe-2019#cpp17)
    - Intel does not ship an implementation of the C++ standard library, except for

        - Parallel STL (https://software.intel.com/en-us/get-started-with-pstl) (an implementation of the C++17 standard library algorithms with support for execution policies)

    - Intel's compatibility with versions of libstdc++ from GCC (https://charm.cs.illinois.edu/redmine/issues/1560#note-6)

- EDG (Updated 2018-06)

    - C++11 core language support status (https://www.edg.com/features.html)
    - C++14 core language support status (https://www.edg.com/cpp14_features.html)
    - C++17 core language support status (https://www.edg.com/cpp17_features.html)
    - EDG does not ship an implementation of the C++ standard library

- Oracle C++ (updated 2017-07)

    - Version number is compiler version, not Oracle Studio version
    - C++11 core language support status in 5.13 (http://docs.oracle.com/cd/E37069_01/html/E37071/gncix.html)

        - Missing C++11 support added in 5.14 (page has a typo, and still says 5.13) (https://docs.oracle.com/cd/E60778_01/html/E60742/gkeza.html#scrolltoc)

    - C++14 features added in 5.14 (https://docs.oracle.com/cd/E60778_01/html/E60742/gncix.html#scrolltoc)

        - Full C++14 support added in 5.15.

    - Oracle ships 4 implementations of the C++ standard library:

        - libCstd (RogueWave Standard Library version 2), predates C++98
        - stlport4 (STLport Standard Library version 4.5.3), predates C++03
        - stdcxx4 (Apache Standard Library version 4), predates C++11

- stdcxx4 (Apache Standard Library version 4), predates C++11
- libstdc++ (GCC runtime library, support for C++11 and C++14 depending on release)

- IBM XL C++ (updated 2018-05)

  - IBM XL C++ for Linux

    - Core language support status (https://www.ibm.com/support/knowledgecenter/en/SSXVZZ_16.1.0/com.ibm.xlcpp161.lelinux.doc/language_ref/standard_features.html) : C++11 complete as of 13.1.6, C++14 partial in 16.1.0
    - IBM does not ship an implementation of C++ standard library for Linux (uses GNU libstdc++)

  - IBM XL C++ for AIX

    - Core language support status (https://www.ibm.com/support/knowledgecenter/en/SSGH3R_13.1.3/com.ibm.xlcpp1313.aix.doc/language_ref/cpp0x_exts.html) : C++11 partial in 13.1.3.
    - IBM ships a version of Dinkumware library (http://www-01.ibm.com/support/knowledgecenter/SSGH3R_13.1.0/com.ibm.xlcpp131.aix.doc/standlib/header_files.html?lang=en) for AIX with full support for C++ TR1, including <regex>, but no C++11

- HP aCC

  - HP aC++ A.06.28 release notes (including C++11 core language features) (http://h20565.www2.hpe.com/hpsc/doc/public/display?sp4ts.oid=4145774&docLocale=en_US&docId=emr_na-c04221956)
  - HP ships a version of RogueWave STL 2.0 implementation of the C++98 standard library

- Digital Mars C++

  - C++11 core language support status (http://www.digitalmars.com/ctg/CPP0x-Language-Implementation.html)

- Embarcadero C++

  - C++11 core language support status (http://docwiki.embarcadero.com/RADStudio/Berlin/en/C%2B%2B11_Language_Features_Compliance_Status) (C++ Builder 10.1 Berlin for Windows 32/64, iOS and Android clang-enhanced compilers) [1] (http://docwiki.embarcadero.com/RADStudio/Berlin/en/Clang-enhanced_C%2B%2B_Compilers)
  - Modern C++ Features Supported by RAD Studio Clang-enhanced C++ Compilers (http://docwiki.embarcadero.com/RADStudio/Rio/en/Modern_C%2B%2B_Features_Supported_by_RAD_Studio_Clang-enhanced_C%2B%2B_Compilers) (C++17 features supported by the Clang-enhanced compilers, C++14 features supported by the Clang-enhanced compilers, C++11 features supported by the Clang-enhanced compilers)

- Cray (updated 2018-01)

  - [2] (http://docs.cray.com/books/S-2179-84/S-2179-84.pdf) For version 8.4, claims all of C++14 is supported except alignas
  - Cray C and C++ Reference Manual (8.6) (https://pubs.cray.com/content/S-2179/8.6/cray-c-and-c++-reference-manual-s-2179-86/cray-c-and-c++-dialect-use#concept_kgd_fcr_3s) For version 8.6, claims all of C++14 is supported

- Portland Group (PGI) (updated 2018-02)

  - Release notes for 2016 (https://www.pgroup.com/doc/pgirn161.pdf) claim C++14 support, except "generalized constexpr and constexpr member functions and implicit const, variable templates, clarifying memory allocation (merged allocation)"
  - Release notes for 2018 (https://www.pgroup.com/resources/docs/18.1/pdf/pgirn181-x86.pdf)
  - PGI does not ship an implementation of C++ standard library

- Texas Instruments (updated 2018-05)

  - cl430 version v18.1.0 (http://www.ti.com/lit/ug/slau132r/slau132r.pdf) claims C++14 support

- Analog Devices (updated 2018-05)

  - CrossCore Embedded Studio 2.8.0 for SHARC (http://www.analog.com/media/en/dsp-documentation/software-manuals/cces-SharcCompiler-manual.pdf) claims C++11 support.

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