Linux Standard Base Core Specification for PPC64

Linux Standard Base Core Specification for PPC64
LSB Core - PPC64 5.0

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Foreword

This is version 5.0 of the Linux Standard Base Core Specification for PPC64. This specification is one of a series of volumes under the collective title *Linux Standard Base*:

- Common
- Core
- Desktop
- Languages
- Imaging

Note that the Core and Desktop volumes consist of a generic volume augmented by an architecture-specific volume.

Status of this Document

This is a released specification, version 5.0. Other documents may supersede or augment this specification.

A list of current released Linux Standard Base (LSB) specifications is available at http://refspecs.linuxbase.org (http://refspecs.linuxbase.org/).

If you wish to make comments regarding this document in a manner that is tracked by the LSB project, please submit them using our public bug database at http://bugs.linuxbase.org. Please enter your feedback, carefully indicating the title of the section for which you are submitting feedback, and the volume and version of the specification where you found the problem, quoting the incorrect text if appropriate. If you are suggesting a new feature, please indicate what the problem you are trying to solve is. That is more important than the solution, in fact.

If you do not have or wish to create a bug database account then you can also e-mail feedback to <lsb-discuss@lists.linuxfoundation.org> (subscribe (http://lists.linuxfoundation.org/mailman/listinfo/lsb-discuss), archives (http://lists.linuxfoundation.org/pipermail/lsb-discuss/)), and arrangements will be made to transpose the comments to our public bug database.

Introduction

The LSB defines a binary interface for application programs that are compiled and packaged for LSB-conforming implementations on many different hardware architectures. A binary specification must include information specific to the computer processor architecture for which it is intended. To avoid the complexity of conditional descriptions, the specification has instead been divided into generic parts which are augmented by one of several architecture-specific parts, depending on the target processor architecture; the generic part will indicate when reference must be made to the architecture part, and vice versa.

This document should be used in conjunction with the documents it references. This document enumerates the system components it includes, but descriptions of those components may be included entirely or partly in this document, partly in other documents, or entirely in other reference documents. For example, the section that describes system service routines includes a list of the system routines supported in this interface, formal declarations of the data structures they use that are visible to applications, and a pointer to the underlying referenced specification for information about the syntax and semantics of each call. Only those routines not described in standards referenced by this document, or extensions to those standards, are described in the detail. Information referenced in this way is as much a part of this document as is the information explicitly included here.

The specification carries a version number of either the form *x.y* or *x.y.z*. This version number carries the following meaning:

1. The first number (*x*) is the major version number. Versions sharing the same major version number shall be compatible in a backwards direction; that is, a newer version shall be compatible with an older version. Any deletion of a library results in a new major version number. Interfaces marked as deprecated may be removed from the specification at a major version change.
2. The second number (*y*) is the minor version number. Libraries and individual interfaces may be added, but not removed. Interfaces may be marked as deprecated at a minor version change. Other minor changes may be permitted at the discretion of the LSB workgroup.
3. The third number (*z*), if present, is the editorial level. Only editorial changes should be included in such versions.

Since this specification is a descriptive Application Binary Interface, and not a source level API specification, it is not possible to make a guarantee of 100% backward compatibility between major releases. However, it is the intent that those parts of the binary interface that are visible in the source level API will remain backward compatible from version to version, except where a feature marked as "Deprecated" in one release may be removed from a future release. Implementors are strongly encouraged to make use of symbol versioning to permit simultaneous support of applications conforming to different releases of this specification.

I Introductory Elements

1 Scope

1.1 General

The Linux Standard Base (LSB) defines a system interface for compiled applications and a minimal environment for support of installation scripts. Its purpose is to enable a uniform industry standard environment for high-volume applications conforming to the LSB.

These specifications are composed of two basic parts: a common part describing those parts of the interface that remain constant across all implementations of the LSB, and an architecture-specific part describing the parts of the interface that vary by processor architecture. Together, the common part and the relevant architecture-specific part for a single hardware architecture provide a complete interface specification for compiled application programs on systems that share a common hardware architecture.

The LSB contains both a set of Application Program Interfaces (APIs) and Application Binary Interfaces (ABIs). APIs may appear in the source code of portable applications, while the compiled binary of that application may use the larger set of ABIs. A conforming implementation provides all of the ABIs listed here. The compilation system may replace (e.g. by macro definition) certain APIs with calls to one or more of the underlying binary interfaces, and may insert calls to binary interfaces as needed.

The LSB is primarily a binary interface definition. Not all of the source level APIs available to applications may be contained in this specification.

1.2 Module Specific Scope

This is the PPC64 architecture specific part of the Core module of the Linux Standard Base (LSB). This part supplements the common part of the LSB Core module with those interfaces that differ between architectures.

This part should be used in conjunction with LSB Core - Generic, the common part. Whenever a section of the common part is supplemented by architecture-specific information, the common part includes a reference to the architecture-specific part. This part may also contain additional information that is not referenced in the common part.

Interfaces described in this part of the LSB Core Specification are mandatory except where explicitly listed otherwise. Interfaces described in the LSB Core module are supplemented by other LSB modules. All other modules depend on the presence of LSB Core.

2 References

2.1 Normative References

The following specifications are incorporated by reference into this specification. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced specification (including any amendments) applies.

> **Note:** Where copies of a referenced specification are available on the World Wide Web, a Uniform Resource Locator (URL) is given, for informative purposes only. Such URL might at any given time resolve to a more recent copy of the specification, or be out of date (not resolve). Reference copies of specifications at the revision level indicated may be found at the Linux Foundation's Reference Specifications (http://refspecs.linuxbase.org) site.

Table 2-1 Normative References

Name	Title	URL
LSB Core - Generic	Linux Standard Base - Core Specification - Generic	http://www.linuxbase.org/spec/
64-bit PowerPC™ ELF ABI Supplement	64-bit PowerPC™ ELF ABI Supplement, Version 1.9	http://www.linux-foundation.org/spec/ELF/ppc64/
Filesystem Hierarchy Standard	Filesystem Hierarchy Standard (FHS) 3.0	http://refspecs.linuxbase.org/fhs
ISO C (1999)	ISO/IEC 9899:1999 - Programming Languages -- C	
ISO/IEC 14882: 2003 C++ Language	ISO/IEC 14882: 2003 Programming languages --C++	
Itanium™ C++ ABI	Itanium™ C++ ABI (Revision 1.86)	http://refspecs.linuxfoundation.org/cxxabi-1.86.html
Large File Support	Large File Support	http://www.UNIX-systems.org/version2/whatsnew/lfs20mar.html
Libncursesw API	Libncursesw API	http://invisible-island.net/ncurses/man/ncurses.3x.html
Libncursesw Placeholder	Libncursesw Specification Placeholder	http://refspecs.linux-foundation.org/libncursesw/libncurses.html
POSIX 1003.1-2001 (ISO/IEC 9945-2003)	ISO/IEC 9945-1:2003 Information technology -- Portable Operating System Interface (POSIX) -- Part 1: Base Definitions ISO/IEC 9945-2:2003 Information technology -- Portable Operating System Interface (POSIX) -- Part 2: System Interfaces ISO/IEC 9945-3:2003 In-	http://www.unix.org/version3/

	formation technology -- Portable Operating System Interface (POSIX) -- Part 3: Shell and Utilities ISO/IEC 9945-4:2003 Information technology -- Portable Operating System Interface (POSIX) -- Part 4: Rationale Including Technical Cor. 1: 2004	
POSIX 1003.1-2008 (ISO/IEC 9945-2009)	Portable Operating System Interface (POSIX®) 2008 Edition / The Open Group Technical Standard Base Specifications, Issue 7	http://www.unix.org/version4/
SUSv2	CAE Specification, January 1997, System Interfaces and Headers (XSH),Issue 5 (ISBN: 1-85912-181-0, C606)	http://www.opengroup.org/publications/catalog/un.htm
SVID Issue 3	American Telephone and Telegraph Company, System V Interface Definition, Issue 3; Morristown, NJ, UNIX Press, 1989. (ISBN 0201566524)	
SVID Issue 4	System V Interface Definition, Fourth Edition	http://refspecs.linuxfoundation.org/svid4/
System V ABI	System V Application Binary Interface, Edition 4.1	http://www.sco.com/developers/devspecs/gabi41.pdf
System V ABI Update	System V Application Binary Interface - DRAFT - 17 December 2003	http://www.sco.com/developers/gabi/2003-12-17/contents.html
The PowerPC™ Microprocessor Family	The PowerPC™ Microprocessor Family: The Programming Environment Manual for 32 and 64-bit Microprocessors	http://refspecs.linux-foundation.org/PPC_hrm.2005mar31.pdf
X/Open Curses, Issue 7	X/Open Curses, Issue 7 (ISBN: 1-931624-83-6, The Open Group, November 2009)	https://www2.opengroup.org/ogsys/catalog/C094

2.2 Informative References/Bibliography

The documents listed below provide essential background information to implementors of this specification. These references are included for information only, and do not represent normative parts of this specification.

Table 2-2 Other References

Name	Title	URL
DWARF Debugging Information Format, Version 4	DWARF Debugging Information Format, Version 4 (June 10, 2010)	http://www.dwarfstd.org/doc/DWARF4.pdf
IEC 60559/IEEE 754 Floating Point	IEC 60559:1989 Binary floating-point arithmetic for microprocessor systems	http://www.ieee.org/
ISO/IEC TR14652	ISO/IEC Technical Report 14652:2002 Specification method for cultural conventions	
ITU-T V.42	International Telecommunication Union Recommendation V.42 (2002): Error-correcting procedures for DCEs using asynchronous-to-synchronous conversionITUV	http://www.itu.int/rec/recommendation.asp?type=folders&lang=e&parent=T-REC-V.42
Li18nux Globalization Specification	LI18NUX 2000 Globalization Specification, Version 1.0 with Amendment 4	http://www.openi18n.org/docs/html/LI18NUX-2000-amd4.htm
Linux Allocated Device Registry	LINUX ALLOCATED DEVICES	http://www.lanana.org/docs/device-list/devices-2.6+.txt
Linux Assigned Names And Numbers Authority	Linux Assigned Names And Numbers Authority	http://www.lanana.org/
Mozilla's NSS SSL Reference	Mozilla's NSS SSL Reference	http://www.mozilla.org/projects/security/pki/nss/ref/ssl/
NSPR Reference	Mozilla's NSPR Reference	http://refspecs.linuxfoundation.org/NSPR_API_Reference/NSPR_API.html
PAM	Open Software Foundation, Request For Comments: 86.0 , October 1995, V. Samar & R.Schemers (SunSoft)	http://www.opengroup.org/tech/rfc/mirror-rfc/rfc86.0.txt
RFC 1321: The MD5 Message-Digest Algorithm	IETF RFC 1321: The MD5 Message-Digest Algorithm	http://www.ietf.org/rfc/rfc1321.txt
RFC 1833: Binding Protocols for ONC RPC Version 2	IETF RFC 1833: Binding Protocols for ONC RPC Version 2	http://www.ietf.org/rfc/rfc1833.txt
RFC 1950: ZLIB Compressed Data Format Specication	IETF RFC 1950: ZLIB Compressed Data Format Specification	http://www.ietf.org/rfc/rfc1950.txt
RFC 1951: DEFLATE Compressed Data Format	IETF RFC 1951: DEFLATE Compressed	http://www.ietf.org/rfc/rfc1951.txt

Specification	Data Format Specification version 1.3	
RFC 1952: GZIP File Format Specification	IETF RFC 1952: GZIP file format specification version 4.3	http://www.ietf.org/rfc/rfc1952.txt
RFC 2440: OpenPGP Message Format	IETF RFC 2440: OpenPGP Message Format	http://www.ietf.org/rfc/rfc2440.txt
RFC 2821:Simple Mail Transfer Protocol	IETF RFC 2821: Simple Mail Transfer Protocol	http://www.ietf.org/rfc/rfc2821.txt
RFC 2822:Internet Message Format	IETF RFC 2822: Internet Message Format	http://www.ietf.org/rfc/rfc2822.txt
RFC 5531/4506 RPC & XDR	IETF RFC 5531 & 4506	http://www.ietf.org/
RFC 791:Internet Protocol	IETF RFC 791: Internet Protocol Specification	http://www.ietf.org/rfc/rfc791.txt
RPM Package Format	RPM Package Format V3.0	http://www.rpm.org/max-rpm/s1-rpm-file-format-rpm-file-format.html
zlib Manual	zlib 1.2 Manual	http://www.gzip.org/zlib/

3 Requirements

3.1 Relevant Libraries

The libraries listed in Table 3-1 shall be available on PPC64 Linux Standard Base systems, with the specified runtime names. These names override or supplement the names specified in the generic LSB (LSB Core - Generic) specification. The specified program interpreter, referred to as proginterp in this table, shall be used to load the shared libraries specified by `DT_NEEDED` entries at run time.

Table 3-1 Standard Library Names

Library	Runtime Name
libc	libc.so.6
libcrypt	libcrypt.so.1
libdl	libdl.so.2
libgcc_s	libgcc_s.so.1
libm	libm.so.6
libncurses	libncurses.so.5
libncursesw	libncursesw.so.5
libpthread	libpthread.so.0
libstdcxx	libstdc++.so.6
libutil	libutil.so.1
libz	libz.so.1
proginterp	/lib64/ld-lsb-ppc64.so.3

These libraries will be in an implementation-defined directory which the dynamic linker shall search by default.

3.2 LSB Implementation Conformance

A conforming implementation is necessarily architecture specific, and must provide the interfaces specified by both the generic LSB Core specification (LSB Core - Generic) and the relevant architecture specific part of the LSB Core Specification.

> **Rationale:** An implementation must provide *at least* the interfaces specified in these specifications. It may also provide additional interfaces.

A conforming implementation shall satisfy the following requirements:

- A processor architecture represents a family of related processors which may not have identical feature sets. The architecture specific parts of the LSB Core Specification that supplement this specification for a given target processor architecture describe a minimum acceptable processor. The implementation shall provide all features of this processor, whether in hardware or through emulation transparent to the application.
- The implementation shall be capable of executing compiled applications having the format and using the system interfaces described in this specification.
- The implementation shall provide libraries containing the interfaces specified by this specification, and shall provide a dynamic linking mechanism that allows these interfaces to be attached to applications at runtime. All the interfaces shall behave as specified in this specification.
- The map of virtual memory provided by the implementation shall conform to the requirements of this specification.

- The implementation's low-level behavior with respect to function call linkage, system traps, signals, and other such activities shall conform to the formats described in this specification.
- The implementation shall provide all of the mandatory interfaces in their entirety.
- The implementation may provide one or more of the optional interfaces. Each optional interface that is provided shall be provided in its entirety. The product documentation shall state which optional interfaces are provided.
- The implementation shall provide all files and utilities specified as part of this specification in the format defined here and in other documents normatively included by reference. All commands and utilities shall behave as required by this specification. The implementation shall also provide all mandatory components of an application's runtime environment that are included or referenced in this specification.
- The implementation, when provided with standard data formats and values at a named interface, shall provide the behavior defined for those values and data formats at that interface. However, a conforming implementation may consist of components which are separately packaged and/or sold. For example, a vendor of a conforming implementation might sell the hardware, operating system, and windowing system as separately packaged items.
- The implementation may provide additional interfaces with different names. It may also provide additional behavior corresponding to data values outside the standard ranges, for standard named interfaces.

3.3 LSB Application Conformance

A conforming application containing object files is necessarily architecture specific, and must conform to both the generic LSB Core specification (LSB Core - Generic) and the relevant architecture specific part of the LSB Core Specification. A conforming application which contains no object files may be architecture neutral. Architecture neutral applications shall conform only to the requirements of the generic LSB Core specification (LSB Core - Generic).

A conforming application shall satisfy the following requirements:

- Executable files shall be either object files in the format defined in the Object Format section of this specification, or script files in a scripting language where the interpreter is required by this specification.
- Object files shall participate in dynamic linking as defined in the Program Loading and Linking section of this specification.
- Object files shall employ only the instructions, traps, and other low-level facilities defined as being for use by applications in the Low-Level System Information section of this specification
- If the application requires any optional interface defined in this specification in order to be installed or to execute successfully, the requirement for that optional interface shall be stated in the application's documentation.
- The application shall not use any interface or data format that is not required to be provided by a conforming implementation, unless such an interface or data format is supplied by another application through direct invocation of that application during execution. The other application must also be a conforming application, and the use of such interface or data format, as well as its source (in other words, the other conforming application), shall be identified in the documentation of the application.
- The application shall not use any values for a named interface that are reserved for vendor extensions.

A strictly conforming application shall not require or use any interface, facility, or implementation-defined extension not defined in this specification in order to be installed or to execute successfully.

4 Terms and Definitions

For the purposes of this document, the terms given in *ISO/IEC Directives, Part 2, Annex H* and the following apply.

archLSB

Some LSB specification documents have both a generic, architecture-neutral part and an architecture-specific part. The latter describes elements whose definitions may be unique to a particular processor architecture. The term archLSB may be used in the generic part to refer to the corresponding section of the architecture-specific part.

Binary Standard, ABI

The total set of interfaces that are available to be used in the compiled binary code of a conforming application, including the run-time details such as calling conventions, binary format, C++ name mangling, etc.

Implementation-defined

Describes a value or behavior that is not defined by this document but is selected by an implementor. The value or behavior may vary among implementations that conform to this document. An application should not rely on the existence of the value or behavior. An application that relies on such a value or behavior cannot be assured to be portable across conforming implementations. The implementor shall document such a value or behavior so that it can be used correctly by an application.

Shell Script

A file that is read by an interpreter (e.g., awk). The first line of the shell script includes a reference to its interpreter binary.

Source Standard, API

The total set of interfaces that are available to be used in the source code of a conforming application. Due to translations, the Binary Standard and the Source Standard may contain some different interfaces.

Undefined

Describes the nature of a value or behavior not defined by this document which results from use of an invalid program construct or invalid data input. The value or behavior may vary among implementations that conform to this document. An application should not rely on the existence or validity of the value or behavior. An application that relies on any particular value or behavior cannot be assured to be portable across conforming implementations.

Unspecified

Describes the nature of a value or behavior not specified by this document which results from use of a valid program construct or valid data input. The value or behavior may vary among implementations that conform to this document. An application should not rely on the existence or validity of the value or behavior. An application that relies on any particular value or behavior cannot be assured to be portable across conforming implementations.

In addition, for the portions of this specification which build on IEEE Std 1003.1-2001, the definitions given in *IEEE Std 1003.1-2001, Base Definitions, Chapter 3* apply.

5 Documentation Conventions

Throughout this document, the following typographic conventions are used:

`function()`

the name of a function

command

the name of a command or utility

`CONSTANT`

a constant value

`parameter`

a parameter

`variable`

a variable

Throughout this specification, several tables of interfaces are presented. Each entry in these tables has the following format:

name

the name of the interface

(symver)

An optional symbol version identifier, if required.

[*`refno`*]

A reference number indexing the table of referenced specifications that follows this table.

For example,

forkpty(GLIBC_2.0) [SUSv4]

refers to the interface named `forkpty()` with symbol version `GLIBC_2.0` that is defined in the reference indicated by the tag `SUSv4`.

Note: For symbols with versions which differ between architectures, the symbol versions are defined in the architecture specific parts of of this module specification only. In the generic part, they will appear without symbol versions.

II Executable and Linking Format (ELF)

6 Introduction

Executable and Linking Format (ELF) defines the object format for compiled applications. This specification supplements the information found in System V ABI Update and 64-bit PowerPC™ ELF ABI Supplement, and is intended to document additions made since the publication of that document.

7 Low Level System Information

7.1 Machine Interface

7.1.1 Processor Architecture

The PowerPC Architecture is specified by the following documents:

- 64-bit PowerPC™ ELF ABI Supplement
- The PowerPC™ Microprocessor Family

Only the features of the PowerPC Power3 processor instruction set may be assumed to be present. An application should determine if any additional instruction set features are available before using those additional features. If a feature is not present, then the application may not use it.

Conforming applications may use only instructions which do not require elevated privileges.

Conforming applications shall not invoke the implementations underlying system call interface directly. The interfaces in the implementation base libraries shall be used instead.

> **Rationale:** Implementation-supplied base libraries may use the system call interface but applications must not assume any particular operating system or kernel version is present.

An implementation must support the 64-bit computation mode as described in The PowerPC™ Microprocessor Family.

Applications conforming to this specification must provide feedback to the user if a feature that is required for correct execution of the application is not present. Applications conforming to this specification should attempt to execute in a diminished capacity if a required feature is not present.

This specification does not provide any performance guarantees of a conforming system. A system conforming to this specification may be implemented in either hardware or software.

7.1.2 Data Representation

LSB-conforming applications shall use the data representation as defined in Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.1.3 Byte Ordering

LSB-conforming applications shall use big-endian byte ordering. LSB-conforming implementations may support little-endian applications.

7.1.4 Fundamental Types

LSB-conforming applications shall use the fundamental types as defined in Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

LSB-conforming applications shall not use the long double fundamental type.

7.1.5 Aggregates and Unions

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.1.6 Bit Fields

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.2 Function Calling Sequence

LSB-conforming applications shall use the function calling sequence as defined in Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.2.1 Registers

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.2.2 Stack Frame

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.2.3 Parameter Passing

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.2.4 Return Values

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.2.5 Function Descriptors

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.3 Traceback Tables

LSB-conforming applications shall use the traceback tables as defined in Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.3.1 Mandatory Fields

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.3.2 Optional Fields

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.4 Process Initialization

LSB-conforming applications shall use the Operating System Interfaces as defined in Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.4.1 Registers

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.4.2 Process Stack

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5 Coding Examples

LSB-conforming applications may implement fundamental operations using the Coding Examples as defined in Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.1 Code Model Overview

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.2 The TOC Section

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.3 TOC Assembly Language Syntax

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.4 Function Prologue and Epilogue

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.5 Register Saving and Restoring Functions

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.6 Saving General Registers Only

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.7 Saving General Registers and Floating Point Registers

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.8 Saving Floating Point Registers Only

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.9 Save and Restore Services

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.10 Data Objects

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.11 Function Calls

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.12 Branching

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

7.5.13 Dynamic Stack Space Allocation

See Chapter 3 of the 64-bit PowerPC™ ELF ABI Supplement.

8 Object Format

8.1 Introduction

LSB-conforming implementations shall support the Executable and Linking Format (ELF) object file format, as defined by the following documents:

- System V ABI
- System V ABI Update
- 64-bit PowerPC™ ELF ABI Supplement
- LSB Core - Generic
- this document

LSB-conforming implementations need not support tags related functionality. LSB-conforming applications must not rely on tags related functionality.

8.2 ELF Header

LSB-conforming applications shall use the ELF header as defined in 64-bit PowerPC™ ELF ABI Supplement, Chapter 4.

8.3 Special Sections

The following sections are defined in the 64-bit PowerPC™ ELF ABI Supplement.

Table 8-1 ELF Special Sections

Name	Type	Attributes
.glink	SHT_PROGBITS	SHF_ALLOC+SHF_EXECINSTR
.got	SHT_PROGBITS	SHF_ALLOC+SHF_WRITE
.plt	SHT_NOBITS	SHF_ALLOC+SHF_WRITE
.sbss	SHT_NOBITS	SHF_ALLOC+SHF_WRITE
.sdata	SHT_PROGBITS	SHF_ALLOC+SHF_WRITE
.toc	SHT_PROGBITS	SHF_ALLOC+SHF_WRITE
.tocbss	SHT_NOBITS	SHF_ALLOC+SHF_WRITE

.glink

This section may be used to hold the global linkage table which aids the procedure linkage table. See Procedure Linkage Table in Chapter 5 of the processor supplement for more information.

.got

This section may be used to hold the Global Offset Table, or GOT. See The Toc Section and Coding Examples in Chapter 3 and Global Offset Table in Chapter 5 of the processor supplement for more information.

.plt

This section holds the procedure linkage table. See Procedure Linkage Table in

Chapter 5 of the processor supplement for more information.

.sbss

This section holds uninitialized data that contribute to the program's memory image. The system initializes the data with zeroes when the program begins to run.

.sdata

This section holds initialized small data that contribute to the program memory image.

.toc

This section may be used to hold the initialized Table of Contents, or TOC.

.tocbss

This section may be used to hold the uninitialized portions of the TOC. This data may also be stored as zero-initialized data in a .toc section.

8.3.1 Additional Special Sections

The following additional sections are defined here.

Table 8-2 Additional Special Sections

Name	Type	Attributes
.branch_lt	SHT_PROGBITS	SHF_ALLOC+SHF_WRITE
.opd	SHT_PROGBITS	SHF_ALLOC+SHF_WRITE
.rela.dyn	SHT_RELA	SHF_ALLOC
.rela.plt	SHT_RELA	SHF_ALLOC
.toc1	SHT_PROGBITS	SHF_ALLOC+SHF_WRITE

.branch_lt

This section holds destination addresses for very long branches.

.opd

This section contains the official procedure descriptors. A pointer to a function shall reference a procedure descriptor in this section.

.rela.dyn

This section holds RELA type relocation information for all sections of a shared library except the PLT.

.rela.plt

This section holds RELA type relocation information for the PLT section of a shared library or dynamically linked application.

.toc1

This section holds the second level TOC information.

8.4 TOC

LSB-conforming applications shall use the Table of Contents (TOC) as defined in 64-bit PowerPC™ ELF ABI Supplement, Chapter 4.

8.5 Symbol Table

LSB-conforming applications shall use the Symbol Table as defined in Chapter 4 of the 64-bit PowerPC™ ELF ABI Supplement.

8.5.1 Symbol Values

See Chapter 4 of the 64-bit PowerPC™ ELF ABI Supplement.

8.6 Relocation

LSB-conforming applications shall use Relocations as defined in Chapter 4 of the 64-bit PowerPC™ ELF ABI Supplement.

8.6.1 Relocation Types

See Chapter 4 of the 64-bit PowerPC™ ELF ABI Supplement.

9 Program Loading and Dynamic Linking

9.1 Introduction

LSB-conforming implementations shall support the object file information and system actions that create running programs as specified in the System V ABI, 64-bit PowerPC™ ELF ABI Supplement and as supplemented by the Linux Standard Base Specification and this document.

9.2 Program Loading

See 64-bit PowerPC™ ELF ABI Supplement, Chapter 5.1.

9.3 Dynamic Linking

See 64-bit PowerPC™ ELF ABI Supplement, Chapter 5.2.

9.3.1 Dynamic Section

The following dynamic entries are defined in the 64-bit PowerPC™ ELF ABI Supplement, Chapter 5.2.

DT_JMPREL

This entry is associated with a table of relocation entries for the procedure linkage table. This entry is mandatory both for executable and shared object files

DT_PLTGOT

This entry's d_ptr member gives the address of the first byte in the procedure linkage table

In addtion the following dynamic entries are also supported:

DT_RELACOUNT

The number of relative relocations in .rela.dyn

9.3.2 Global Offset Table

See 64-bit PowerPC™ ELF ABI Supplement, Chapter 5.2.2.

9.3.3 Function Addresses

See 64-bit PowerPC™ ELF ABI Supplement, Chapter 5.2.3.

9.3.4 Procedure Linkage Table

See 64-bit PowerPC™ ELF ABI Supplement, Chapter 5.2.4.

III Base Libraries

10 Libraries

An LSB-conforming implementation shall support base libraries which provide interfaces for accessing the operating system, processor and other hardware in the system.

Only interfaces and interface details which are unique to the PPC64 platform are defined here. This section should be used in conjunction with the corresponding section of LSB Core - Generic.

10.1 Program Interpreter/Dynamic Linker

The Program Interpreter shall be `/lib64/ld-lsb-ppc64.so.3`.

10.2 Interfaces for libc

Table 10-1 defines the library name and shared object name for the libc library

Table 10-1 libc Definition

Library:	libc
SONAME:	libc.so.6

The behavior of the interfaces in this library is specified by the following specifications:
[LFS] Large File Support
[LSB] LSB Core - Generic
[RPC + XDR] RFC 5531/4506 RPC & XDR
[SUSv2] SUSv2
[SUSv3] POSIX 1003.1-2001 (ISO/IEC 9945-2003)
[SUSv4] POSIX 1003.1-2008 (ISO/IEC 9945-2009)
[SVID.4] SVID Issue 4

10.2.1 RPC

10.2.1.1 Interfaces for RPC

An LSB conforming implementation shall provide the architecture specific functions for RPC specified in Table 10-2, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-2 libc - RPC Function Interfaces

authnone_create(GLIBC_2.3) [SVID.4]	callrpc(GLIBC_2.3) [RPC + XDR]	clnt_create(GLIBC_2.3) [SVID.4]	clnt_pcreateerror(GLIBC_2.3) [SVID.4]
clnt_perrno(GLIBC_2.3) [SVID.4]	clnt_perror(GLIBC_2.3) [SVID.4]	clnt_spcreateerror(GLIBC_2.3) [SVID.4]	clnt_sperrno(GLIBC_2.3) [SVID.4]
clnt_sperror(GLIBC_2.3) [SVID.4]	clntraw_create(GLIBC_2.3) [RPC + XDR]	clnttcp_create(GLIBC_2.3) [RPC + XDR]	clntudp_bufcreate(GLIBC_2.3) [RPC + XDR]
clntudp_create(GLIBC_2.3) [RPC + XDR]	key_decryptsession(GLIBC_2.3) [SVID.4]	pmap_getport(GLIBC_2.3) [LSB]	pmap_set(GLIBC_2.3) [LSB]
pmap_unset(GLIBC_2.3) [LSB]	svc_getreqset(GLIBC_2.3) [SVID.4]	svc_register(GLIBC_2.3) [LSB]	svc_run(GLIBC_2.3) [LSB]
svc_sendreply(GLIBC_2.3) [LSB]	svcerr_auth(GLIBC_2.3) [SVID.4]	svcerr_decode(GLIBC_2.3) [SVID.4]	svcerr_noproc(GLIBC_2.3) [SVID.4]

svcerr_noprog(GLIBC_2.3) [SVID.4]	svcerr_progvers(GLIBC_2.3) [SVID.4]	svcerr_systemerr(GLIBC_2.3) [SVID.4]	svcerr_weakauth(GLIBC_2.3) [SVID.4]
svcfd_create(GLIBC_2.3) [RPC + XDR]	svcraw_create(GLIBC_2.3) [RPC + XDR]	svctcp_create(GLIBC_2.3) [LSB]	svcudp_create(GLIBC_2.3) [LSB]
xdr_accepted_reply(GLIBC_2.3) [SVID.4]	xdr_array(GLIBC_2.3) [SVID.4]	xdr_bool(GLIBC_2.3) [SVID.4]	xdr_bytes(GLIBC_2.3) [SVID.4]
xdr_callhdr(GLIBC_2.3) [SVID.4]	xdr_callmsg(GLIBC_2.3) [SVID.4]	xdr_char(GLIBC_2.3) [SVID.4]	xdr_double(GLIBC_2.3) [SVID.4]
xdr_enum(GLIBC_2.3) [SVID.4]	xdr_float(GLIBC_2.3) [SVID.4]	xdr_free(GLIBC_2.3) [SVID.4]	xdr_int(GLIBC_2.3) [SVID.4]
xdr_long(GLIBC_2.3) [SVID.4]	xdr_opaque(GLIBC_2.3) [SVID.4]	xdr_opaque_auth(GLIBC_2.3) [SVID.4]	xdr_pointer(GLIBC_2.3) [SVID.4]
xdr_reference(GLIBC_2.3) [SVID.4]	xdr_rejected_reply(GLIBC_2.3) [SVID.4]	xdr_replymsg(GLIBC_2.3) [SVID.4]	xdr_short(GLIBC_2.3) [SVID.4]
xdr_string(GLIBC_2.3) [SVID.4]	xdr_u_char(GLIBC_2.3) [SVID.4]	xdr_u_int(GLIBC_2.3) [LSB]	xdr_u_long(GLIBC_2.3) [SVID.4]
xdr_u_short(GLIBC_2.3) [SVID.4]	xdr_union(GLIBC_2.3) [SVID.4]	xdr_vector(GLIBC_2.3) [SVID.4]	xdr_void(GLIBC_2.3) [SVID.4]
xdr_wrapstring(GLIBC_2.3) [SVID.4]	xdrmem_create(GLIBC_2.3) [SVID.4]	xdrrec_create(GLIBC_2.3) [SVID.4]	xdrrec_endofrecord(GLIBC_2.3) [RPC + XDR]
xdrrec_eof(GLIBC_2.3) [SVID.4]	xdrrec_skiprecord(GLIBC_2.3) [RPC + XDR]	xdrstdio_create(GLIBC_2.3) [LSB]	

An LSB conforming implementation shall provide the architecture specific deprecated functions for RPC specified in Table 10-3, with the full mandatory functionality as described in the referenced underlying specification.

> **Note:** These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-3 libc - RPC Deprecated Function Interfaces

key_decryptsession(GLIBC_2.3) [SVID.4]			

10.2.2 Epoll

10.2.2.1 Interfaces for Epoll

No external functions are defined for libc - Epoll in this part of the specification. See also the generic specification.

10.2.3 System Calls

10.2.3.1 Interfaces for System Calls

An LSB conforming implementation shall provide the architecture specific functions for System Calls specified in Table 10-4, with the full mandatory functionality as described

in the referenced underlying specification.

Table 10-4 libc - System Calls Function Interfaces

__fxstat(GLIBC_2.3) [LSB]	__getpgid(GLIBC_2.3) [LSB]	__lxstat(GLIBC_2.3) [LSB]	__xmknod(GLIBC_2.3) [LSB]
__xstat(GLIBC_2.3) [LSB]	access(GLIBC_2.3) [SUSv4]	acct(GLIBC_2.3) [LSB]	alarm(GLIBC_2.3) [SUSv4]
backtrace(GLIBC_2.3) [LSB]	backtrace_symbols(GLIBC_2.3) [LSB]	backtrace_symbols_fd(GLIBC_2.3) [LSB]	brk(GLIBC_2.3) [SUSv2]
chdir(GLIBC_2.3) [SUSv4]	chmod(GLIBC_2.3) [SUSv4]	chown(GLIBC_2.3) [SUSv4]	chroot(GLIBC_2.3) [SUSv2]
clock(GLIBC_2.3) [SUSv4]	close(GLIBC_2.3) [SUSv4]	closedir(GLIBC_2.3) [SUSv4]	creat(GLIBC_2.3) [SUSv4]
dup(GLIBC_2.3) [SUSv4]	dup2(GLIBC_2.3) [SUSv4]	execl(GLIBC_2.3) [SUSv4]	execle(GLIBC_2.3) [SUSv4]
execlp(GLIBC_2.3) [SUSv4]	execv(GLIBC_2.3) [SUSv4]	execve(GLIBC_2.3) [SUSv4]	execvp(GLIBC_2.3) [SUSv4]
exit(GLIBC_2.3) [SUSv4]	fchdir(GLIBC_2.3) [SUSv4]	fchmod(GLIBC_2.3) [SUSv4]	fchown(GLIBC_2.3) [SUSv4]
fcntl(GLIBC_2.3) [LSB]	fdatasync(GLIBC_2.3) [SUSv4]	fexecve(GLIBC_2.3) [SUSv4]	flock(GLIBC_2.3) [LSB]
fork(GLIBC_2.3) [SUSv4]	fstatfs(GLIBC_2.3) [LSB]	fstatvfs(GLIBC_2.3) [SUSv4]	fsync(GLIBC_2.3) [SUSv4]
ftime(GLIBC_2.3) [SUSv3]	ftruncate(GLIBC_2.3) [SUSv4]	getcontext(GLIBC_2.3.4) [SUSv3]	getdtablesize(GLIBC_2.3) [LSB]
getegid(GLIBC_2.3) [SUSv4]	geteuid(GLIBC_2.3) [SUSv4]	getgid(GLIBC_2.3) [SUSv4]	getgroups(GLIBC_2.3) [SUSv4]
getitimer(GLIBC_2.3) [SUSv4]	getloadavg(GLIBC_2.3) [LSB]	getpagesize(GLIBC_2.3) [LSB]	getpgid(GLIBC_2.3) [SUSv4]
getpgrp(GLIBC_2.3) [SUSv4]	getpid(GLIBC_2.3) [SUSv4]	getppid(GLIBC_2.3) [SUSv4]	getpriority(GLIBC_2.3) [SUSv4]
getrlimit(GLIBC_2.3) [LSB]	getrusage(GLIBC_2.3) [SUSv4]	getsid(GLIBC_2.3) [SUSv4]	getuid(GLIBC_2.3) [SUSv4]
getwd(GLIBC_2.3) [SUSv3]	initgroups(GLIBC_2.3) [LSB]	ioctl(GLIBC_2.3) [LSB]	kill(GLIBC_2.3) [LSB]
killpg(GLIBC_2.3) [SUSv4]	lchown(GLIBC_2.3) [SUSv4]	link(GLIBC_2.3) [LSB]	lockf(GLIBC_2.3) [SUSv4]
lseek(GLIBC_2.3) [SUSv4]	mkdir(GLIBC_2.3) [SUSv4]	mkfifo(GLIBC_2.3) [SUSv4]	mlock(GLIBC_2.3) [SUSv4]
mlockall(GLIBC_2.3) [SUSv4]	mmap(GLIBC_2.3) [SUSv4]	mprotect(GLIBC_2.3) [SUSv4]	mremap(GLIBC_2.3) [LSB]
msync(GLIBC_2.3) [SUSv4]	munlock(GLIBC_2.3) [SUSv4]	munlockall(GLIBC_2.3) [SUSv4]	munmap(GLIBC_2.3) [SUSv4]
nanosleep(GLIBC_2.3) [SUSv4]	nice(GLIBC_2.3) [SUSv4]	open(GLIBC_2.3) [SUSv4]	opendir(GLIBC_2.3) [SUSv4]
pathconf(GLIBC_2.3) [SUSv4]	pause(GLIBC_2.3) [SUSv4]	pipe(GLIBC_2.3) [SUSv4]	poll(GLIBC_2.3) [SUSv4]
pread(GLIBC_2.3) [SUSv4]	pselect(GLIBC_2.3) [SUSv4]	ptrace(GLIBC_2.3) [LSB]	pwrite(GLIBC_2.3) [SUSv4]

read(GLIBC_2.3) [SUSv4]	readdir(GLIBC_2.3) [SUSv4]	readdir_r(GLIBC_2.3) [SUSv4]	readlink(GLIBC_2.3) [SUSv4]
readv(GLIBC_2.3) [SUSv4]	rename(GLIBC_2.3) [SUSv4]	rmdir(GLIBC_2.3) [SUSv4]	sbrk(GLIBC_2.3) [SUSv2]
sched_get_priority_max(GLIBC_2.3) [SUSv4]	sched_get_priority_min(GLIBC_2.3) [SUSv4]	sched_getparam(GLIBC_2.3) [SUSv4]	sched_getscheduler(GLIBC_2.3) [SUSv4]
sched_rr_get_interval(GLIBC_2.3) [SUSv4]	sched_setparam(GLIBC_2.3) [SUSv4]	sched_setscheduler(GLIBC_2.3) [LSB]	sched_yield(GLIBC_2.3) [SUSv4]
select(GLIBC_2.3) [SUSv4]	setcontext(GLIBC_2.3.4) [SUSv3]	setegid(GLIBC_2.3) [SUSv4]	seteuid(GLIBC_2.3) [SUSv4]
setgid(GLIBC_2.3) [SUSv4]	setitimer(GLIBC_2.3) [SUSv4]	setpgid(GLIBC_2.3) [SUSv4]	setpgrp(GLIBC_2.3) [SUSv4]
setpriority(GLIBC_2.3) [SUSv4]	setregid(GLIBC_2.3) [SUSv4]	setreuid(GLIBC_2.3) [SUSv4]	setrlimit(GLIBC_2.3) [LSB]
setrlimit64(GLIBC_2.3) [LFS]	setsid(GLIBC_2.3) [SUSv4]	setuid(GLIBC_2.3) [SUSv4]	sleep(GLIBC_2.3) [SUSv4]
statfs(GLIBC_2.3) [LSB]	statvfs(GLIBC_2.3) [SUSv4]	stime(GLIBC_2.3) [LSB]	symlink(GLIBC_2.3) [SUSv4]
sync(GLIBC_2.3) [SUSv4]	sysconf(GLIBC_2.3) [LSB]	sysinfo(GLIBC_2.3) [LSB]	time(GLIBC_2.3) [SUSv4]
times(GLIBC_2.3) [SUSv4]	truncate(GLIBC_2.3) [SUSv4]	ulimit(GLIBC_2.3) [SUSv4]	umask(GLIBC_2.3) [SUSv4]
uname(GLIBC_2.3) [SUSv4]	unlink(GLIBC_2.3) [LSB]	utime(GLIBC_2.3) [SUSv4]	utimes(GLIBC_2.3) [SUSv4]
vfork(GLIBC_2.3) [SUSv3]	wait(GLIBC_2.3) [SUSv4]	wait4(GLIBC_2.3) [LSB]	waitid(GLIBC_2.3) [SUSv4]
waitpid(GLIBC_2.3) [SUSv4]	write(GLIBC_2.3) [SUSv4]	writev(GLIBC_2.3) [SUSv4]	

An LSB conforming implementation shall provide the architecture specific deprecated functions for System Calls specified in Table 10-5, with the full mandatory functionality as described in the referenced underlying specification.

> **Note:** These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-5 libc - System Calls Deprecated Function Interfaces

fstatfs(GLIBC_2.3) [LSB]	getdtablesize(GLIBC_2.3) [LSB]	getpagesize(GLIBC_2.3) [LSB]	getwd(GLIBC_2.3) [SUSv3]
statfs(GLIBC_2.3) [LSB]			

10.2.4 Standard I/O

10.2.4.1 Interfaces for Standard I/O

An LSB conforming implementation shall provide the architecture specific functions for Standard I/O specified in Table 10-6, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-6 libc - Standard I/O Function Interfaces

_IO_feof(GLIBC_2.3) [LSB]	_IO_getc(GLIBC_2.3) [LSB]	_IO_putc(GLIBC_2.3) [LSB]	_IO_puts(GLIBC_2.3) [LSB]
__fprintf_chk(GLIBC_2.4) [LSB]	__printf_chk(GLIBC_2.4) [LSB]	__snprintf_chk(GLIBC_2.4) [LSB]	__sprintf_chk(GLIBC_2.4) [LSB]
__vfprintf_chk(GLIBC_2.4) [LSB]	__vprintf_chk(GLIBC_2.4) [LSB]	__vsnprintf_chk(GLIBC_2.4) [LSB]	__vsprintf_chk(GLIBC_2.4) [LSB]
asprintf(GLIBC_2.3) [LSB]	asprintf(GLIBC_2.4) [LSB]	clearerr(GLIBC_2.3) [SUSv4]	clearerr_unlocked(GLIBC_2.3) [LSB]
ctermid(GLIBC_2.3) [SUSv4]	dprintf(GLIBC_2.3) [SUSv4]	fclose(GLIBC_2.3) [SUSv4]	fdopen(GLIBC_2.3) [SUSv4]
feof(GLIBC_2.3) [SUSv4]	feof_unlocked(GLIBC_2.3) [LSB]	ferror(GLIBC_2.3) [SUSv4]	ferror_unlocked(GLIBC_2.3) [LSB]
fflush(GLIBC_2.3) [SUSv4]	fflush_unlocked(GLIBC_2.3) [LSB]	fgetc(GLIBC_2.3) [SUSv4]	fgetc_unlocked(GLIBC_2.3) [LSB]
fgetpos(GLIBC_2.3) [SUSv4]	fgets(GLIBC_2.3) [SUSv4]	fgets_unlocked(GLIBC_2.3) [LSB]	fgetwc_unlocked(GLIBC_2.3) [LSB]
fgetws_unlocked(GLIBC_2.3) [LSB]	fileno(GLIBC_2.3) [SUSv4]	fileno_unlocked(GLIBC_2.3) [LSB]	flockfile(GLIBC_2.3) [SUSv4]
fopen(GLIBC_2.3) [SUSv4]	fprintf(GLIBC_2.3) [SUSv4]	fprintf(GLIBC_2.4) [SUSv4]	fputc(GLIBC_2.3) [SUSv4]
fputc_unlocked(GLIBC_2.3) [LSB]	fputs(GLIBC_2.3) [SUSv4]	fputs_unlocked(GLIBC_2.3) [LSB]	fputwc_unlocked(GLIBC_2.3) [LSB]
fputws_unlocked(GLIBC_2.3) [LSB]	fread(GLIBC_2.3) [SUSv4]	fread_unlocked(GLIBC_2.3) [LSB]	freopen(GLIBC_2.3) [SUSv4]
fscanf(GLIBC_2.3) [LSB]	fscanf(GLIBC_2.4) [LSB]	fseek(GLIBC_2.3) [SUSv4]	fseeko(GLIBC_2.3) [SUSv4]
fsetpos(GLIBC_2.3) [SUSv4]	ftell(GLIBC_2.3) [SUSv4]	ftello(GLIBC_2.3) [SUSv4]	fwrite(GLIBC_2.3) [SUSv4]
fwrite_unlocked(GLIBC_2.3) [LSB]	getc(GLIBC_2.3) [SUSv4]	getc_unlocked(GLIBC_2.3) [SUSv4]	getchar(GLIBC_2.3) [SUSv4]
getchar_unlocked(GLIBC_2.3) [SUSv4]	getdelim(GLIBC_2.3) [SUSv4]	getline(GLIBC_2.3) [SUSv4]	getw(GLIBC_2.3) [SUSv2]
getwc_unlocked(GLIBC_2.3) [LSB]	getwchar_unlocked(GLIBC_2.3) [LSB]	pclose(GLIBC_2.3) [SUSv4]	popen(GLIBC_2.3) [SUSv4]
printf(GLIBC_2.3) [SUSv4]	printf(GLIBC_2.4) [SUSv4]	putc(GLIBC_2.3) [SUSv4]	putc_unlocked(GLIBC_2.3) [SUSv4]
putchar(GLIBC_2.3) [SUSv4]	putchar_unlocked(GLIBC_2.3) [SUSv4]	puts(GLIBC_2.3) [SUSv4]	putw(GLIBC_2.3) [SUSv2]
putwc_unlocked(GLIBC_2.3)	putwchar_unlocked(GLIBC_2.3)	remove(GLIBC_2.3) [SUSv4]	rewind(GLIBC_2.3) [SUSv4]

[LSB]	[LSB]		
rewinddir(GLIBC_2.3) [SUSv4]	scanf(GLIBC_2.3) [LSB]	scanf(GLIBC_2.4) [LSB]	seekdir(GLIBC_2.3) [SUSv4]
setbuf(GLIBC_2.3) [SUSv4]	setbuffer(GLIBC_2.3) [LSB]	setvbuf(GLIBC_2.3) [SUSv4]	snprintf(GLIBC_2.3) [SUSv4]
snprintf(GLIBC_2.4) [SUSv4]	sprintf(GLIBC_2.3) [SUSv4]	sprintf(GLIBC_2.4) [SUSv4]	sscanf(GLIBC_2.3) [LSB]
sscanf(GLIBC_2.4) [LSB]	telldir(GLIBC_2.3) [SUSv4]	tempnam(GLIBC_2.3) [SUSv4]	ungetc(GLIBC_2.3) [SUSv4]
vasprintf(GLIBC_2.3) [LSB]	vasprintf(GLIBC_2.4) [LSB]	vdprintf(GLIBC_2.3) [SUSv4]	vdprintf(GLIBC_2.4) [SUSv4]
vfprintf(GLIBC_2.3) [SUSv4]	vfprintf(GLIBC_2.4) [SUSv4]	vprintf(GLIBC_2.3) [SUSv4]	vprintf(GLIBC_2.4) [SUSv4]
vsnprintf(GLIBC_2.3) [SUSv4]	vsnprintf(GLIBC_2.4) [SUSv4]	vsprintf(GLIBC_2.3) [SUSv4]	vsprintf(GLIBC_2.4) [SUSv4]

An LSB conforming implementation shall provide the architecture specific deprecated functions for Standard I/O specified in Table 10-7, with the full mandatory functionality as described in the referenced underlying specification.

> **Note:** These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-7 libc - Standard I/O Deprecated Function Interfaces

asprintf(GLIBC_2.3) [LSB]	fprintf(GLIBC_2.3) [SUSv4]	fscanf(GLIBC_2.3) [LSB]	printf(GLIBC_2.3) [SUSv4]
scanf(GLIBC_2.3) [LSB]	snprintf(GLIBC_2.3) [SUSv4]	sprintf(GLIBC_2.3) [SUSv4]	sscanf(GLIBC_2.3) [LSB]
tempnam(GLIBC_2.3) [SUSv4]	vasprintf(GLIBC_2.3) [LSB]	vdprintf(GLIBC_2.3) [SUSv4]	vfprintf(GLIBC_2.3) [SUSv4]
vprintf(GLIBC_2.3) [SUSv4]	vsnprintf(GLIBC_2.3) [SUSv4]	vsprintf(GLIBC_2.3) [SUSv4]	

An LSB conforming implementation shall provide the architecture specific data interfaces for Standard I/O specified in Table 10-8, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-8 libc - Standard I/O Data Interfaces

stderr(GLIBC_2.3) [SUSv4]	stdin(GLIBC_2.3) [SUSv4]	stdout(GLIBC_2.3) [SUSv4]	

10.2.5 Signal Handling

10.2.5.1 Interfaces for Signal Handling

An LSB conforming implementation shall provide the architecture specific functions for Signal Handling specified in Table 10-9, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-9 libc - Signal Handling Function Interfaces

__libc_current_sigrtmax(GLIBC_2.3) [LSB]	__libc_current_sigrtmin(GLIBC_2.3) [LSB]	__sigsetjmp(GLIBC_2.3.4) [LSB]	__sysv_signal(GLIBC_2.3) [LSB]
__xpg_sigpause(G	bsd_signal(GLIB	psignal(GLIBC_2.	raise(GLIBC_2.3)

LIBC_2.3) [LSB]	C_2.3) [SUSv3]	3) [SUSv4]	[SUSv4]
sigaction(GLIBC_2.3) [SUSv4]	sigaddset(GLIBC_2.3) [SUSv4]	sigaltstack(GLIBC_2.3) [SUSv4]	sigandset(GLIBC_2.3) [LSB]
sigdelset(GLIBC_2.3) [SUSv4]	sigemptyset(GLIBC_2.3) [SUSv4]	sigfillset(GLIBC_2.3) [SUSv4]	sighold(GLIBC_2.3) [SUSv4]
sigignore(GLIBC_2.3) [SUSv4]	siginterrupt(GLIBC_2.3) [SUSv4]	sigisemptyset(GLIBC_2.3) [LSB]	sigismember(GLIBC_2.3) [SUSv4]
siglongjmp(GLIBC_2.3.4) [SUSv4]	signal(GLIBC_2.3) [SUSv4]	sigorset(GLIBC_2.3) [LSB]	sigpause(GLIBC_2.3) [LSB]
sigpending(GLIBC_2.3) [SUSv4]	sigprocmask(GLIBC_2.3) [SUSv4]	sigqueue(GLIBC_2.3) [SUSv4]	sigrelse(GLIBC_2.3) [SUSv4]
sigreturn(GLIBC_2.3) [LSB]	sigset(GLIBC_2.3) [SUSv4]	sigsuspend(GLIBC_2.3) [SUSv4]	sigtimedwait(GLIBC_2.3) [SUSv4]
sigwait(GLIBC_2.3) [SUSv4]	sigwaitinfo(GLIBC_2.3) [SUSv4]		

An LSB conforming implementation shall provide the architecture specific deprecated functions for Signal Handling specified in Table 10-10, with the full mandatory functionality as described in the referenced underlying specification.

> **Note:** These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-10 libc - Signal Handling Deprecated Function Interfaces

sigpause(GLIBC_2.3) [LSB]			

An LSB conforming implementation shall provide the architecture specific data interfaces for Signal Handling specified in Table 10-11, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-11 libc - Signal Handling Data Interfaces

_sys_siglist(GLIBC_2.3.3) [LSB]			

10.2.6 Localization Functions

10.2.6.1 Interfaces for Localization Functions

An LSB conforming implementation shall provide the architecture specific functions for Localization Functions specified in Table 10-12, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-12 libc - Localization Functions Function Interfaces

bind_textdomain_codeset(GLIBC_2.3) [LSB]	bindtextdomain(GLIBC_2.3) [LSB]	catclose(GLIBC_2.3) [SUSv4]	catgets(GLIBC_2.3) [SUSv4]
catopen(GLIBC_2.3) [SUSv4]	dcgettext(GLIBC_2.3) [LSB]	dcngettext(GLIBC_2.3) [LSB]	dgettext(GLIBC_2.3) [LSB]
dngettext(GLIBC_2.3) [LSB]	gettext(GLIBC_2.3) [LSB]	iconv(GLIBC_2.3) [SUSv4]	iconv_close(GLIBC_2.3) [SUSv4]
iconv_open(GLIBC_2.3) [SUSv4]	localeconv(GLIBC_2.3) [SUSv4]	ngettext(GLIBC_2.3) [LSB]	nl_langinfo(GLIBC_2.3) [SUSv4]
setlocale(GLIBC_	textdomain(GLIB		

2.3) [SUSv4]	C_2.3) [LSB]		

An LSB conforming implementation shall provide the architecture specific data interfaces for Localization Functions specified in Table 10-13, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-13 libc - Localization Functions Data Interfaces

_nl_msg_cat_cntr(GLIBC_2.3) [LSB]			

10.2.7 Posix Spawn Option

10.2.7.1 Interfaces for Posix Spawn Option

An LSB conforming implementation shall provide the architecture specific functions for Posix Spawn Option specified in Table 10-14, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-14 libc - Posix Spawn Option Function Interfaces

posix_spawn(GLIBC_2.15) [SUSv4]	posix_spawn_file_actions_addclose(GLIBC_2.3) [SUSv4]	posix_spawn_file_actions_adddup2(GLIBC_2.3) [SUSv4]	posix_spawn_file_actions_addopen(GLIBC_2.3) [SUSv4]
posix_spawn_file_actions_destroy(GLIBC_2.3) [SUSv4]	posix_spawn_file_actions_init(GLIBC_2.3) [SUSv4]	posix_spawnattr_destroy(GLIBC_2.3) [SUSv4]	posix_spawnattr_getflags(GLIBC_2.3) [SUSv4]
posix_spawnattr_getpgroup(GLIBC_2.3) [SUSv4]	posix_spawnattr_getschedparam(GLIBC_2.3) [SUSv4]	posix_spawnattr_getschedpolicy(GLIBC_2.3) [SUSv4]	posix_spawnattr_getsigdefault(GLIBC_2.3) [SUSv4]
posix_spawnattr_getsigmask(GLIBC_2.3) [SUSv4]	posix_spawnattr_init(GLIBC_2.3) [SUSv4]	posix_spawnattr_setflags(GLIBC_2.3) [SUSv4]	posix_spawnattr_setpgroup(GLIBC_2.3) [SUSv4]
posix_spawnattr_setschedparam(GLIBC_2.3) [SUSv4]	posix_spawnattr_setschedpolicy(GLIBC_2.3) [SUSv4]	posix_spawnattr_setsigdefault(GLIBC_2.3) [SUSv4]	posix_spawnattr_setsigmask(GLIBC_2.3) [SUSv4]
posix_spawnp(GLIBC_2.15) [SUSv4]			

10.2.8 Posix Advisory Option

10.2.8.1 Interfaces for Posix Advisory Option

An LSB conforming implementation shall provide the architecture specific functions for Posix Advisory Option specified in Table 10-15, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-15 libc - Posix Advisory Option Function Interfaces

posix_fadvise(GLIBC_2.3) [SUSv4]	posix_fallocate(GLIBC_2.3) [SUSv4]	posix_madvise(GLIBC_2.3) [SUSv4]	posix_memalign(GLIBC_2.3) [SUSv4]

10.2.9 Socket Interface

10.2.9.1 Interfaces for Socket Interface

An LSB conforming implementation shall provide the architecture specific functions for Socket Interface specified in Table 10-16, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-16 libc - Socket Interface Function Interfaces

__h_errno_location(GLIBC_2.3) [LSB]	accept(GLIBC_2.3) [SUSv4]	bind(GLIBC_2.3) [SUSv4]	bindresvport(GLIBC_2.3) [LSB]
connect(GLIBC_2.3) [SUSv4]	gethostid(GLIBC_2.3) [SUSv4]	gethostname(GLIBC_2.3) [SUSv4]	getpeername(GLIBC_2.3) [SUSv4]
getsockname(GLIBC_2.3) [SUSv4]	getsockopt(GLIBC_2.3) [LSB]	if_freenameindex(GLIBC_2.3) [SUSv4]	if_indextoname(GLIBC_2.3) [SUSv4]
if_nameindex(GLIBC_2.3) [SUSv4]	if_nametoindex(GLIBC_2.3) [SUSv4]	listen(GLIBC_2.3) [SUSv4]	recv(GLIBC_2.3) [SUSv4]
recvfrom(GLIBC_2.3) [SUSv4]	recvmsg(GLIBC_2.3) [SUSv4]	send(GLIBC_2.3) [SUSv4]	sendmsg(GLIBC_2.3) [SUSv4]
sendto(GLIBC_2.3) [SUSv4]	setsockopt(GLIBC_2.3) [LSB]	shutdown(GLIBC_2.3) [SUSv4]	sockatmark(GLIBC_2.3) [SUSv4]
socket(GLIBC_2.3) [SUSv4]	socketpair(GLIBC_2.3) [SUSv4]		

An LSB conforming implementation shall provide the architecture specific data interfaces for Socket Interface specified in Table 10-17, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-17 libc - Socket Interface Data Interfaces

in6addr_any(GLIBC_2.3) [SUSv3]	in6addr_loopback(GLIBC_2.3) [SUSv3]		

10.2.10 Wide Characters

10.2.10.1 Interfaces for Wide Characters

An LSB conforming implementation shall provide the architecture specific functions for Wide Characters specified in Table 10-18, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-18 libc - Wide Characters Function Interfaces

__wcstod_internal(GLIBC_2.3) [LSB]	__wcstof_internal(GLIBC_2.3) [LSB]	__wcstol_internal(GLIBC_2.3) [LSB]	__wcstold_internal(GLIBC_2.3) [LSB]
__wcstold_internal(GLIBC_2.4) [LSB]	__wcstoul_internal(GLIBC_2.3) [LSB]	btowc(GLIBC_2.3) [SUSv4]	fgetwc(GLIBC_2.3) [SUSv4]
fgetws(GLIBC_2.3) [SUSv4]	fputwc(GLIBC_2.3) [SUSv4]	fputws(GLIBC_2.3) [SUSv4]	fwide(GLIBC_2.3) [SUSv4]
fwprintf(GLIBC_2.3) [SUSv4]	fwprintf(GLIBC_2.4) [SUSv4]	fwscanf(GLIBC_2.3) [LSB]	fwscanf(GLIBC_2.4) [LSB]

getwc(GLIBC_2.3) [SUSv4]	getwchar(GLIBC_2.3) [SUSv4]	mblen(GLIBC_2.3) [SUSv4]	mbrlen(GLIBC_2.3) [SUSv4]
mbrtowc(GLIBC_2.3) [SUSv4]	mbsinit(GLIBC_2.3) [SUSv4]	mbsnrtowcs(GLIBC_2.3) [SUSv4]	mbsrtowcs(GLIBC_2.3) [SUSv4]
mbstowcs(GLIBC_2.3) [SUSv4]	mbtowc(GLIBC_2.3) [SUSv4]	putwc(GLIBC_2.3) [SUSv4]	putwchar(GLIBC_2.3) [SUSv4]
swprintf(GLIBC_2.3) [SUSv4]	swprintf(GLIBC_2.4) [SUSv4]	swscanf(GLIBC_2.3) [LSB]	swscanf(GLIBC_2.4) [LSB]
towctrans(GLIBC_2.3) [SUSv4]	towlower(GLIBC_2.3) [SUSv4]	towupper(GLIBC_2.3) [SUSv4]	ungetwc(GLIBC_2.3) [SUSv4]
vfwprintf(GLIBC_2.3) [SUSv4]	vfwprintf(GLIBC_2.4) [SUSv4]	vfwscanf(GLIBC_2.3) [LSB]	vfwscanf(GLIBC_2.4) [LSB]
vswprintf(GLIBC_2.3) [SUSv4]	vswprintf(GLIBC_2.4) [SUSv4]	vswscanf(GLIBC_2.3) [LSB]	vswscanf(GLIBC_2.4) [LSB]
vwprintf(GLIBC_2.3) [SUSv4]	vwprintf(GLIBC_2.4) [SUSv4]	vwscanf(GLIBC_2.3) [LSB]	vwscanf(GLIBC_2.4) [LSB]
wcpcpy(GLIBC_2.3) [SUSv4]	wcpncpy(GLIBC_2.3) [SUSv4]	wcrtomb(GLIBC_2.3) [SUSv4]	wcscasecmp(GLIBC_2.3) [SUSv4]
wcscat(GLIBC_2.3) [SUSv4]	wcschr(GLIBC_2.3) [SUSv4]	wcscmp(GLIBC_2.3) [SUSv4]	wcscoll(GLIBC_2.3) [SUSv4]
wcscpy(GLIBC_2.3) [SUSv4]	wcscspn(GLIBC_2.3) [SUSv4]	wcsdup(GLIBC_2.3) [SUSv4]	wcsftime(GLIBC_2.3) [SUSv4]
wcslen(GLIBC_2.3) [SUSv4]	wcsncasecmp(GLIBC_2.3) [SUSv4]	wcsncat(GLIBC_2.3) [SUSv4]	wcsncmp(GLIBC_2.3) [SUSv4]
wcsncpy(GLIBC_2.3) [SUSv4]	wcsnlen(GLIBC_2.3) [SUSv4]	wcsnrtombs(GLIBC_2.3) [SUSv4]	wcspbrk(GLIBC_2.3) [SUSv4]
wcsrchr(GLIBC_2.3) [SUSv4]	wcsrtombs(GLIBC_2.3) [SUSv4]	wcsspn(GLIBC_2.3) [SUSv4]	wcsstr(GLIBC_2.3) [SUSv4]
wcstod(GLIBC_2.3) [SUSv4]	wcstof(GLIBC_2.3) [SUSv4]	wcstoimax(GLIBC_2.3) [SUSv4]	wcstok(GLIBC_2.3) [SUSv4]
wcstol(GLIBC_2.3) [SUSv4]	wcstold(GLIBC_2.3) [SUSv4]	wcstold(GLIBC_2.4) [SUSv4]	wcstoll(GLIBC_2.3) [SUSv4]
wcstombs(GLIBC_2.3) [SUSv4]	wcstoq(GLIBC_2.3) [LSB]	wcstoul(GLIBC_2.3) [SUSv4]	wcstoull(GLIBC_2.3) [SUSv4]
wcstoumax(GLIBC_2.3) [SUSv4]	wcstouq(GLIBC_2.3) [LSB]	wcswcs(GLIBC_2.3) [SUSv3]	wcswidth(GLIBC_2.3) [SUSv4]
wcsxfrm(GLIBC_2.3) [SUSv4]	wctob(GLIBC_2.3) [SUSv4]	wctomb(GLIBC_2.3) [SUSv4]	wctrans(GLIBC_2.3) [SUSv4]
wctype(GLIBC_2.3) [SUSv4]	wcwidth(GLIBC_2.3) [SUSv4]	wmemchr(GLIBC_2.3) [SUSv4]	wmemcmp(GLIBC_2.3) [SUSv4]
wmemcpy(GLIBC_2.3) [SUSv4]	wmemmove(GLIBC_2.3) [SUSv4]	wmemset(GLIBC_2.3) [SUSv4]	wprintf(GLIBC_2.3) [SUSv4]
wprintf(GLIBC_2.4) [SUSv4]	wscanf(GLIBC_2.3) [LSB]	wscanf(GLIBC_2.4) [LSB]	

An LSB conforming implementation shall provide the architecture specific deprecated functions for Wide Characters specified in Table 10-19, with the full mandatory functionality as described in the referenced underlying specification.

Note: These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-19 libc - Wide Characters Deprecated Function Interfaces

__wcstold_internal(GLIBC_2.3) [LSB]	fwprintf(GLIBC_2.3) [SUSv4]	fwscanf(GLIBC_2.3) [LSB]	swprintf(GLIBC_2.3) [SUSv4]
swscanf(GLIBC_2.3) [LSB]	vfwprintf(GLIBC_2.3) [SUSv4]	vfwscanf(GLIBC_2.3) [LSB]	vswprintf(GLIBC_2.3) [SUSv4]
vswscanf(GLIBC_2.3) [LSB]	vwprintf(GLIBC_2.3) [SUSv4]	vwscanf(GLIBC_2.3) [LSB]	wcstold(GLIBC_2.3) [SUSv4]
wprintf(GLIBC_2.3) [SUSv4]	wscanf(GLIBC_2.3) [LSB]		

10.2.11 String Functions

10.2.11.1 Interfaces for String Functions

An LSB conforming implementation shall provide the architecture specific functions for String Functions specified in Table 10-20, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-20 libc - String Functions Function Interfaces

__mempcpy(GLIBC_2.3) [LSB]	__rawmemchr(GLIBC_2.3) [LSB]	__stpcpy(GLIBC_2.3) [LSB]	__strdup(GLIBC_2.3) [LSB]
__strtod_internal(GLIBC_2.3) [LSB]	__strtof_internal(GLIBC_2.3) [LSB]	__strtok_r(GLIBC_2.3) [LSB]	__strtol_internal(GLIBC_2.3) [LSB]
__strtold_internal(GLIBC_2.3) [LSB]	__strtold_internal(GLIBC_2.4) [LSB]	__strtoll_internal(GLIBC_2.3) [LSB]	__strtoul_internal(GLIBC_2.3) [LSB]
__strtoull_internal(GLIBC_2.3) [LSB]	__xpg_strerror_r(GLIBC_2.3.4) [LSB]	bcmp(GLIBC_2.3) [SUSv3]	bcopy(GLIBC_2.3) [SUSv3]
bzero(GLIBC_2.3) [SUSv3]	ffs(GLIBC_2.3) [SUSv4]	index(GLIBC_2.3) [SUSv3]	memccpy(GLIBC_2.3) [SUSv4]
memchr(GLIBC_2.3) [SUSv4]	memcmp(GLIBC_2.3) [SUSv4]	memcpy(GLIBC_2.3) [SUSv4]	memmove(GLIBC_2.3) [SUSv4]
memrchr(GLIBC_2.3) [LSB]	memset(GLIBC_2.3) [SUSv4]	rindex(GLIBC_2.3) [SUSv3]	stpcpy(GLIBC_2.3) [SUSv4]
stpncpy(GLIBC_2.3) [SUSv4]	strcasecmp(GLIBC_2.3) [SUSv4]	strcasestr(GLIBC_2.3) [LSB]	strcat(GLIBC_2.3) [SUSv4]
strchr(GLIBC_2.3) [SUSv4]	strcmp(GLIBC_2.3) [SUSv4]	strcoll(GLIBC_2.3) [SUSv4]	strcpy(GLIBC_2.3) [SUSv4]
strcspn(GLIBC_2.3) [SUSv4]	strdup(GLIBC_2.3) [SUSv4]	strerror(GLIBC_2.3) [SUSv4]	strerror_r(GLIBC_2.3) [LSB]
strfmon(GLIBC_2.3) [SUSv4]	strfmon(GLIBC_2.4) [SUSv4]	strftime(GLIBC_2.3) [SUSv4]	strlen(GLIBC_2.3) [SUSv4]
strncasecmp(GLIBC_2.3) [SUSv4]	strncat(GLIBC_2.3) [SUSv4]	strncmp(GLIBC_2.3) [SUSv4]	strncpy(GLIBC_2.3) [SUSv4]
strndup(GLIBC_2.3) [SUSv4]	strnlen(GLIBC_2.3) [SUSv4]	strpbrk(GLIBC_2.3) [SUSv4]	strptime(GLIBC_2.3) [LSB]
strrchr(GLIBC_2.3) [SUSv4]	strsep(GLIBC_2.3) [LSB]	strsignal(GLIBC_2.3) [SUSv4]	strspn(GLIBC_2.3) [SUSv4]
strstr(GLIBC_2.3)	strtof(GLIBC_2.3)	strtoimax(GLIBC	strtok(GLIBC_2.3

[SUSv4]	[SUSv4]	_2.3) [SUSv4]	) [SUSv4]
strtok_r(GLIBC_2.3) [SUSv4]	strtold(GLIBC_2.3) [SUSv4]	strtold(GLIBC_2.4) [SUSv4]	strtoll(GLIBC_2.3) [SUSv4]
strtoq(GLIBC_2.3) [LSB]	strtoull(GLIBC_2.3) [SUSv4]	strtoumax(GLIBC_2.3) [SUSv4]	strtouq(GLIBC_2.3) [LSB]
strxfrm(GLIBC_2.3) [SUSv4]	swab(GLIBC_2.3) [SUSv4]		

An LSB conforming implementation shall provide the architecture specific deprecated functions for String Functions specified in Table 10-21, with the full mandatory functionality as described in the referenced underlying specification.

> **Note:** These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-21 libc - String Functions Deprecated Function Interfaces

__strtold_internal(GLIBC_2.3) [LSB]	strerror_r(GLIBC_2.3) [LSB]	strfmon(GLIBC_2.3) [SUSv4]	strtold(GLIBC_2.3) [SUSv4]

10.2.12 IPC Functions

10.2.12.1 Interfaces for IPC Functions

An LSB conforming implementation shall provide the architecture specific functions for IPC Functions specified in Table 10-22, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-22 libc - IPC Functions Function Interfaces

ftok(GLIBC_2.3) [SUSv4]	msgctl(GLIBC_2.3) [SUSv4]	msgget(GLIBC_2.3) [SUSv4]	msgrcv(GLIBC_2.3) [SUSv4]
msgsnd(GLIBC_2.3) [SUSv4]	semctl(GLIBC_2.3) [SUSv4]	semget(GLIBC_2.3) [SUSv4]	semop(GLIBC_2.3) [SUSv4]
shmat(GLIBC_2.3) [SUSv4]	shmctl(GLIBC_2.3) [SUSv4]	shmdt(GLIBC_2.3) [SUSv4]	shmget(GLIBC_2.3) [SUSv4]

10.2.13 Regular Expressions

10.2.13.1 Interfaces for Regular Expressions

An LSB conforming implementation shall provide the architecture specific functions for Regular Expressions specified in Table 10-23, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-23 libc - Regular Expressions Function Interfaces

regcomp(GLIBC_2.3) [SUSv4]	regerror(GLIBC_2.3) [SUSv4]	regexec(GLIBC_2.3.4) [LSB]	regfree(GLIBC_2.3) [SUSv4]

10.2.14 Character Type Functions

10.2.14.1 Interfaces for Character Type Functions

An LSB conforming implementation shall provide the architecture specific functions for Character Type Functions specified in Table 10-24, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-24 libc - Character Type Functions Function Interfaces

__ctype_get_mb_cur_max(GLIBC_2.3) [LSB]	_tolower(GLIBC_2.3) [SUSv4]	_toupper(GLIBC_2.3) [SUSv4]	isalnum(GLIBC_2.3) [SUSv4]
isalpha(GLIBC_2.3) [SUSv4]	isascii(GLIBC_2.3) [SUSv4]	iscntrl(GLIBC_2.3) [SUSv4]	isdigit(GLIBC_2.3) [SUSv4]
isgraph(GLIBC_2.3) [SUSv4]	islower(GLIBC_2.3) [SUSv4]	isprint(GLIBC_2.3) [SUSv4]	ispunct(GLIBC_2.3) [SUSv4]
isspace(GLIBC_2.3) [SUSv4]	isupper(GLIBC_2.3) [SUSv4]	iswalnum(GLIBC_2.3) [SUSv4]	iswalpha(GLIBC_2.3) [SUSv4]
iswblank(GLIBC_2.3) [SUSv4]	iswcntrl(GLIBC_2.3) [SUSv4]	iswctype(GLIBC_2.3) [SUSv4]	iswdigit(GLIBC_2.3) [SUSv4]
iswgraph(GLIBC_2.3) [SUSv4]	iswlower(GLIBC_2.3) [SUSv4]	iswprint(GLIBC_2.3) [SUSv4]	iswpunct(GLIBC_2.3) [SUSv4]
iswspace(GLIBC_2.3) [SUSv4]	iswupper(GLIBC_2.3) [SUSv4]	iswxdigit(GLIBC_2.3) [SUSv4]	isxdigit(GLIBC_2.3) [SUSv4]
toascii(GLIBC_2.3) [SUSv4]	tolower(GLIBC_2.3) [SUSv4]	toupper(GLIBC_2.3) [SUSv4]	

10.2.15 Time Manipulation

10.2.15.1 Interfaces for Time Manipulation

An LSB conforming implementation shall provide the architecture specific functions for Time Manipulation specified in Table 10-25, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-25 libc - Time Manipulation Function Interfaces

adjtime(GLIBC_2.3) [LSB]	asctime(GLIBC_2.3) [SUSv4]	asctime_r(GLIBC_2.3) [SUSv4]	ctime(GLIBC_2.3) [SUSv4]
ctime_r(GLIBC_2.3) [SUSv4]	difftime(GLIBC_2.3) [SUSv4]	gmtime(GLIBC_2.3) [SUSv4]	gmtime_r(GLIBC_2.3) [SUSv4]
localtime(GLIBC_2.3) [SUSv4]	localtime_r(GLIBC_2.3) [SUSv4]	mktime(GLIBC_2.3) [SUSv4]	tzset(GLIBC_2.3) [SUSv4]
ualarm(GLIBC_2.3) [SUSv3]			

An LSB conforming implementation shall provide the architecture specific data interfaces for Time Manipulation specified in Table 10-26, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-26 libc - Time Manipulation Data Interfaces

__daylight(GLIBC_2.3) [LSB]	__timezone(GLIBC_2.3) [LSB]	__tzname(GLIBC_2.3) [LSB]	daylight(GLIBC_2.3) [SUSv4]
timezone(GLIBC_2.3) [SUSv4]	tzname(GLIBC_2.3) [SUSv4]		

10.2.16 Terminal Interface Functions

10.2.16.1 Interfaces for Terminal Interface Functions

An LSB conforming implementation shall provide the architecture specific functions for Terminal Interface Functions specified in Table 10-27, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-27 libc - Terminal Interface Functions Function Interfaces

cfgetispeed(GLIBC_2.3) [SUSv4]	cfgetospeed(GLIBC_2.3) [SUSv4]	cfmakeraw(GLIBC_2.3) [LSB]	cfsetispeed(GLIBC_2.3) [SUSv4]
cfsetospeed(GLIBC_2.3) [SUSv4]	cfsetspeed(GLIBC_2.3) [LSB]	tcdrain(GLIBC_2.3) [SUSv4]	tcflow(GLIBC_2.3) [SUSv4]
tcflush(GLIBC_2.3) [SUSv4]	tcgetattr(GLIBC_2.3) [SUSv4]	tcgetpgrp(GLIBC_2.3) [SUSv4]	tcgetsid(GLIBC_2.3) [SUSv4]
tcsendbreak(GLIBC_2.3) [SUSv4]	tcsetattr(GLIBC_2.3) [SUSv4]	tcsetpgrp(GLIBC_2.3) [SUSv4]	

10.2.17 System Database Interface

10.2.17.1 Interfaces for System Database Interface

An LSB conforming implementation shall provide the architecture specific functions for System Database Interface specified in Table 10-28, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-28 libc - System Database Interface Function Interfaces

endgrent(GLIBC_2.3) [SUSv4]	endprotoent(GLIBC_2.3) [SUSv4]	endpwent(GLIBC_2.3) [SUSv4]	endservent(GLIBC_2.3) [SUSv4]
endutent(GLIBC_2.3) [LSB]	endutxent(GLIBC_2.3) [SUSv4]	getgrent(GLIBC_2.3) [SUSv4]	getgrent_r(GLIBC_2.3) [LSB]
getgrgid(GLIBC_2.3) [SUSv4]	getgrgid_r(GLIBC_2.3) [SUSv4]	getgrnam(GLIBC_2.3) [SUSv4]	getgrnam_r(GLIBC_2.3) [SUSv4]
getgrouplist(GLIBC_2.3) [LSB]	gethostbyaddr(GLIBC_2.3) [SUSv3]	gethostbyaddr_r(GLIBC_2.3) [LSB]	gethostbyname(GLIBC_2.3) [SUSv3]
gethostbyname2(GLIBC_2.3) [LSB]	gethostbyname2_r(GLIBC_2.3) [LSB]	gethostbyname_r(GLIBC_2.3) [LSB]	getprotobyname(GLIBC_2.3) [SUSv4]
getprotobyname_r(GLIBC_2.3) [LSB]	getprotobynumber(GLIBC_2.3) [SUSv4]	getprotobynumber_r(GLIBC_2.3) [LSB]	getprotoent(GLIBC_2.3) [SUSv4]
getprotoent_r(GLIBC_2.3) [LSB]	getpwent(GLIBC_2.3) [SUSv4]	getpwent_r(GLIBC_2.3) [LSB]	getpwnam(GLIBC_2.3) [SUSv4]
getpwnam_r(GLIBC_2.3) [SUSv4]	getpwuid(GLIBC_2.3) [SUSv4]	getpwuid_r(GLIBC_2.3) [SUSv4]	getservbyname(GLIBC_2.3) [SUSv4]
getservbyname_r(GLIBC_2.3) [LSB]	getservbyport(GLIBC_2.3) [SUSv4]	getservbyport_r(GLIBC_2.3) [LSB]	getservent(GLIBC_2.3) [SUSv4]
getservent_r(GLIBC_2.3) [LSB]	getutent(GLIBC_2.3) [LSB]	getutent_r(GLIBC_2.3) [LSB]	getutxent(GLIBC_2.3) [SUSv4]
getutxid(GLIBC_2.3) [SUSv4]	getutxline(GLIBC_2.3) [SUSv4]	pututxline(GLIBC_2.3) [SUSv4]	setgrent(GLIBC_2.3) [SUSv4]
setgroups(GLIBC_2.3) [LSB]	setprotoent(GLIBC_2.3) [SUSv4]	setpwent(GLIBC_2.3) [SUSv4]	setservent(GLIBC_2.3) [SUSv4]
setutent(GLIBC_2.3) [LSB]	setutxent(GLIBC_2.3) [SUSv4]	utmpname(GLIBC_2.3) [LSB]	

An LSB conforming implementation shall provide the architecture specific deprecated functions for System Database Interface specified in Table 10-29, with the full mandat-

ory functionality as described in the referenced underlying specification.

> **Note:** These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-29 libc - System Database Interface Deprecated Function Interfaces

gethostbyaddr(GLIBC_2.3) [SUSv3]	gethostbyaddr_r(GLIBC_2.3) [LSB]	gethostbyname(GLIBC_2.3) [SUSv3]	gethostbyname2(GLIBC_2.3) [LSB]
gethostbyname2_r(GLIBC_2.3) [LSB]	gethostbyname_r(GLIBC_2.3) [LSB]		

10.2.18 Language Support

10.2.18.1 Interfaces for Language Support

An LSB conforming implementation shall provide the architecture specific functions for Language Support specified in Table 10-30, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-30 libc - Language Support Function Interfaces

__libc_start_main(GLIBC_2.3) [LSB]			

10.2.19 Large File Support

10.2.19.1 Interfaces for Large File Support

An LSB conforming implementation shall provide the architecture specific functions for Large File Support specified in Table 10-31, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-31 libc - Large File Support Function Interfaces

__fxstat64(GLIBC_2.3) [LSB]	__lxstat64(GLIBC_2.3) [LSB]	__xstat64(GLIBC_2.3) [LSB]	creat64(GLIBC_2.3) [LFS]
fgetpos64(GLIBC_2.3) [LFS]	fopen64(GLIBC_2.3) [LFS]	freopen64(GLIBC_2.3) [LFS]	fseeko64(GLIBC_2.3) [LFS]
fsetpos64(GLIBC_2.3) [LFS]	fstatfs64(GLIBC_2.3) [LSB]	fstatvfs64(GLIBC_2.3) [LFS]	ftello64(GLIBC_2.3) [LFS]
ftruncate64(GLIBC_2.3) [LFS]	ftw64(GLIBC_2.3) [LFS]	getrlimit64(GLIBC_2.3) [LFS]	lockf64(GLIBC_2.3) [LFS]
lseek64(GLIBC_2.3) [LFS]	mkstemp64(GLIBC_2.3) [LSB]	mmap64(GLIBC_2.3) [LFS]	nftw64(GLIBC_2.3.3) [LFS]
open64(GLIBC_2.3) [LFS]	posix_fadvise64(GLIBC_2.3) [LSB]	posix_fallocate64(GLIBC_2.3) [LSB]	pread64(GLIBC_2.3) [LSB]
pwrite64(GLIBC_2.3) [LSB]	readdir64(GLIBC_2.3) [LFS]	readdir64_r(GLIBC_2.3) [LSB]	statfs64(GLIBC_2.3) [LSB]
statvfs64(GLIBC_2.3) [LFS]	tmpfile64(GLIBC_2.3) [LFS]	truncate64(GLIBC_2.3) [LFS]	

An LSB conforming implementation shall provide the architecture specific deprecated functions for Large File Support specified in Table 10-32, with the full mandatory functionality as described in the referenced underlying specification.

Note: These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-32 libc - Large File Support Deprecated Function Interfaces

fstatfs64(GLIBC_2.3) [LSB]	statfs64(GLIBC_2.3) [LSB]		

10.2.20 Inotify

10.2.20.1 Interfaces for Inotify

No external functions are defined for libc - Inotify in this part of the specification. See also the generic specification.

10.2.21 Standard Library

10.2.21.1 Interfaces for Standard Library

An LSB conforming implementation shall provide the architecture specific functions for Standard Library specified in Table 10-33, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-33 libc - Standard Library Function Interfaces

_Exit(GLIBC_2.3) [SUSv4]	__assert_fail(GLIBC_2.3) [LSB]	__cxa_atexit(GLIBC_2.3) [LSB]	__cxa_finalize(GLIBC_2.3) [LSB]
__errno_location(GLIBC_2.3) [LSB]	__fpending(GLIBC_2.3) [LSB]	__getpagesize(GLIBC_2.3) [LSB]	__isinf(GLIBC_2.3) [LSB]
__isinff(GLIBC_2.3) [LSB]	__isinfl(GLIBC_2.3) [LSB]	__isinfl(GLIBC_2.4) [LSB]	__isnan(GLIBC_2.3) [LSB]
__isnanf(GLIBC_2.3) [LSB]	__isnanl(GLIBC_2.3) [LSB]	__isnanl(GLIBC_2.4) [LSB]	__sysconf(GLIBC_2.3) [LSB]
__xpg_basename(GLIBC_2.3) [LSB]	_exit(GLIBC_2.3) [SUSv4]	_longjmp(GLIBC_2.3.4) [SUSv4]	_setjmp(GLIBC_2.3.4) [SUSv4]
a64l(GLIBC_2.3) [SUSv4]	abort(GLIBC_2.3) [SUSv4]	abs(GLIBC_2.3) [SUSv4]	alphasort(GLIBC_2.3) [SUSv4]
alphasort64(GLIBC_2.3) [LSB]	argz_add(GLIBC_2.3) [LSB]	argz_add_sep(GLIBC_2.3) [LSB]	argz_append(GLIBC_2.3) [LSB]
argz_count(GLIBC_2.3) [LSB]	argz_create(GLIBC_2.3) [LSB]	argz_create_sep(GLIBC_2.3) [LSB]	argz_delete(GLIBC_2.3) [LSB]
argz_extract(GLIBC_2.3) [LSB]	argz_insert(GLIBC_2.3) [LSB]	argz_next(GLIBC_2.3) [LSB]	argz_replace(GLIBC_2.3) [LSB]
argz_stringify(GLIBC_2.3) [LSB]	atof(GLIBC_2.3) [SUSv4]	atoi(GLIBC_2.3) [SUSv4]	atol(GLIBC_2.3) [SUSv4]
atoll(GLIBC_2.3) [SUSv4]	basename(GLIBC_2.3) [LSB]	bsearch(GLIBC_2.3) [SUSv4]	calloc(GLIBC_2.3) [SUSv4]
closelog(GLIBC_2.3) [SUSv4]	confstr(GLIBC_2.3) [SUSv4]	cuserid(GLIBC_2.3) [SUSv2]	daemon(GLIBC_2.3) [LSB]
dirfd(GLIBC_2.3) [SUSv4]	dirname(GLIBC_2.3) [SUSv4]	div(GLIBC_2.3) [SUSv4]	dl_iterate_phdr(GLIBC_2.3) [LSB]
drand48(GLIBC_2.3) [SUSv4]	drand48_r(GLIBC_2.3) [LSB]	ecvt(GLIBC_2.3) [SUSv3]	envz_add(GLIBC_2.3) [LSB]
envz_entry(GLIB	envz_get(GLIBC_	envz_merge(GLIB	envz_remove(GLI

C_2.3) [LSB]	2.3) [LSB]	C_2.3) [LSB]	BC_2.3) [LSB]
envz_strip(GLIBC_2.3) [LSB]	erand48(GLIBC_2.3) [SUSv4]	erand48_r(GLIBC_2.3) [LSB]	err(GLIBC_2.3) [LSB]
error(GLIBC_2.3) [LSB]	errx(GLIBC_2.3) [LSB]	fcvt(GLIBC_2.3) [SUSv3]	fmemopen(GLIBC_2.3) [SUSv4]
fmtmsg(GLIBC_2.3) [SUSv4]	fnmatch(GLIBC_2.3) [LSB]	fpathconf(GLIBC_2.3) [SUSv4]	free(GLIBC_2.3) [SUSv4]
freeaddrinfo(GLIBC_2.3) [SUSv4]	ftrylockfile(GLIBC_2.3) [SUSv4]	ftw(GLIBC_2.3) [SUSv4]	funlockfile(GLIBC_2.3) [SUSv4]
gai_strerror(GLIBC_2.3) [SUSv4]	gcvt(GLIBC_2.3) [SUSv3]	getaddrinfo(GLIBC_2.3) [SUSv4]	getcwd(GLIBC_2.3) [LSB]
getdate(GLIBC_2.3) [SUSv4]	getdomainname(GLIBC_2.3) [LSB]	getenv(GLIBC_2.3) [SUSv4]	getlogin(GLIBC_2.3) [SUSv4]
getlogin_r(GLIBC_2.3) [SUSv4]	getnameinfo(GLIBC_2.3) [SUSv4]	getopt(GLIBC_2.3) [LSB]	getopt_long(GLIBC_2.3) [LSB]
getopt_long_only(GLIBC_2.3) [LSB]	getsubopt(GLIBC_2.3) [SUSv4]	gettimeofday(GLIBC_2.3) [SUSv4]	glob(GLIBC_2.3) [SUSv4]
glob64(GLIBC_2.3) [LSB]	globfree(GLIBC_2.3) [SUSv4]	globfree64(GLIBC_2.3) [LSB]	grantpt(GLIBC_2.3) [SUSv4]
hcreate(GLIBC_2.3) [SUSv4]	hcreate_r(GLIBC_2.3) [LSB]	hdestroy(GLIBC_2.3) [SUSv4]	hdestroy_r(GLIBC_2.3) [LSB]
hsearch(GLIBC_2.3) [SUSv4]	hsearch_r(GLIBC_2.3) [LSB]	htonl(GLIBC_2.3) [SUSv4]	htons(GLIBC_2.3) [SUSv4]
imaxabs(GLIBC_2.3) [SUSv4]	imaxdiv(GLIBC_2.3) [SUSv4]	inet_addr(GLIBC_2.3) [SUSv4]	inet_aton(GLIBC_2.3) [LSB]
inet_ntoa(GLIBC_2.3) [SUSv4]	inet_ntop(GLIBC_2.3) [SUSv4]	inet_pton(GLIBC_2.3) [SUSv4]	initstate(GLIBC_2.3) [SUSv4]
initstate_r(GLIBC_2.3) [LSB]	insque(GLIBC_2.3) [SUSv4]	isatty(GLIBC_2.3) [SUSv4]	isblank(GLIBC_2.3) [SUSv4]
jrand48(GLIBC_2.3) [SUSv4]	jrand48_r(GLIBC_2.3) [LSB]	l64a(GLIBC_2.3) [SUSv4]	labs(GLIBC_2.3) [SUSv4]
lcong48(GLIBC_2.3) [SUSv4]	lcong48_r(GLIBC_2.3) [LSB]	ldiv(GLIBC_2.3) [SUSv4]	lfind(GLIBC_2.3) [SUSv4]
llabs(GLIBC_2.3) [SUSv4]	lldiv(GLIBC_2.3) [SUSv4]	longjmp(GLIBC_2.3.4) [SUSv4]	lrand48(GLIBC_2.3) [SUSv4]
lrand48_r(GLIBC_2.3) [LSB]	lsearch(GLIBC_2.3) [SUSv4]	makecontext(GLIBC_2.3) [SUSv3]	malloc(GLIBC_2.3) [SUSv4]
memmem(GLIBC_2.3) [LSB]	mkdtemp(GLIBC_2.3) [SUSv4]	mkstemp(GLIBC_2.3) [SUSv4]	mktemp(GLIBC_2.3) [SUSv3]
mrand48(GLIBC_2.3) [SUSv4]	mrand48_r(GLIBC_2.3) [LSB]	nftw(GLIBC_2.3.3) [SUSv4]	nrand48(GLIBC_2.3) [SUSv4]
nrand48_r(GLIBC_2.3) [LSB]	ntohl(GLIBC_2.3) [SUSv4]	ntohs(GLIBC_2.3) [SUSv4]	open_memstream(GLIBC_2.3) [SUSv4]
openlog(GLIBC_2.3) [SUSv4]	perror(GLIBC_2.3) [SUSv4]	posix_openpt(GLIBC_2.3) [SUSv4]	ptsname(GLIBC_2.3) [SUSv4]
putenv(GLIBC_2.3) [SUSv4]	qsort(GLIBC_2.3) [SUSv4]	rand(GLIBC_2.3) [SUSv4]	rand_r(GLIBC_2.3) [SUSv4]
random(GLIBC_2	random_r(GLIBC	realloc(GLIBC_2.	realpath(GLIBC_2

.3) [SUSv4]	_2.3) [LSB]	3) [SUSv4]	.3) [SUSv4]
remque(GLIBC_2.3) [SUSv4]	scandir(GLIBC_2.3) [SUSv4]	scandir64(GLIBC_2.3) [LSB]	seed48(GLIBC_2.3) [SUSv4]
seed48_r(GLIBC_2.3) [LSB]	sendfile(GLIBC_2.3) [LSB]	setenv(GLIBC_2.3) [SUSv4]	sethostname(GLIBC_2.3) [LSB]
setlogmask(GLIBC_2.3) [SUSv4]	setstate(GLIBC_2.3) [SUSv4]	setstate_r(GLIBC_2.3) [LSB]	srand(GLIBC_2.3) [SUSv4]
srand48(GLIBC_2.3) [SUSv4]	srand48_r(GLIBC_2.3) [LSB]	srandom(GLIBC_2.3) [SUSv4]	srandom_r(GLIBC_2.3) [LSB]
strtod(GLIBC_2.3) [SUSv4]	strtol(GLIBC_2.3) [SUSv4]	strtoul(GLIBC_2.3) [SUSv4]	swapcontext(GLIBC_2.3.4) [SUSv3]
syslog(GLIBC_2.3) [SUSv4]	syslog(GLIBC_2.4) [SUSv4]	system(GLIBC_2.3) [LSB]	tdelete(GLIBC_2.3) [SUSv4]
tfind(GLIBC_2.3) [SUSv4]	tmpfile(GLIBC_2.3) [SUSv4]	tmpnam(GLIBC_2.3) [SUSv4]	tsearch(GLIBC_2.3) [SUSv4]
ttyname(GLIBC_2.3) [SUSv4]	ttyname_r(GLIBC_2.3) [SUSv4]	twalk(GLIBC_2.3) [SUSv4]	unlockpt(GLIBC_2.3) [SUSv4]
unsetenv(GLIBC_2.3) [SUSv4]	usleep(GLIBC_2.3) [SUSv3]	verrx(GLIBC_2.3) [LSB]	vfscanf(GLIBC_2.3) [LSB]
vfscanf(GLIBC_2.4) [LSB]	vscanf(GLIBC_2.3) [LSB]	vscanf(GLIBC_2.4) [LSB]	vsscanf(GLIBC_2.3) [LSB]
vsscanf(GLIBC_2.4) [LSB]	vsyslog(GLIBC_2.3) [LSB]	vsyslog(GLIBC_2.4) [LSB]	warn(GLIBC_2.3) [LSB]
warnx(GLIBC_2.3) [LSB]	wordexp(GLIBC_2.3) [SUSv4]	wordfree(GLIBC_2.3) [SUSv4]	

An LSB conforming implementation shall provide the architecture specific deprecated functions for Standard Library specified in Table 10-34, with the full mandatory functionality as described in the referenced underlying specification.

> **Note:** These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-34 libc - Standard Library Deprecated Function Interfaces

__isinfl(GLIBC_2.3) [LSB]	__isnanl(GLIBC_2.3) [LSB]	basename(GLIBC_2.3) [LSB]	getdomainname(GLIBC_2.3) [LSB]
inet_aton(GLIBC_2.3) [LSB]	syslog(GLIBC_2.3) [SUSv4]	tmpnam(GLIBC_2.3) [SUSv4]	vfscanf(GLIBC_2.3) [LSB]
vscanf(GLIBC_2.3) [LSB]	vsscanf(GLIBC_2.3) [LSB]	vsyslog(GLIBC_2.3) [LSB]	

An LSB conforming implementation shall provide the architecture specific data interfaces for Standard Library specified in Table 10-35, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-35 libc - Standard Library Data Interfaces

__environ(GLIBC_2.3) [LSB]	_environ(GLIBC_2.3) [LSB]	_sys_errlist(GLIBC_2.12) [LSB]	environ(GLIBC_2.3) [SUSv4]
getdate_err(GLIBC_2.3) [SUSv4]	optarg(GLIBC_2.3) [SUSv4]	opterr(GLIBC_2.3) [SUSv4]	optind(GLIBC_2.3) [SUSv4]
optopt(GLIBC_2.			

3) [SUSv4]			

10.2.22 GNU Extensions for libc

10.2.22.1 Interfaces for GNU Extensions for libc

An LSB conforming implementation shall provide the architecture specific functions for GNU Extensions for libc specified in Table 10-36, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-36 libc - GNU Extensions for libc Function Interfaces

gnu_get_libc_release(GLIBC_2.3) [LSB]	gnu_get_libc_version(GLIBC_2.3) [LSB]		

10.3 Data Definitions for libc

This section defines global identifiers and their values that are associated with interfaces contained in libc. These definitions are organized into groups that correspond to system headers. This convention is used as a convenience for the reader, and does not imply the existence of these headers, or their content. Where an interface is defined as requiring a particular system header file all of the data definitions for that system header file presented here shall be in effect.

This section gives data definitions to promote binary application portability, not to repeat source interface definitions available elsewhere. System providers and application developers should use this ABI to supplement - not to replace - source interface definition specifications.

This specification uses the ISO C (1999) C Language as the reference programming language, and data definitions are specified in ISO C format. The C language is used here as a convenient notation. Using a C language description of these data objects does not preclude their use by other programming languages.

10.3.1 argz.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.2 assert.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.3 cpio.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.4 ctype.h

```
enum {
    _ISupper = 1,
    _ISlower = 2,
    _ISalpha = 4,
    _ISdigit = 8,
    _ISxdigit = 16,
    _ISspace = 32,
    _ISprint = 64,
    _ISgraph = 128,
    _ISblank = 256,
    _IScntrl = 512,
    _ISpunct = 1024,
    _ISalnum = 2048
};
```

10.3.5 dirent.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.6 elf.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.7 endian.h

```
#define __BYTE_ORDER    __BIG_ENDIAN
```

10.3.8 errno.h

```
#define EDEADLOCK       58
```

10.3.9 fcntl.h

```
#define O_NOFOLLOW      0100000
#define O_LARGEFILE     0200000
#define O_DIRECTORY     040000
#define POSIX_FADV_DONTNEED     4
#define POSIX_FADV_NOREUSE      5

#define F_GETLK64       12
#define F_SETLK64       13
#define F_SETLKW64      14
```

10.3.10 fmtmsg.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```


10.3.11 fnmatch.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.12 ftw.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.13 getopt.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.14 glob.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.15 iconv.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.16 ifaddrs.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.17 inttypes.h

```
#define __PRI64_PREFIX  "l"
#define __PRIPTR_PREFIX "l"

typedef ldiv_t imaxdiv_t;
```

10.3.18 langinfo.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
```

```
 */
```

10.3.19 limits.h

```
#define ULONG_MAX       0xFFFFFFFFFFFFFFFFUL
#define LONG_BIT        64
#define LONG_MAX        9223372036854775807L

#define CHAR_MIN        0
#define CHAR_MAX        255

#define PTHREAD_STACK_MIN       131072
```

10.3.20 link.h

```
struct dl_phdr_info {
    Elf64_Addr dlpi_addr;
    const char *dlpi_name;
    const Elf64_Phdr *dlpi_phdr;
    Elf64_Half dlpi_phnum;
    unsigned long long int dlpi_adds;
    unsigned long long int dlpi_subs;
    size_t dlpi_tls_modid;
    void *dlpi_tls_data;
};
```

10.3.21 locale.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.22 lsb/time.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.23 lsb/types.h

```
typedef int64_t ssize_t;
```

10.3.24 lsb/wchar.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.25 net/if.h

```
/*
 * This header is architecture neutral
```



```
 * Please refer to the generic specification for details
 */
```

10.3.26 netdb.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.27 netinet/icmp6.h

```
#define ICMP6_RR_RESULT_FLAGS_FORBIDDEN 0x1000
#define ICMP6_RR_RESULT_FLAGS_OOB       0x2000
#define ND_NA_FLAG_OVERRIDE     0x20000000
#define ND_NA_FLAG_SOLICITED    0x40000000
#define ND_NA_FLAG_ROUTER       0x80000000
```

10.3.28 netinet/igmp.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.29 netinet/in.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.30 netinet/in_systm.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.31 netinet/ip.h

```
struct timestamp {
    u_int8_t len;
    u_int8_t ptr;
    unsigned int overflow:4;
    unsigned int flags:4;
    u_int32_t data[9];
};
struct iphdr {
    unsigned int version:4;
    unsigned int ihl:4;
    u_int8_t tos;
    u_int16_t tot_len;
    u_int16_t id;
    u_int16_t frag_off;
    u_int8_t ttl;
    u_int8_t protocol;
```

```
    u_int16_t check;
    u_int32_t saddr;
    u_int32_t daddr;
};
struct ip {
    unsigned int ip_v:4;
    unsigned int ip_hl:4;
    u_int8_t ip_tos;
    u_short ip_len;
    u_short ip_id;
    u_short ip_off;
    u_int8_t ip_ttl;
    u_int8_t ip_p;
    u_short ip_sum;
    struct in_addr ip_src;
    struct in_addr ip_dst;
};
struct ip_timestamp {
    u_int8_t ipt_len;
    u_int8_t ipt_code;
    u_int8_t ipt_ptr;
    unsigned int ipt_flg:4;
    unsigned int ipt_oflw:4;
    u_int32_t data[9];
};
```

10.3.32 netinet/ip6.h

```
#define IP6_ALERT_MLD   0x0000
#define IP6F_MORE_FRAG  0x0001
#define IP6_ALERT_RSVP  0x0001
#define IP6_ALERT_AN    0x0002
#define IP6F_RESERVED_MASK      0x0006
#define IP6F_OFF_MASK   0xfff8
```

10.3.33 netinet/ip_icmp.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.34 netinet/tcp.h

```
struct tcphdr {
    uint16_t source;
    uint16_t dest;
    uint32_t seq;
    uint32_t ack_seq;
    uint16_t doff:4;
    uint16_t res1:4;
    uint16_t res2:2;
    uint16_t urg:1;
    uint16_t ack:1;
    uint16_t psh:1;
    uint16_t rst:1;
    uint16_t syn:1;
    uint16_t fin:1;
    uint16_t window;
    uint16_t check;
    uint16_t urg_ptr;
};
```


10.3.35 netinet/udp.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.36 nl_types.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.37 pwd.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.38 regex.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.39 rpc/auth.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.40 rpc/clnt.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.41 rpc/rpc_msg.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.42 rpc/svc.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
```

```
 */
```

10.3.43 rpc/types.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.44 rpc/xdr.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.45 sched.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.46 search.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.47 setjmp.h

```
typedef long int __jmp_buf[64] __attribute__ ((aligned(16)));
```

10.3.48 signal.h

```
struct pt_regs {
    unsigned long int gpr[32];
    unsigned long int nip;
    unsigned long int msr;
    unsigned long int orig_gpr3;
    unsigned long int ctr;
    unsigned long int link;
    unsigned long int xer;
    unsigned long int ccr;
    unsigned long int softe;
    unsigned long int trap;
    unsigned long int dar;
    unsigned long int dsisr;
    unsigned long int result;
};

#define SIGEV_PAD_SIZE  ((SIGEV_MAX_SIZE/sizeof(int))-4)

#define SI_PAD_SIZE     ((SI_MAX_SIZE/sizeof(int))-4)

struct sigaction {
```

```
    union {
        sighandler_t _sa_handler;
        void (*_sa_sigaction) (int, siginfo_t *, void *);
    } __sigaction_handler;
    sigset_t sa_mask;
    int sa_flags;
    void (*sa_restorer) (void);
};

#define MINSIGSTKSZ       2048      /* Minimum stack size for a
signal handler. */
#define SIGSTKSZ        8192    /* System default stack size. */

struct sigcontext {
    unsigned long int _unused[4];
    int signal;
    unsigned long int handler;
    unsigned long int oldmask;
    struct pt_regs *regs;
    unsigned long int gp_regs[48];
    double fp_regs[33];
};
```

10.3.49 spawn.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.50 stddef.h

```
typedef int wchar_t;
typedef unsigned long int size_t;
typedef long int ptrdiff_t;
```

10.3.51 stdint.h

```
#define INT64_C(c)      c ## L
#define INTMAX_C(c)     c ## L
#define __INT64_C(c)    c ## L
#define UINT64_C(c)     c ## UL
#define UINTMAX_C(c)    c ## UL
#define __UINT64_C(c)   c ## UL

#define INTPTR_MIN      (-9223372036854775807L-1)
#define INT_FAST16_MIN  (-9223372036854775807L-1)
#define INT_FAST32_MIN  (-9223372036854775807L-1)
#define PTRDIFF_MIN     (-9223372036854775807L-1)
#define SIZE_MAX        (18446744073709551615UL)
#define UINTPTR_MAX     (18446744073709551615UL)
#define UINT_FAST16_MAX (18446744073709551615UL)
#define UINT_FAST32_MAX (18446744073709551615UL)
#define INTPTR_MAX      (9223372036854775807L)
#define INT_FAST16_MAX  (9223372036854775807L)
#define INT_FAST32_MAX  (9223372036854775807L)
#define PTRDIFF_MAX     (9223372036854775807L)

typedef long int int64_t;
typedef long int intmax_t;
typedef unsigned long int uintmax_t;
typedef long int intptr_t;
```

```
typedef unsigned long int uintptr_t;
typedef unsigned long int uint64_t;
typedef long int int_least64_t;
typedef unsigned long int uint_least64_t;
typedef long int int_fast16_t;
typedef long int int_fast32_t;
typedef long int int_fast64_t;
typedef unsigned long int uint_fast16_t;
typedef unsigned long int uint_fast32_t;
typedef unsigned long int uint_fast64_t;
```

10.3.52 stdio.h

```
#define __IO_FILE_SIZE  216
```

10.3.53 stdlib.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.54 string.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.55 sys/epoll.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.56 sys/file.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.57 sys/inotify.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.58 sys/ioctl.h

```
#define TIOCGWINSZ      0x40087468
#define TIOCSWINSZ      0x80087467
#define FIONREAD        1074030207
```



```
#define TIOCNOTTY       21538
```

10.3.59 sys/ipc.h

```
struct ipc_perm {
    key_t __key;
    uid_t uid;
    gid_t gid;
    uid_t cuid;
    gid_t cgid;
    mode_t mode;
    unsigned int __seq;
    unsigned int __pad1;
    unsigned long int __unused1;
    unsigned long int __unused2;
};
```

10.3.60 sys/mman.h

```
#define MCL_FUTURE      16384
#define MCL_CURRENT     8192
```

10.3.61 sys/msg.h

```
typedef unsigned long int msgqnum_t;
typedef unsigned long int msglen_t;

struct msqid_ds {
    struct ipc_perm msg_perm;   /* structure describing operation
permission */
    time_t msg_stime;           /* time of last msgsnd command */
    time_t msg_rtime;           /* time of last msgrcv command */
    time_t msg_ctime;           /* time of last change */
     unsigned long int __msg_cbytes;       /* current number of
bytes on queue */
     msgqnum_t msg_qnum;          /* number of messages currently
on queue */
    msglen_t msg_qbytes;        /* max number of bytes allowed on
queue */
    pid_t msg_lspid;            /* pid of last msgsnd() */
    pid_t msg_lrpid;            /* pid of last msgrcv() */
    unsigned long int __unused4;
    unsigned long int __unused5;
};
```

10.3.62 sys/param.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.63 sys/poll.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.64 sys/ptrace.h

```
enum __ptrace_request {
    PTRACE_TRACEME = 0,
    PTRACE_PEEKTEXT = 1,
    PTRACE_PEEKDATA = 2,
    PTRACE_PEEKUSER = 3,
    PTRACE_POKETEXT = 4,
    PTRACE_POKEDATA = 5,
    PTRACE_POKEUSER = 6,
    PTRACE_CONT = 7,
    PTRACE_KILL = 8,
    PTRACE_SINGLESTEP = 9,
    PTRACE_ATTACH = 16,
    PTRACE_DETACH = 17,
    PTRACE_SYSCALL = 24,
    PTRACE_SETOPTIONS = 0x4200,
    PTRACE_GETEVENTMSG = 0x4201,
    PTRACE_GETSIGINFO = 0x4202,
    PTRACE_SETSIGINFO = 0x4203
};
```

10.3.65 sys/resource.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.66 sys/select.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.67 sys/sem.h

```
struct semid_ds {
    struct ipc_perm sem_perm;
    time_t sem_otime;
    time_t sem_ctime;
    unsigned long int sem_nsems;
    unsigned long int __unused3;
    unsigned long int __unused4;
};
```

10.3.68 sys/shm.h

```
#define SHMLBA  (__getpagesize())

typedef unsigned long int shmatt_t;

struct shmid_ds {
    struct ipc_perm shm_perm;
    time_t shm_atime;
    time_t shm_dtime;
    time_t shm_ctime;
```

```
    size_t shm_segsz;
    pid_t shm_cpid;
    pid_t shm_lpid;
    shmatt_t shm_nattch;
    unsigned long int __unused5;
    unsigned long int __unused6;
};
```

10.3.69 sys/socket.h

```
typedef uint64_t __ss_aligntype;

#define SO_RCVLOWAT     16
#define SO_SNDLOWAT     17
#define SO_RCVTIMEO     18
#define SO_SNDTIMEO     19
```

10.3.70 sys/stat.h

```
#define _MKNOD_VER      0
#define _STAT_VER       1

struct stat {
    dev_t st_dev;
    ino_t st_ino;
    nlink_t st_nlink;
    mode_t st_mode;
    uid_t st_uid;
    gid_t st_gid;
    int __pad2;
    dev_t st_rdev;
    off_t st_size;
    blksize_t st_blksize;
    blkcnt_t st_blocks;
    struct timespec st_atim;    /* Time of last access. */
    struct timespec st_mtim;    /* Time of last modification. */
    struct timespec st_ctim;    /* Time of last status change. */
    unsigned long int __unused4;
    unsigned long int __unused5;
    unsigned long int __unused6;
};
struct stat64 {
    dev_t st_dev;
    ino64_t st_ino;
    nlink_t st_nlink;
    mode_t st_mode;
    uid_t st_uid;
    gid_t st_gid;
    int __pad2;
    dev_t st_rdev;
    off64_t st_size;
    blksize_t st_blksize;
    blkcnt64_t st_blocks;
    struct timespec st_atim;    /* Time of last access. */
    struct timespec st_mtim;    /* Time of last modification. */
    struct timespec st_ctim;    /* Time of last status change. */
    unsigned long int __unused4;
    unsigned long int __unused5;
    unsigned long int __unused6;
};
```

10.3.71 sys/statfs.h

```
struct statfs {
    long int f_type;           /* type of filesystem */
    long int f_bsize;          /* optimal transfer block size */
     fsblkcnt_t f_blocks;          /* total data blocks in file
system */
    fsblkcnt_t f_bfree;        /* free blocks in fs */
     fsblkcnt_t f_bavail;          /* free blocks avail to non-
superuser */
     fsfilcnt_t f_files;           /* total file nodes in file
system */
    fsfilcnt_t f_ffree;         /* free file nodes in file system
*/
    fsid_t f_fsid;             /* file system id */
    long int f_namelen;        /* maximum length of filenames */
    long int f_frsize;         /* fragment size */
    long int f_spare[5];       /* spare for later */
};
struct statfs64 {
    long int f_type;           /* type of filesystem */
    long int f_bsize;          /* optimal transfer block size */
     fsblkcnt64_t f_blocks;        /* total data blocks in file
system */
    fsblkcnt64_t f_bfree;      /* free blocks in fs */
     fsblkcnt64_t f_bavail;        /* free blocks avail to non-
superuser */
     fsfilcnt64_t f_files;         /* total file nodes in file
system */
    fsfilcnt64_t f_ffree;       /* free file nodes in file system
*/
    fsid_t f_fsid;             /* file system id */
    long int f_namelen;        /* maximum length of filenames */
    long int f_frsize;         /* fragment size */
    long int f_spare[5];       /* spare for later */
};
```

10.3.72 sys/statvfs.h

```
struct statvfs {
    unsigned long int f_bsize;
    unsigned long int f_frsize;
    fsblkcnt_t f_blocks;
    fsblkcnt_t f_bfree;
    fsblkcnt_t f_bavail;
    fsfilcnt_t f_files;
    fsfilcnt_t f_ffree;
    fsfilcnt_t f_favail;
    unsigned long int f_fsid;
    unsigned long int f_flag;
    unsigned long int f_namemax;
    int __f_spare[6];
};
struct statvfs64 {
    unsigned long int f_bsize;
    unsigned long int f_frsize;
    fsblkcnt64_t f_blocks;
    fsblkcnt64_t f_bfree;
    fsblkcnt64_t f_bavail;
    fsfilcnt64_t f_files;
    fsfilcnt64_t f_ffree;
    fsfilcnt64_t f_favail;
    unsigned long int f_fsid;
```

```
    unsigned long int f_flag;
    unsigned long int f_namemax;
    int __f_spare[6];
};
```

10.3.73 sys/sysinfo.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.74 sys/time.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.75 sys/timeb.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.76 sys/times.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.77 sys/un.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.78 sys/utsname.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.79 sys/wait.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.80 sysexits.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.81 syslog.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.82 tar.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.83 termios.h

```
#define TAB1    1024
#define CR3     12288
#define CRDLY   12288
#define FF1     16384
#define FFDLY   16384
#define XCASE   16384
#define ONLCR   2
#define TAB2    2048
#define TAB3    3072
#define TABDLY  3072
#define BS1     32768
#define BSDLY   32768
#define OLCUC   4
#define CR1     4096
#define IUCLC   4096
#define VT1     65536
#define VTDLY   65536
#define NLDLY   768
#define CR2     8192

#define VWERASE 10
#define VREPRINT        11
#define VSUSP   12
#define VSTART  13
#define VSTOP   14
#define VDISCARD        16
#define VMIN    5
#define VEOL    6
#define VEOL2   8
#define VSWTC   9

#define IXOFF   1024
#define IXON    512

#define CSTOPB  1024
#define HUPCL   16384
#define CREAD   2048
```



```
#define CS6     256
#define CLOCAL  32768
#define PARENB  4096
#define CS7     512
#define VTIME   7
#define CS8     768
#define CSIZE   768
#define PARODD  8192

#define NOFLSH  0x80000000
#define ECHOKE  1
#define IEXTEN  1024
#define ISIG    128
#define ECHONL  16
#define ECHOE   2
#define ICANON  256
#define ECHOPRT 32
#define ECHOK   4
#define TOSTOP  4194304
#define PENDIN  536870912
#define ECHOCTL 64
#define FLUSHO  8388608
```

10.3.84 time.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.85 ucontext.h

```
#define define NFPREG   33
#define define NVRREG   34

typedef struct _libc_vscr {
    int __pad[3];
    int vscr_word;
} vscr_t;
typedef struct _libc_vrstate {
    unsigned int vrregs[128];
    vscr_t vscr;
    unsigned int vrsave;
    unsigned int __pad[3];
} vrregset_t __attribute__ ((__aligned__(16)));

#define NGREG   48

typedef unsigned long int gregset_t[48];

typedef double fpregset_t[33];

typedef struct {
    unsigned long int __unused[4];
    int signal;
    int pad0;
    unsigned long int handler;
    unsigned long int oldmask;
    struct pt_regs *regs;
    gregset_t gp_regs;
    fpregset_t fp_regs;
    vrregset_t *v_regs;
    long int vmx_reserve[69];
```

```
} mcontext_t;

typedef struct ucontext {
    unsigned long int uc_flags;
    struct ucontext *uc_link;
    stack_t uc_stack;
    sigset_t uc_sigmask;
    mcontext_t uc_mcontext;
} ucontext_t;
```

10.3.86 ulimit.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.87 unistd.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.88 utime.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.3.89 utmp.h

```
struct lastlog {
    int32_t ll_time;
    char ll_line[UT_LINESIZE];
    char ll_host[UT_HOSTSIZE];
};

struct utmp {
    short ut_type;              /* Type of login. */
     pid_t ut_pid;                /* Process ID of login process.
*/
    char ut_line[UT_LINESIZE];  /* Devicename. */
    char ut_id[4];              /* Inittab ID. */
    char ut_user[UT_NAMESIZE];  /* Username. */
    char ut_host[UT_HOSTSIZE];  /* Hostname for remote login. */
      struct exit_status ut_exit;  /* Exit status of a process
marked as DEAD_PROCESS. */
       int32_t ut_session;              /* Session ID, used for
windowing. */
    struct {
        int32_t tv_sec;
        int32_t tv_usec;
    } ut_tv;                    /* Time entry was made. */
     int32_t ut_addr_v6[4];        /* Internet address of remote
host. */
    char __unused[20];          /* Reserved for future use. */
};
```


10.3.90 utmpx.h

```
struct utmpx {
    short ut_type;              /* Type of login. */
    pid_t ut_pid;               /* Process ID of login process.
*/
    char ut_line[UT_LINESIZE];  /* Devicename. */
    char ut_id[4];              /* Inittab ID. */
    char ut_user[UT_NAMESIZE];  /* Username. */
    char ut_host[UT_HOSTSIZE];  /* Hostname for remote login. */
      struct exit_status ut_exit; /* Exit status of a process
marked as DEAD_PROCESS. */
      int32_t ut_session;           /* Session ID, used for
windowing. */
    struct {
        int32_t tv_sec;         /* Seconds. */
        int32_t tv_usec;        /* Microseconds. */
    } ut_tv;                    /* Time entry was made. */
     int32_t ut_addr_v6[4];        /* Internet address of remote
host. */
    char __unused[20];          /* Reserved for future use. */
};
```

10.3.91 wordexp.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.4 Interfaces for libm

Table 10-37 defines the library name and shared object name for the libm library

Table 10-37 libm Definition

Library:	libm
SONAME:	libm.so.6

The behavior of the interfaces in this library is specified by the following specifications:
[LSB] LSB Core - Generic
[SUSv3] POSIX 1003.1-2001 (ISO/IEC 9945-2003)
[SUSv4] POSIX 1003.1-2008 (ISO/IEC 9945-2009)

10.4.1 Math

10.4.1.1 Interfaces for Math

An LSB conforming implementation shall provide the architecture specific functions for Math specified in Table 10-38, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-38 libm - Math Function Interfaces

__finite(GLIBC_2.3) [LSB]	__finitef(GLIBC_2.3) [LSB]	__finitel(GLIBC_2.3) [LSB]	__finitel(GLIBC_2.4) [LSB]
__fpclassify(GLIBC_2.3) [LSB]	__fpclassifyf(GLIBC_2.3) [LSB]	__fpclassifyl(GLIBC_2.4) [LSB]	__signbit(GLIBC_2.3) [LSB]
__signbitf(GLIBC_2.3) [LSB]	__signbitl(GLIBC_2.4) [LSB]	acos(GLIBC_2.3) [SUSv4]	acosf(GLIBC_2.3) [SUSv4]

acosh(GLIBC_2.3) [SUSv4]	acoshf(GLIBC_2.3) [SUSv4]	acoshl(GLIBC_2.3) [SUSv4]	acoshl(GLIBC_2.4) [SUSv4]
acosl(GLIBC_2.3) [SUSv4]	acosl(GLIBC_2.4) [SUSv4]	asin(GLIBC_2.3) [SUSv4]	asinf(GLIBC_2.3) [SUSv4]
asinh(GLIBC_2.3) [SUSv4]	asinhf(GLIBC_2.3) [SUSv4]	asinhl(GLIBC_2.3) [SUSv4]	asinhl(GLIBC_2.4) [SUSv4]
asinl(GLIBC_2.3) [SUSv4]	asinl(GLIBC_2.4) [SUSv4]	atan(GLIBC_2.3) [SUSv4]	atan2(GLIBC_2.3) [SUSv4]
atan2f(GLIBC_2.3) [SUSv4]	atan2l(GLIBC_2.3) [SUSv4]	atan2l(GLIBC_2.4) [SUSv4]	atanf(GLIBC_2.3) [SUSv4]
atanh(GLIBC_2.3) [SUSv4]	atanhf(GLIBC_2.3) [SUSv4]	atanhl(GLIBC_2.3) [SUSv4]	atanhl(GLIBC_2.4) [SUSv4]
atanl(GLIBC_2.3) [SUSv4]	atanl(GLIBC_2.4) [SUSv4]	cabs(GLIBC_2.3) [SUSv4]	cabsf(GLIBC_2.3) [SUSv4]
cabsl(GLIBC_2.3) [SUSv4]	cabsl(GLIBC_2.4) [SUSv4]	cacos(GLIBC_2.3) [SUSv4]	cacosf(GLIBC_2.3) [SUSv4]
cacosh(GLIBC_2.3) [SUSv4]	cacoshf(GLIBC_2.3) [SUSv4]	cacoshl(GLIBC_2.3) [SUSv4]	cacoshl(GLIBC_2.4) [SUSv4]
cacosl(GLIBC_2.3) [SUSv4]	cacosl(GLIBC_2.4) [SUSv4]	carg(GLIBC_2.3) [SUSv4]	cargf(GLIBC_2.3) [SUSv4]
cargl(GLIBC_2.3) [SUSv4]	cargl(GLIBC_2.4) [SUSv4]	casin(GLIBC_2.3) [SUSv4]	casinf(GLIBC_2.3) [SUSv4]
casinh(GLIBC_2.3) [SUSv4]	casinhf(GLIBC_2.3) [SUSv4]	casinhl(GLIBC_2.3) [SUSv4]	casinhl(GLIBC_2.4) [SUSv4]
casinl(GLIBC_2.3) [SUSv4]	casinl(GLIBC_2.4) [SUSv4]	catan(GLIBC_2.3) [SUSv4]	catanf(GLIBC_2.3) [SUSv4]
catanh(GLIBC_2.3) [SUSv4]	catanhf(GLIBC_2.3) [SUSv4]	catanhl(GLIBC_2.3) [SUSv4]	catanhl(GLIBC_2.4) [SUSv4]
catanl(GLIBC_2.3) [SUSv4]	catanl(GLIBC_2.4) [SUSv4]	cbrt(GLIBC_2.3) [SUSv4]	cbrtf(GLIBC_2.3) [SUSv4]
cbrtl(GLIBC_2.3) [SUSv4]	cbrtl(GLIBC_2.4) [SUSv4]	ccos(GLIBC_2.3) [SUSv4]	ccosf(GLIBC_2.3) [SUSv4]
ccosh(GLIBC_2.3) [SUSv4]	ccoshf(GLIBC_2.3) [SUSv4]	ccoshl(GLIBC_2.3) [SUSv4]	ccoshl(GLIBC_2.4) [SUSv4]
ccosl(GLIBC_2.3) [SUSv4]	ccosl(GLIBC_2.4) [SUSv4]	ceil(GLIBC_2.3) [SUSv4]	ceilf(GLIBC_2.3) [SUSv4]
ceill(GLIBC_2.3) [SUSv4]	ceill(GLIBC_2.4) [SUSv4]	cexp(GLIBC_2.3) [SUSv4]	cexpf(GLIBC_2.3) [SUSv4]
cexpl(GLIBC_2.3) [SUSv4]	cexpl(GLIBC_2.4) [SUSv4]	cimag(GLIBC_2.3) [SUSv4]	cimagf(GLIBC_2.3) [SUSv4]
cimagl(GLIBC_2.3) [SUSv4]	cimagl(GLIBC_2.4) [SUSv4]	clog(GLIBC_2.3) [SUSv4]	clog10(GLIBC_2.3) [LSB]
clog10f(GLIBC_2.3) [LSB]	clog10l(GLIBC_2.3) [LSB]	clog10l(GLIBC_2.4) [LSB]	clogf(GLIBC_2.3) [SUSv4]
clogl(GLIBC_2.3) [SUSv4]	clogl(GLIBC_2.4) [SUSv4]	conj(GLIBC_2.3) [SUSv4]	conjf(GLIBC_2.3) [SUSv4]
conjl(GLIBC_2.3) [SUSv4]	conjl(GLIBC_2.4) [SUSv4]	copysign(GLIBC_2.3) [SUSv4]	copysignf(GLIBC_2.3) [SUSv4]
copysignl(GLIBC_2.3) [SUSv4]	copysignl(GLIBC_2.4) [SUSv4]	cos(GLIBC_2.3) [SUSv4]	cosf(GLIBC_2.3) [SUSv4]

cosh(GLIBC_2.3) [SUSv4]	coshf(GLIBC_2.3) [SUSv4]	coshl(GLIBC_2.3) [SUSv4]	coshl(GLIBC_2.4) [SUSv4]
cosl(GLIBC_2.3) [SUSv4]	cosl(GLIBC_2.4) [SUSv4]	cpow(GLIBC_2.3) [SUSv4]	cpowf(GLIBC_2.3) [SUSv4]
cpowl(GLIBC_2.3) [SUSv4]	cpowl(GLIBC_2.4) [SUSv4]	cproj(GLIBC_2.3) [SUSv4]	cprojf(GLIBC_2.3) [SUSv4]
cprojl(GLIBC_2.3) [SUSv4]	cprojl(GLIBC_2.4) [SUSv4]	creal(GLIBC_2.3) [SUSv4]	crealf(GLIBC_2.3) [SUSv4]
creall(GLIBC_2.3) [SUSv4]	creall(GLIBC_2.4) [SUSv4]	csin(GLIBC_2.3) [SUSv4]	csinf(GLIBC_2.3) [SUSv4]
csinh(GLIBC_2.3) [SUSv4]	csinhf(GLIBC_2.3) [SUSv4]	csinhl(GLIBC_2.3) [SUSv4]	csinhl(GLIBC_2.4) [SUSv4]
csinl(GLIBC_2.3) [SUSv4]	csinl(GLIBC_2.4) [SUSv4]	csqrt(GLIBC_2.3) [SUSv4]	csqrtf(GLIBC_2.3) [SUSv4]
csqrtl(GLIBC_2.3) [SUSv4]	csqrtl(GLIBC_2.4) [SUSv4]	ctan(GLIBC_2.3) [SUSv4]	ctanf(GLIBC_2.3) [SUSv4]
ctanh(GLIBC_2.3) [SUSv4]	ctanhf(GLIBC_2.3) [SUSv4]	ctanhl(GLIBC_2.3) [SUSv4]	ctanhl(GLIBC_2.4) [SUSv4]
ctanl(GLIBC_2.3) [SUSv4]	ctanl(GLIBC_2.4) [SUSv4]	drem(GLIBC_2.3) [LSB]	dremf(GLIBC_2.3) [LSB]
dreml(GLIBC_2.3) [LSB]	dreml(GLIBC_2.4) [LSB]	erf(GLIBC_2.3) [SUSv4]	erfc(GLIBC_2.3) [SUSv4]
erfcf(GLIBC_2.3) [SUSv4]	erfcl(GLIBC_2.3) [SUSv4]	erfcl(GLIBC_2.4) [SUSv4]	erff(GLIBC_2.3) [SUSv4]
erfl(GLIBC_2.3) [SUSv4]	erfl(GLIBC_2.4) [SUSv4]	exp(GLIBC_2.3) [SUSv4]	exp10(GLIBC_2.3) [LSB]
exp10f(GLIBC_2.3) [LSB]	exp10l(GLIBC_2.3) [LSB]	exp10l(GLIBC_2.4) [LSB]	exp2(GLIBC_2.3) [SUSv4]
exp2f(GLIBC_2.3) [SUSv4]	exp2l(GLIBC_2.4) [SUSv4]	expf(GLIBC_2.3) [SUSv4]	expl(GLIBC_2.3) [SUSv4]
expl(GLIBC_2.4) [SUSv4]	expm1(GLIBC_2.3) [SUSv4]	expm1f(GLIBC_2.3) [SUSv4]	expm1l(GLIBC_2.3) [SUSv4]
expm1l(GLIBC_2.4) [SUSv4]	fabs(GLIBC_2.3) [SUSv4]	fabsf(GLIBC_2.3) [SUSv4]	fabsl(GLIBC_2.3) [SUSv4]
fabsl(GLIBC_2.4) [SUSv4]	fdim(GLIBC_2.3) [SUSv4]	fdimf(GLIBC_2.3) [SUSv4]	fdiml(GLIBC_2.3) [SUSv4]
fdiml(GLIBC_2.4) [SUSv4]	feclearexcept(GLIBC_2.3) [SUSv4]	fedisableexcept(GLIBC_2.3) [LSB]	feenableexcept(GLIBC_2.3) [LSB]
fegetenv(GLIBC_2.3) [SUSv4]	fegetexcept(GLIBC_2.3) [LSB]	fegetexceptflag(GLIBC_2.3) [SUSv4]	fegetround(GLIBC_2.3) [SUSv4]
feholdexcept(GLIBC_2.3) [SUSv4]	feraiseexcept(GLIBC_2.3) [SUSv4]	fesetenv(GLIBC_2.3) [SUSv4]	fesetexceptflag(GLIBC_2.3) [SUSv4]
fesetround(GLIBC_2.3) [SUSv4]	fetestexcept(GLIBC_2.3) [SUSv4]	feupdateenv(GLIBC_2.3) [SUSv4]	finite(GLIBC_2.3) [LSB]
finitef(GLIBC_2.3) [LSB]	finitel(GLIBC_2.3) [LSB]	finitel(GLIBC_2.4) [LSB]	floor(GLIBC_2.3) [SUSv4]
floorf(GLIBC_2.3) [SUSv4]	floorl(GLIBC_2.3) [SUSv4]	floorl(GLIBC_2.4) [SUSv4]	fma(GLIBC_2.3) [SUSv4]

fmaf(GLIBC_2.3) [SUSv4]	fmal(GLIBC_2.3) [SUSv4]	fmal(GLIBC_2.4) [SUSv4]	fmax(GLIBC_2.3) [SUSv4]
fmaxf(GLIBC_2.3) [SUSv4]	fmaxl(GLIBC_2.3) [SUSv4]	fmaxl(GLIBC_2.4) [SUSv4]	fmin(GLIBC_2.3) [SUSv4]
fminf(GLIBC_2.3) [SUSv4]	fminl(GLIBC_2.3) [SUSv4]	fminl(GLIBC_2.4) [SUSv4]	fmod(GLIBC_2.3) [SUSv4]
fmodf(GLIBC_2.3) [SUSv4]	fmodl(GLIBC_2.3) [SUSv4]	fmodl(GLIBC_2.4) [SUSv4]	frexp(GLIBC_2.3) [SUSv4]
frexpf(GLIBC_2.3) [SUSv4]	frexpl(GLIBC_2.3) [SUSv4]	frexpl(GLIBC_2.4) [SUSv4]	gamma(GLIBC_2.3) [LSB]
gammaf(GLIBC_2.3) [LSB]	gammal(GLIBC_2.3) [LSB]	gammal(GLIBC_2.4) [LSB]	hypot(GLIBC_2.3) [SUSv4]
hypotf(GLIBC_2.3) [SUSv4]	hypotl(GLIBC_2.3) [SUSv4]	hypotl(GLIBC_2.4) [SUSv4]	ilogb(GLIBC_2.3) [SUSv4]
ilogbf(GLIBC_2.3) [SUSv4]	ilogbl(GLIBC_2.3) [SUSv4]	ilogbl(GLIBC_2.4) [SUSv4]	j0(GLIBC_2.3) [SUSv4]
j0f(GLIBC_2.3) [LSB]	j0l(GLIBC_2.3) [LSB]	j0l(GLIBC_2.4) [LSB]	j1(GLIBC_2.3) [SUSv4]
j1f(GLIBC_2.3) [LSB]	j1l(GLIBC_2.3) [LSB]	j1l(GLIBC_2.4) [LSB]	jn(GLIBC_2.3) [SUSv4]
jnf(GLIBC_2.3) [LSB]	jnl(GLIBC_2.3) [LSB]	jnl(GLIBC_2.4) [LSB]	ldexp(GLIBC_2.3) [SUSv4]
ldexpf(GLIBC_2.3) [SUSv4]	ldexpl(GLIBC_2.3) [SUSv4]	ldexpl(GLIBC_2.4) [SUSv4]	lgamma(GLIBC_2.3) [SUSv4]
lgamma_r(GLIBC_2.3) [LSB]	lgammaf(GLIBC_2.3) [SUSv4]	lgammaf_r(GLIBC_2.3) [LSB]	lgammal(GLIBC_2.3) [SUSv4]
lgammal(GLIBC_2.4) [SUSv4]	lgammal_r(GLIBC_2.3) [LSB]	lgammal_r(GLIBC_2.4) [LSB]	llrint(GLIBC_2.3) [SUSv4]
llrintf(GLIBC_2.3) [SUSv4]	llrintl(GLIBC_2.3) [SUSv4]	llrintl(GLIBC_2.4) [SUSv4]	llround(GLIBC_2.3) [SUSv4]
llroundf(GLIBC_2.3) [SUSv4]	llroundl(GLIBC_2.3) [SUSv4]	llroundl(GLIBC_2.4) [SUSv4]	log(GLIBC_2.3) [SUSv4]
log10(GLIBC_2.3) [SUSv4]	log10f(GLIBC_2.3) [SUSv4]	log10l(GLIBC_2.3) [SUSv4]	log10l(GLIBC_2.4) [SUSv4]
log1p(GLIBC_2.3) [SUSv4]	log1pf(GLIBC_2.3) [SUSv4]	log1pl(GLIBC_2.3) [SUSv4]	log1pl(GLIBC_2.4) [SUSv4]
log2(GLIBC_2.3) [SUSv4]	log2f(GLIBC_2.3) [SUSv4]	log2l(GLIBC_2.3) [SUSv4]	log2l(GLIBC_2.4) [SUSv4]
logb(GLIBC_2.3) [SUSv4]	logbf(GLIBC_2.3) [SUSv4]	logbl(GLIBC_2.3) [SUSv4]	logbl(GLIBC_2.4) [SUSv4]
logf(GLIBC_2.3) [SUSv4]	logl(GLIBC_2.3) [SUSv4]	logl(GLIBC_2.4) [SUSv4]	lrint(GLIBC_2.3) [SUSv4]
lrintf(GLIBC_2.3) [SUSv4]	lrintl(GLIBC_2.3) [SUSv4]	lrintl(GLIBC_2.4) [SUSv4]	lround(GLIBC_2.3) [SUSv4]
lroundf(GLIBC_2.3) [SUSv4]	lroundl(GLIBC_2.3) [SUSv4]	lroundl(GLIBC_2.4) [SUSv4]	matherr(GLIBC_2.3) [LSB]
modf(GLIBC_2.3) [SUSv4]	modff(GLIBC_2.3) [SUSv4]	modfl(GLIBC_2.3) [SUSv4]	modfl(GLIBC_2.4) [SUSv4]
nan(GLIBC_2.3) [SUSv4]	nanf(GLIBC_2.3) [SUSv4]	nanl(GLIBC_2.3) [SUSv4]	nanl(GLIBC_2.4) [SUSv4]

nearbyint(GLIBC_2.3) [SUSv4]	nearbyintf(GLIBC_2.3) [SUSv4]	nearbyintl(GLIBC_2.3) [SUSv4]	nearbyintl(GLIBC_2.4) [SUSv4]
nextafter(GLIBC_2.3) [SUSv4]	nextafterf(GLIBC_2.3) [SUSv4]	nextafterl(GLIBC_2.3) [SUSv4]	nextafterl(GLIBC_2.4) [SUSv4]
nexttoward(GLIBC_2.3) [SUSv4]	nexttoward(GLIBC_2.4) [SUSv4]	nexttowardf(GLIBC_2.3) [SUSv4]	nexttowardf(GLIBC_2.4) [SUSv4]
nexttowardl(GLIBC_2.3) [SUSv4]	nexttowardl(GLIBC_2.4) [SUSv4]	pow(GLIBC_2.3) [SUSv4]	pow10(GLIBC_2.3) [LSB]
pow10f(GLIBC_2.3) [LSB]	pow10l(GLIBC_2.3) [LSB]	pow10l(GLIBC_2.4) [LSB]	powf(GLIBC_2.3) [SUSv4]
powl(GLIBC_2.3) [SUSv4]	powl(GLIBC_2.4) [SUSv4]	remainder(GLIBC_2.3) [SUSv4]	remainderf(GLIBC_2.3) [SUSv4]
remainderl(GLIBC_2.3) [SUSv4]	remainderl(GLIBC_2.4) [SUSv4]	remquo(GLIBC_2.3) [SUSv4]	remquof(GLIBC_2.3) [SUSv4]
remquol(GLIBC_2.3) [SUSv4]	remquol(GLIBC_2.4) [SUSv4]	rint(GLIBC_2.3) [SUSv4]	rintf(GLIBC_2.3) [SUSv4]
rintl(GLIBC_2.3) [SUSv4]	rintl(GLIBC_2.4) [SUSv4]	round(GLIBC_2.3) [SUSv4]	roundf(GLIBC_2.3) [SUSv4]
roundl(GLIBC_2.3) [SUSv4]	roundl(GLIBC_2.4) [SUSv4]	scalb(GLIBC_2.3) [SUSv3]	scalbf(GLIBC_2.3) [LSB]
scalbl(GLIBC_2.3) [LSB]	scalbl(GLIBC_2.4) [LSB]	scalbln(GLIBC_2.3) [SUSv4]	scalblnf(GLIBC_2.3) [SUSv4]
scalblnl(GLIBC_2.3) [SUSv4]	scalblnl(GLIBC_2.4) [SUSv4]	scalbn(GLIBC_2.3) [SUSv4]	scalbnf(GLIBC_2.3) [SUSv4]
scalbnl(GLIBC_2.3) [SUSv4]	scalbnl(GLIBC_2.4) [SUSv4]	significand(GLIBC_2.3) [LSB]	significandf(GLIBC_2.3) [LSB]
significandl(GLIBC_2.3) [LSB]	significandl(GLIBC_2.4) [LSB]	sin(GLIBC_2.3) [SUSv4]	sincos(GLIBC_2.3) [LSB]
sincosf(GLIBC_2.3) [LSB]	sincosl(GLIBC_2.3) [LSB]	sincosl(GLIBC_2.4) [LSB]	sinf(GLIBC_2.3) [SUSv4]
sinh(GLIBC_2.3) [SUSv4]	sinhf(GLIBC_2.3) [SUSv4]	sinhl(GLIBC_2.3) [SUSv4]	sinhl(GLIBC_2.4) [SUSv4]
sinl(GLIBC_2.3) [SUSv4]	sinl(GLIBC_2.4) [SUSv4]	sqrt(GLIBC_2.3) [SUSv4]	sqrtf(GLIBC_2.3) [SUSv4]
sqrtl(GLIBC_2.3) [SUSv4]	sqrtl(GLIBC_2.4) [SUSv4]	tan(GLIBC_2.3) [SUSv4]	tanf(GLIBC_2.3) [SUSv4]
tanh(GLIBC_2.3) [SUSv4]	tanhf(GLIBC_2.3) [SUSv4]	tanhl(GLIBC_2.3) [SUSv4]	tanhl(GLIBC_2.4) [SUSv4]
tanl(GLIBC_2.3) [SUSv4]	tanl(GLIBC_2.4) [SUSv4]	tgamma(GLIBC_2.3) [SUSv4]	tgammaf(GLIBC_2.3) [SUSv4]
tgammal(GLIBC_2.3) [SUSv4]	tgammal(GLIBC_2.4) [SUSv4]	trunc(GLIBC_2.3) [SUSv4]	truncf(GLIBC_2.3) [SUSv4]
truncl(GLIBC_2.3) [SUSv4]	truncl(GLIBC_2.4) [SUSv4]	y0(GLIBC_2.3) [SUSv4]	y0f(GLIBC_2.3) [LSB]
y0l(GLIBC_2.3) [LSB]	y0l(GLIBC_2.4) [LSB]	y1(GLIBC_2.3) [SUSv4]	y1f(GLIBC_2.3) [LSB]
y1l(GLIBC_2.3) [LSB]	y1l(GLIBC_2.4) [LSB]	yn(GLIBC_2.3) [SUSv4]	ynf(GLIBC_2.3) [LSB]
ynl(GLIBC_2.3) [LSB]	ynl(GLIBC_2.4) [LSB]		

An LSB conforming implementation shall provide the architecture specific deprecated functions for Math specified in Table 10-39, with the full mandatory functionality as described in the referenced underlying specification.

Note: These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-39 libm - Math Deprecated Function Interfaces

__finitel(GLIBC_2.3) [LSB]	acoshl(GLIBC_2.3) [SUSv4]	acosl(GLIBC_2.3) [SUSv4]	asinhl(GLIBC_2.3) [SUSv4]
asinl(GLIBC_2.3) [SUSv4]	atan2l(GLIBC_2.3) [SUSv4]	atanhl(GLIBC_2.3) [SUSv4]	atanl(GLIBC_2.3) [SUSv4]
cabsl(GLIBC_2.3) [SUSv4]	cacoshl(GLIBC_2.3) [SUSv4]	cacosl(GLIBC_2.3) [SUSv4]	cargl(GLIBC_2.3) [SUSv4]
casinhl(GLIBC_2.3) [SUSv4]	casinl(GLIBC_2.3) [SUSv4]	catanhl(GLIBC_2.3) [SUSv4]	catanl(GLIBC_2.3) [SUSv4]
cbrtl(GLIBC_2.3) [SUSv4]	ccoshl(GLIBC_2.3) [SUSv4]	ccosl(GLIBC_2.3) [SUSv4]	ceill(GLIBC_2.3) [SUSv4]
cexpl(GLIBC_2.3) [SUSv4]	cimagl(GLIBC_2.3) [SUSv4]	clog10l(GLIBC_2.3) [LSB]	clogl(GLIBC_2.3) [SUSv4]
conjl(GLIBC_2.3) [SUSv4]	copysignl(GLIBC_2.3) [SUSv4]	coshl(GLIBC_2.3) [SUSv4]	cosl(GLIBC_2.3) [SUSv4]
cpowl(GLIBC_2.3) [SUSv4]	cprojl(GLIBC_2.3) [SUSv4]	creall(GLIBC_2.3) [SUSv4]	csinhl(GLIBC_2.3) [SUSv4]
csinl(GLIBC_2.3) [SUSv4]	csqrtl(GLIBC_2.3) [SUSv4]	ctanhl(GLIBC_2.3) [SUSv4]	ctanl(GLIBC_2.3) [SUSv4]
drem(GLIBC_2.3) [LSB]	dremf(GLIBC_2.3) [LSB]	dreml(GLIBC_2.3) [LSB]	dreml(GLIBC_2.4) [LSB]
erfcl(GLIBC_2.3) [SUSv4]	erfl(GLIBC_2.3) [SUSv4]	exp10l(GLIBC_2.3) [LSB]	expl(GLIBC_2.3) [SUSv4]
expm1l(GLIBC_2.3) [SUSv4]	fabsl(GLIBC_2.3) [SUSv4]	fdiml(GLIBC_2.3) [SUSv4]	finite(GLIBC_2.3) [LSB]
finitef(GLIBC_2.3) [LSB]	finitel(GLIBC_2.3) [LSB]	finitel(GLIBC_2.4) [LSB]	floorl(GLIBC_2.3) [SUSv4]
fmal(GLIBC_2.3) [SUSv4]	fmaxl(GLIBC_2.3) [SUSv4]	fminl(GLIBC_2.3) [SUSv4]	fmodl(GLIBC_2.3) [SUSv4]
frexpl(GLIBC_2.3) [SUSv4]	gamma(GLIBC_2.3) [LSB]	gammaf(GLIBC_2.3) [LSB]	gammal(GLIBC_2.3) [LSB]
gammal(GLIBC_2.4) [LSB]	hypotl(GLIBC_2.3) [SUSv4]	ilogbl(GLIBC_2.3) [SUSv4]	j0l(GLIBC_2.3) [LSB]
j1l(GLIBC_2.3) [LSB]	jnl(GLIBC_2.3) [LSB]	ldexpl(GLIBC_2.3) [SUSv4]	lgammal(GLIBC_2.3) [SUSv4]
lgammal_r(GLIBC_2.3) [LSB]	llrintl(GLIBC_2.3) [SUSv4]	llroundl(GLIBC_2.3) [SUSv4]	log10l(GLIBC_2.3) [SUSv4]
log1pl(GLIBC_2.3) [SUSv4]	log2l(GLIBC_2.3) [SUSv4]	logbl(GLIBC_2.3) [SUSv4]	logl(GLIBC_2.3) [SUSv4]
lrintl(GLIBC_2.3) [SUSv4]	lroundl(GLIBC_2.3) [SUSv4]	matherr(GLIBC_2.3) [LSB]	modfl(GLIBC_2.3) [SUSv4]
nanl(GLIBC_2.3) [SUSv4]	nearbyintl(GLIBC_2.3) [SUSv4]	nextafterl(GLIBC_2.3) [SUSv4]	nexttoward(GLIBC_2.3) [SUSv4]
nexttowardf(GLIB	nexttowardl(GLIB	pow10l(GLIBC_2.	powl(GLIBC_2.3)

C_2.3) [SUSv4]	C_2.3) [SUSv4]	3) [LSB]	[SUSv4]
remainderl(GLIBC_2.3) [SUSv4]	remquol(GLIBC_2.3) [SUSv4]	rintl(GLIBC_2.3) [SUSv4]	roundl(GLIBC_2.3) [SUSv4]
scalbl(GLIBC_2.3) [LSB]	scalblnl(GLIBC_2.3) [SUSv4]	scalbnl(GLIBC_2.3) [SUSv4]	significandl(GLIBC_2.3) [LSB]
sincosl(GLIBC_2.3) [LSB]	sinhl(GLIBC_2.3) [SUSv4]	sinl(GLIBC_2.3) [SUSv4]	sqrtl(GLIBC_2.3) [SUSv4]
tanhl(GLIBC_2.3) [SUSv4]	tanl(GLIBC_2.3) [SUSv4]	tgammal(GLIBC_2.3) [SUSv4]	truncl(GLIBC_2.3) [SUSv4]
y0l(GLIBC_2.3) [LSB]	y1l(GLIBC_2.3) [LSB]	ynl(GLIBC_2.3) [LSB]	

An LSB conforming implementation shall provide the architecture specific data interfaces for Math specified in Table 10-40, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-40 libm - Math Data Interfaces

signgam(GLIBC_2.3) [SUSv4]			

10.5 Data Definitions for libm

This section defines global identifiers and their values that are associated with interfaces contained in libm. These definitions are organized into groups that correspond to system headers. This convention is used as a convenience for the reader, and does not imply the existence of these headers, or their content. Where an interface is defined as requiring a particular system header file all of the data definitions for that system header file presented here shall be in effect.

This section gives data definitions to promote binary application portability, not to repeat source interface definitions available elsewhere. System providers and application developers should use this ABI to supplement - not to replace - source interface definition specifications.

This specification uses the ISO C (1999) C Language as the reference programming language, and data definitions are specified in ISO C format. The C language is used here as a convenient notation. Using a C language description of these data objects does not preclude their use by other programming languages.

10.5.1 complex.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.5.2 fenv.h

```
#define FE_INVALID      (1 << (31 - 2))
#define FE_OVERFLOW     (1 << (31 - 3))
#define FE_UNDERFLOW    (1 << (31 - 4))
#define FE_DIVBYZERO    (1 << (31 - 5))
#define FE_INEXACT      (1 << (31 - 6))

#define FE_ALL_EXCEPT   \
        (FE_INEXACT | FE_DIVBYZERO | FE_UNDERFLOW | FE_OVERFLOW |
FE_INVALID)
```

```
#define FE_TONEAREST    0
#define FE_TOWARDZERO   1
#define FE_UPWARD       2
#define FE_DOWNWARD     3

typedef unsigned int fexcept_t;

typedef double fenv_t;

#define FE_DFL_ENV      (&__fe_dfl_env)
```

10.5.3 math.h

```
typedef float float_t;
typedef double double_t;

#define isfinite(x)     \
  (sizeof (x) == sizeof (float) ? __finitef (x) : sizeof (x) ==
sizeof (double)? __finite (x) : __finitel (x))  /* Return nonzero
value if X is not +-Inf or NaN. */
#define fpclassify(x)   \
  (sizeof (x) == sizeof (float) ? __fpclassifyf (x) :sizeof (x)
==   sizeof   (double)   ?   __fpclassify   (x)   :   __fpclassifyl
(x))       /* Return number of classification appropriate for X.
*/
#define isinf(x)        \
  (sizeof (x) == sizeof (float) ? __isnanf (x)  : sizeof (x) ==
sizeof (double) ? __isnan (x) : __isnanl (x))
#define isnan(x)        \
  (sizeof (x) == sizeof (float) ? __isnanf (x)  : sizeof (x) ==
sizeof (double) ? __isnan (x) : __isnanl (x))
#define signbit(x)      \
  (sizeof (x) == sizeof (float)? __signbitf (x): sizeof (x) ==
sizeof  (double)?  __signbit  (x)  :  __signbitl  (x)    /*  Return
nonzero value if sign of X is negative. */

#define HUGE_VALL       0x1.0p2047L

#define FP_ILOGB0       -2147483647
#define FP_ILOGBNAN     2147483647

extern int __fpclassifyl(long double);
extern int __signbitl(long double);
extern long double exp2l(long double);
```

10.6 Interface Definitions for libm

The interfaces defined on the following pages are included in libm and are defined by this specification. Unless otherwise noted, these interfaces shall be included in the source standard.

Other interfaces listed in Section 10.4 shall behave as described in the referenced base document. For interfaces referencing LSB and not listed below, please see the generic part of the specification.

__fpclassifyl

Name

__fpclassifyl — Classify real floating type

Synopsis

```
int __fpclassifyl(long double arg);
```

Description

__fpclassifyl() has the same specification as fpclassify() in POSIX 1003.1-2008 (ISO/IEC 9945-2009), except that the argument type for __fpclassifyl() is known to be long double.

__fpclassifyl() is not in the source standard; it is only in the binary standard.

__signbitl

Name

__signbitl — test sign of floating point value

Synopsis

```
#include <math.h>
int __signbitl(long double arg);
```

Description

__signbitl() has the same specification as signbit() in POSIX 1003.1-2008 (ISO/IEC 9945-2009), except that the argument type for __signbitl() is known to be long double.

__signbitl() is not in the source standard; it is only in the binary standard.

10.7 Interfaces for libpthread

Table 10-41 defines the library name and shared object name for the libpthread library

Table 10-41 libpthread Definition

Library:	libpthread
SONAME:	libpthread.so.0

The behavior of the interfaces in this library is specified by the following specifications:
[LFS] Large File Support
[LSB] LSB Core - Generic
[SUSv3] POSIX 1003.1-2001 (ISO/IEC 9945-2003)
[SUSv4] POSIX 1003.1-2008 (ISO/IEC 9945-2009)

10.7.1 Realtime Threads

10.7.1.1 Interfaces for Realtime Threads

An LSB conforming implementation shall provide the architecture specific functions for Realtime Threads specified in Table 10-42, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-42 libpthread - Realtime Threads Function Interfaces

pthread_attr_getinheritsched(GLIBC_2.3) [SUSv4]	pthread_attr_getschedpolicy(GLIBC_2.3) [SUSv4]	pthread_attr_getscope(GLIBC_2.3) [SUSv4]	pthread_attr_setinheritsched(GLIBC_2.3) [SUSv4]
pthread_attr_setschedpolicy(GLIBC_2.3) [SUSv4]	pthread_attr_setscope(GLIBC_2.3) [SUSv4]	pthread_getschedparam(GLIBC_2.3) [SUSv4]	pthread_setschedparam(GLIBC_2.3) [SUSv4]

10.7.2 Advanced Realtime Threads

10.7.2.1 Interfaces for Advanced Realtime Threads

An LSB conforming implementation shall provide the architecture specific functions for Advanced Realtime Threads specified in Table 10-43, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-43 libpthread - Advanced Realtime Threads Function Interfaces

pthread_barrier_destroy(GLIBC_2.3) [SUSv4]	pthread_barrier_init(GLIBC_2.3) [SUSv4]	pthread_barrier_wait(GLIBC_2.3) [SUSv4]	pthread_barrierattr_destroy(GLIBC_2.3) [SUSv4]
pthread_barrierattr_init(GLIBC_2.3) [SUSv4]	pthread_barrierattr_setpshared(GLIBC_2.3) [SUSv4]	pthread_getcpuclockid(GLIBC_2.3) [SUSv4]	pthread_spin_destroy(GLIBC_2.3) [SUSv4]
pthread_spin_init(GLIBC_2.3) [SUSv4]	pthread_spin_lock(GLIBC_2.3) [SUSv4]	pthread_spin_trylock(GLIBC_2.3) [SUSv4]	pthread_spin_unlock(GLIBC_2.3) [SUSv4]

10.7.3 Posix Threads

10.7.3.1 Interfaces for Posix Threads

An LSB conforming implementation shall provide the architecture specific functions for Posix Threads specified in Table 10-44, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-44 libpthread - Posix Threads Function Interfaces

_pthread_cleanup_pop(GLIBC_2.3) [LSB]	_pthread_cleanup_push(GLIBC_2.3) [LSB]	pthread_attr_destroy(GLIBC_2.3) [SUSv4]	pthread_attr_getdetachstate(GLIBC_2.3) [SUSv4]
pthread_attr_getguardsize(GLIBC_2.3) [SUSv4]	pthread_attr_getschedparam(GLIBC_2.3) [SUSv4]	pthread_attr_getstack(GLIBC_2.3) [SUSv4]	pthread_attr_getstackaddr(GLIBC_2.3) [SUSv3]
pthread_attr_getstacksize(GLIBC_2.3) [SUSv4]	pthread_attr_init(GLIBC_2.3) [SUSv4]	pthread_attr_setdetachstate(GLIBC_2.3) [SUSv4]	pthread_attr_setguardsize(GLIBC_2.3) [SUSv4]
pthread_attr_setschedparam(GLIBC_2.3) [SUSv4]	pthread_attr_setstack(GLIBC_2.3) [SUSv4]	pthread_attr_setstack(GLIBC_2.6) [SUSv4]	pthread_attr_setstackaddr(GLIBC_2.3) [SUSv3]
pthread_attr_setstacksize(GLIBC_2.3) [SUSv4]	pthread_attr_setstacksize(GLIBC_2.6) [SUSv4]	pthread_cancel(GLIBC_2.3) [SUSv4]	pthread_cond_broadcast(GLIBC_2.3.2) [SUSv4]
pthread_cond_destroy(GLIBC_2.3.2) [SUSv4]	pthread_cond_init(GLIBC_2.3.2) [SUSv4]	pthread_cond_signal(GLIBC_2.3.2) [SUSv4]	pthread_cond_timedwait(GLIBC_2.3.2) [SUSv4]
pthread_cond_wai	pthread_condattr_	pthread_condattr_	pthread_condattr_i

t(GLIBC_2.3.2) [SUSv4]	destroy(GLIBC_2.3) [SUSv4]	getpshared(GLIBC_2.3) [SUSv4]	nit(GLIBC_2.3) [SUSv4]
pthread_condattr_setpshared(GLIBC_2.3) [SUSv4]	pthread_create(GLIBC_2.3) [SUSv4]	pthread_detach(GLIBC_2.3) [SUSv4]	pthread_equal(GLIBC_2.3) [SUSv4]
pthread_exit(GLIBC_2.3) [SUSv4]	pthread_getconcurrency(GLIBC_2.3) [SUSv4]	pthread_getspecific(GLIBC_2.3) [SUSv4]	pthread_join(GLIBC_2.3) [SUSv4]
pthread_key_create(GLIBC_2.3) [SUSv4]	pthread_key_delete(GLIBC_2.3) [SUSv4]	pthread_kill(GLIBC_2.3) [SUSv4]	pthread_mutex_destroy(GLIBC_2.3) [SUSv4]
pthread_mutex_init(GLIBC_2.3) [SUSv4]	pthread_mutex_lock(GLIBC_2.3) [SUSv4]	pthread_mutex_timedlock(GLIBC_2.3) [SUSv4]	pthread_mutex_trylock(GLIBC_2.3) [SUSv4]
pthread_mutex_unlock(GLIBC_2.3) [SUSv4]	pthread_mutexattr_destroy(GLIBC_2.3) [SUSv4]	pthread_mutexattr_getpshared(GLIBC_2.3) [SUSv4]	pthread_mutexattr_gettype(GLIBC_2.3) [SUSv4]
pthread_mutexattr_init(GLIBC_2.3) [SUSv4]	pthread_mutexattr_setpshared(GLIBC_2.3) [SUSv4]	pthread_mutexattr_settype(GLIBC_2.3) [SUSv4]	pthread_once(GLIBC_2.3) [SUSv4]
pthread_rwlock_destroy(GLIBC_2.3) [SUSv4]	pthread_rwlock_init(GLIBC_2.3) [SUSv4]	pthread_rwlock_rdlock(GLIBC_2.3) [SUSv4]	pthread_rwlock_timedrdlock(GLIBC_2.3) [SUSv4]
pthread_rwlock_timedwrlock(GLIBC_2.3) [SUSv4]	pthread_rwlock_tryrdlock(GLIBC_2.3) [SUSv4]	pthread_rwlock_trywrlock(GLIBC_2.3) [SUSv4]	pthread_rwlock_unlock(GLIBC_2.3) [SUSv4]
pthread_rwlock_wrlock(GLIBC_2.3) [SUSv4]	pthread_rwlockattr_destroy(GLIBC_2.3) [SUSv4]	pthread_rwlockattr_getpshared(GLIBC_2.3) [SUSv4]	pthread_rwlockattr_init(GLIBC_2.3) [SUSv4]
pthread_rwlockattr_setpshared(GLIBC_2.3) [SUSv4]	pthread_self(GLIBC_2.3) [SUSv4]	pthread_setcancelstate(GLIBC_2.3) [SUSv4]	pthread_setcanceltype(GLIBC_2.3) [SUSv4]
pthread_setconcurrency(GLIBC_2.3) [SUSv4]	pthread_setspecific(GLIBC_2.3) [SUSv4]	pthread_sigmask(GLIBC_2.3) [SUSv4]	pthread_testcancel(GLIBC_2.3) [SUSv4]
sem_close(GLIBC_2.3) [SUSv4]	sem_destroy(GLIBC_2.3) [SUSv4]	sem_getvalue(GLIBC_2.3) [SUSv4]	sem_init(GLIBC_2.3) [SUSv4]
sem_open(GLIBC_2.3) [SUSv4]	sem_post(GLIBC_2.3) [SUSv4]	sem_timedwait(GLIBC_2.3) [SUSv4]	sem_trywait(GLIBC_2.3) [SUSv4]
sem_unlink(GLIBC_2.3) [SUSv4]	sem_wait(GLIBC_2.3) [SUSv4]		

An LSB conforming implementation shall provide the architecture specific deprecated functions for Posix Threads specified in Table 10-45, with the full mandatory functionality as described in the referenced underlying specification.

> **Note:** These interfaces are deprecated, and applications should avoid using them. These interfaces may be withdrawn in future releases of this specification.

Table 10-45 libpthread - Posix Threads Deprecated Function Interfaces

pthread_attr_getstackaddr(GLIBC_2	pthread_attr_setstack(GLIBC_2.3)	pthread_attr_setstackaddr(GLIBC_2.	pthread_attr_setstacksize(GLIBC_2.3

.3) [SUSv3]	[SUSv4]	3) [SUSv3]	) [SUSv4]

10.7.4 Thread aware versions of libc interfaces

10.7.4.1 Interfaces for Thread aware versions of libc interfaces

An LSB conforming implementation shall provide the architecture specific functions for Thread aware versions of libc interfaces specified in Table 10-46, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-46 libpthread - Thread aware versions of libc interfaces Function Interfaces

lseek64(GLIBC_2.3) [LFS]	open64(GLIBC_2.3) [LFS]	pread(GLIBC_2.3) [SUSv4]	pread64(GLIBC_2.3) [LSB]
pwrite(GLIBC_2.3) [SUSv4]	pwrite64(GLIBC_2.3) [LSB]		

10.7.5 GNU Extensions for libpthread

10.7.5.1 Interfaces for GNU Extensions for libpthread

An LSB conforming implementation shall provide the architecture specific functions for GNU Extensions for libpthread specified in Table 10-47, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-47 libpthread - GNU Extensions for libpthread Function Interfaces

pthread_getattr_np(GLIBC_2.3) [LSB]	pthread_mutex_consistent_np(GLIBC_2.4) [LSB]	pthread_mutexattr_getrobust_np(GLIBC_2.4) [LSB]	pthread_mutexattr_setrobust_np(GLIBC_2.4) [LSB]
pthread_rwlockattr_getkind_np(GLIBC_2.3) [LSB]	pthread_rwlockattr_setkind_np(GLIBC_2.3) [LSB]		

10.7.6 System Calls

10.7.6.1 Interfaces for System Calls

An LSB conforming implementation shall provide the architecture specific functions for System Calls specified in Table 10-48, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-48 libpthread - System Calls Function Interfaces

close(GLIBC_2.3) [SUSv4]	fcntl(GLIBC_2.3) [LSB]	fork(GLIBC_2.3) [SUSv4]	fsync(GLIBC_2.3) [SUSv4]
lseek(GLIBC_2.3) [SUSv4]	msync(GLIBC_2.3) [SUSv4]	nanosleep(GLIBC_2.3) [SUSv4]	open(GLIBC_2.3) [SUSv4]
pause(GLIBC_2.3) [SUSv4]	read(GLIBC_2.3) [SUSv4]	vfork(GLIBC_2.3) [SUSv3]	wait(GLIBC_2.3) [SUSv4]
waitpid(GLIBC_2.3) [LSB]	write(GLIBC_2.3) [SUSv4]		

10.7.7 Standard I/O

10.7.7.1 Interfaces for Standard I/O

An LSB conforming implementation shall provide the architecture specific functions for

Standard I/O specified in Table 10-49, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-49 libpthread - Standard I/O Function Interfaces

flockfile(GLIBC_2.3) [SUSv4]			

10.7.8 Signal Handling

10.7.8.1 Interfaces for Signal Handling

An LSB conforming implementation shall provide the architecture specific functions for Signal Handling specified in Table 10-50, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-50 libpthread - Signal Handling Function Interfaces

__libc_current_sigrtmax(GLIBC_2.3) [LSB]	__libc_current_sigrtmin(GLIBC_2.3) [LSB]	raise(GLIBC_2.3) [SUSv4]	sigaction(GLIBC_2.3) [SUSv4]
siglongjmp(GLIBC_2.3.4) [SUSv4]	sigwait(GLIBC_2.3) [SUSv4]		

10.7.9 Standard Library

10.7.9.1 Interfaces for Standard Library

An LSB conforming implementation shall provide the architecture specific functions for Standard Library specified in Table 10-51, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-51 libpthread - Standard Library Function Interfaces

__errno_location(GLIBC_2.3) [LSB]	ftrylockfile(GLIBC_2.3) [SUSv4]	funlockfile(GLIBC_2.3) [SUSv4]	longjmp(GLIBC_2.3.4) [SUSv4]
system(GLIBC_2.3) [LSB]			

10.7.10 Socket Interface

10.7.10.1 Interfaces for Socket Interface

An LSB conforming implementation shall provide the architecture specific functions for Socket Interface specified in Table 10-52, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-52 libpthread - Socket Interface Function Interfaces

__h_errno_location(GLIBC_2.3) [LSB]	accept(GLIBC_2.3) [SUSv4]	connect(GLIBC_2.3) [SUSv4]	recv(GLIBC_2.3) [SUSv4]
recvfrom(GLIBC_2.3) [SUSv4]	recvmsg(GLIBC_2.3) [SUSv4]	send(GLIBC_2.3) [SUSv4]	sendmsg(GLIBC_2.3) [SUSv4]
sendto(GLIBC_2.3) [SUSv4]			

10.7.11 Terminal Interface Functions

10.7.11.1 Interfaces for Terminal Interface Functions

An LSB conforming implementation shall provide the architecture specific functions for Terminal Interface Functions specified in Table 10-53, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-53 libpthread - Terminal Interface Functions Function Interfaces

tcdrain(GLIBC_2.3) [SUSv4]			

10.8 Data Definitions for libpthread

This section defines global identifiers and their values that are associated with interfaces contained in libpthread. These definitions are organized into groups that correspond to system headers. This convention is used as a convenience for the reader, and does not imply the existence of these headers, or their content. Where an interface is defined as requiring a particular system header file all of the data definitions for that system header file presented here shall be in effect.

This section gives data definitions to promote binary application portability, not to repeat source interface definitions available elsewhere. System providers and application developers should use this ABI to supplement - not to replace - source interface definition specifications.

This specification uses the ISO C (1999) C Language as the reference programming language, and data definitions are specified in ISO C format. The C language is used here as a convenient notation. Using a C language description of these data objects does not preclude their use by other programming languages.

10.8.1 lsb/pthread.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.8.2 pthread.h

```
#define __SIZEOF_PTHREAD_BARRIER_T      32
#define __SIZEOF_PTHREAD_MUTEX_T        40
#define __SIZEOF_PTHREAD_ATTR_T 56
#define __SIZEOF_PTHREAD_RWLOCK_T       56
#define PTHREAD_RWLOCK_INITIALIZER       { { 0, 0, 0, 0, 0, 0, 0,
0, 0, 0, 0 } }
#define PTHREAD_MUTEX_INITIALIZER          { { 0, 0, 0, 0, 0, 0,
{ 0, 0 } } }

typedef union {
    char __size[__SIZEOF_PTHREAD_BARRIER_T];
    long int __align;
} pthread_barrier_t;

typedef struct __pthread_internal_list __pthread_list_t;
struct __pthread_mutex_s {
    int __lock;
    unsigned int __count;
    int __owner;
    unsigned int __nusers;
    int __kind;
```



```
    int __spins;
    __pthread_list_t __list;
};

typedef union {
    struct {
        int __lock;
        unsigned int __nr_readers;
        unsigned int __readers_wakeup;
        unsigned int __writer_wakeup;
        unsigned int __nr_readers_queued;
        unsigned int __nr_writers_queued;
        int __writer;
        int __pad1;
        unsigned long int __pad2;
        unsigned long int __pad3;
        unsigned int __flags;
    } __data;
    char __size[__SIZEOF_PTHREAD_RWLOCK_T];
    long int __align;
} pthread_rwlock_t;
```

10.8.3 semaphore.h

```
#define __SIZEOF_SEM_T  32
```

10.9 Interfaces for libgcc_s

Table 10-54 defines the library name and shared object name for the libgcc_s library

Table 10-54 libgcc_s Definition

Library:	libgcc_s
SONAME:	libgcc_s.so.1

The behavior of the interfaces in this library is specified by the following specifications:
[LSB] LSB Core - Generic

10.9.1 Unwind Library

10.9.1.1 Interfaces for Unwind Library

An LSB conforming implementation shall provide the architecture specific functions for Unwind Library specified in Table 10-55, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-55 libgcc_s - Unwind Library Function Interfaces

_Unwind_Backtrace(GCC_3.3) [LSB]	_Unwind_DeleteException(GCC_3.0) [LSB]	_Unwind_FindEnclosingFunction(GCC_3.3) [LSB]	_Unwind_Find_FDE(GCC_3.0) [LSB]
_Unwind_ForcedUnwind(GCC_3.0) [LSB]	_Unwind_GetCFA(GCC_3.3) [LSB]	_Unwind_GetDataRelBase(GCC_3.0) [LSB]	_Unwind_GetGR(GCC_3.0) [LSB]
_Unwind_GetIP(GCC_3.0) [LSB]	_Unwind_GetLanguageSpecificData(GCC_3.0) [LSB]	_Unwind_GetRegionStart(GCC_3.0) [LSB]	_Unwind_GetTextRelBase(GCC_3.0) [LSB]
_Unwind_RaiseException(GCC_3.0) [LSB]	_Unwind_Resume(GCC_3.0) [LSB]	_Unwind_Resume_or_Rethrow(GCC_3.3) [LSB]	_Unwind_SetGR(GCC_3.0) [LSB]

_Unwind_SetIP(GCC_3.0) [LSB]			

10.10 Data Definitions for libgcc_s

This section defines global identifiers and their values that are associated with interfaces contained in libgcc_s. These definitions are organized into groups that correspond to system headers. This convention is used as a convenience for the reader, and does not imply the existence of these headers, or their content. Where an interface is defined as requiring a particular system header file all of the data definitions for that system header file presented here shall be in effect.

This section gives data definitions to promote binary application portability, not to repeat source interface definitions available elsewhere. System providers and application developers should use this ABI to supplement - not to replace - source interface definition specifications.

This specification uses the ISO C (1999) C Language as the reference programming language, and data definitions are specified in ISO C format. The C language is used here as a convenient notation. Using a C language description of these data objects does not preclude their use by other programming languages.

10.10.1 unwind.h

```
extern _Unwind_Ptr _Unwind_GetDataRelBase(struct _Unwind_Context
*);
extern _Unwind_Ptr _Unwind_GetTextRelBase(struct _Unwind_Context
*);
```

10.11 Interface Definitions for libgcc_s

The interfaces defined on the following pages are included in libgcc_s and are defined by this specification. Unless otherwise noted, these interfaces shall be included in the source standard.

Other interfaces listed in Section 10.9 shall behave as described in the referenced base document. For interfaces referencing LSB and not listed below, please see the generic part of the specification.

_Unwind_Find_FDE

Name

_Unwind_Find_FDE — private C++ error handling method

Synopsis

```
fde * _Unwind_Find_FDE(void * pc, struct dwarf_eh_bases * bases);
```

Description

_Unwind_Find_FDE() looks for the object containing *pc*, then inserts into *bases*.

_Unwind_GetDataRelBase

Name

_Unwind_GetDataRelBase — private IA64 C++ error handling method

Synopsis

```
_Unwind_Ptr _Unwind_GetDataRelBase(struct _Unwind_Context * context);
```

Description

_Unwind_GetDataRelBase() returns the global pointer in register one for *context*.

_Unwind_GetTextRelBase

Name

_Unwind_GetTextRelBase — private IA64 C++ error handling method

Synopsis

```
_Unwind_Ptr _Unwind_GetTextRelBase(struct _Unwind_Context * context);
```

Description

_Unwind_GetTextRelBase() calls the abort method, then returns.

10.12 Interfaces for libdl

Table 10-56 defines the library name and shared object name for the libdl library

Table 10-56 libdl Definition

Library:	libdl
SONAME:	libdl.so.2

The behavior of the interfaces in this library is specified by the following specifications:
[LSB] LSB Core - Generic
[SUSv4] POSIX 1003.1-2008 (ISO/IEC 9945-2009)

10.12.1 Dynamic Loader

10.12.1.1 Interfaces for Dynamic Loader

An LSB conforming implementation shall provide the architecture specific functions for Dynamic Loader specified in Table 10-57, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-57 libdl - Dynamic Loader Function Interfaces

dladdr(GLIBC_2.3) [LSB]	dlclose(GLIBC_2.3) [SUSv4]	dlerror(GLIBC_2.3) [SUSv4]	dlopen(GLIBC_2.3) [LSB]
dlsym(GLIBC_2.3) [LSB]	dlvsym(GLIBC_2.3) [LSB]		

10.13 Data Definitions for libdl

This section defines global identifiers and their values that are associated with interfaces contained in libdl. These definitions are organized into groups that correspond to system

headers. This convention is used as a convenience for the reader, and does not imply the existence of these headers, or their content. Where an interface is defined as requiring a particular system header file all of the data definitions for that system header file presented here shall be in effect.

This section gives data definitions to promote binary application portability, not to repeat source interface definitions available elsewhere. System providers and application developers should use this ABI to supplement - not to replace - source interface definition specifications.

This specification uses the ISO C (1999) C Language as the reference programming language, and data definitions are specified in ISO C format. The C language is used here as a convenient notation. Using a C language description of these data objects does not preclude their use by other programming languages.

10.13.1 dlfcn.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

10.14 Interfaces for libcrypt

Table 10-58 defines the library name and shared object name for the libcrypt library

Table 10-58 libcrypt Definition

Library:	libcrypt
SONAME:	libcrypt.so.1

The behavior of the interfaces in this library is specified by the following specifications:
[LSB] LSB Core - Generic
[SUSv4] POSIX 1003.1-2008 (ISO/IEC 9945-2009)

10.14.1 Encryption

10.14.1.1 Interfaces for Encryption

An LSB conforming implementation shall provide the architecture specific functions for Encryption specified in Table 10-59, with the full mandatory functionality as described in the referenced underlying specification.

Table 10-59 libcrypt - Encryption Function Interfaces

crypt(GLIBC_2.3) [SUSv4]	crypt_r(GLIBC_2.3) [LSB]	encrypt(GLIBC_2.3) [SUSv4]	encrypt_r(GLIBC_2.3) [LSB]
setkey(GLIBC_2.3) [SUSv4]	setkey_r(GLIBC_2.3) [LSB]		

10.15 Data Definitions for libcrypt

This section defines global identifiers and their values that are associated with interfaces contained in libcrypt. These definitions are organized into groups that correspond to system headers. This convention is used as a convenience for the reader, and does not imply the existence of these headers, or their content. Where an interface is defined as requiring a particular system header file all of the data definitions for that system header file presented here shall be in effect.

This section gives data definitions to promote binary application portability, not to repeat source interface definitions available elsewhere. System providers and application

developers should use this ABI to supplement - not to replace - source interface definition specifications.

This specification uses the ISO C (1999) C Language as the reference programming language, and data definitions are specified in ISO C format. The C language is used here as a convenient notation. Using a C language description of these data objects does not preclude their use by other programming languages.

10.15.1 crypt.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

IV Utility Libraries

11 Libraries

An LSB-conforming implementation shall also support the following utility libraries which are built on top of the interfaces provided by the base libraries. These libraries implement common functionality, and hide additional system dependent information such as file formats and device names.

11.1 Interfaces for libz

Table 11-1 defines the library name and shared object name for the libz library

Table 11-1 libz Definition

Library:	libz
SONAME:	libz.so.1

11.1.1 Compression Library

11.1.1.1 Interfaces for Compression Library

No external functions are defined for libz - Compression Library in this part of the specification. See also the generic specification.

11.2 Data Definitions for libz

This section defines global identifiers and their values that are associated with interfaces contained in libz. These definitions are organized into groups that correspond to system headers. This convention is used as a convenience for the reader, and does not imply the existence of these headers, or their content. Where an interface is defined as requiring a particular system header file all of the data definitions for that system header file presented here shall be in effect.

This section gives data definitions to promote binary application portability, not to repeat source interface definitions available elsewhere. System providers and application developers should use this ABI to supplement - not to replace - source interface definition specifications.

This specification uses the ISO C (1999) C Language as the reference programming language, and data definitions are specified in ISO C format. The C language is used here as a convenient notation. Using a C language description of these data objects does not preclude their use by other programming languages.

11.2.1 zconf.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

11.2.2 zlib.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

11.3 Interfaces for libncurses

Table 11-2 defines the library name and shared object name for the libncurses library

Table 11-2 libncurses Definition

Library:	libncurses
SONAME:	libncurses.so.5

11.3.1 Curses

11.3.1.1 Interfaces for Curses

No external functions are defined for libncurses - Curses in this part of the specification. See also the generic specification.

11.4 Data Definitions for libncurses

This section defines global identifiers and their values that are associated with interfaces contained in libncurses. These definitions are organized into groups that correspond to system headers. This convention is used as a convenience for the reader, and does not imply the existence of these headers, or their content. Where an interface is defined as requiring a particular system header file all of the data definitions for that system header file presented here shall be in effect.

This section gives data definitions to promote binary application portability, not to repeat source interface definitions available elsewhere. System providers and application developers should use this ABI to supplement - not to replace - source interface definition specifications.

This specification uses the ISO C (1999) C Language as the reference programming language, and data definitions are specified in ISO C format. The C language is used here as a convenient notation. Using a C language description of these data objects does not preclude their use by other programming languages.

11.4.1 curses.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

11.5 Interfaces for libncursesw

Table 11-3 defines the library name and shared object name for the libncursesw library

Table 11-3 libncursesw Definition

Library:	libncursesw
SONAME:	libncursesw.so.5

11.5.1 Curses Wide

11.5.1.1 Interfaces for Curses Wide

No external functions are defined for libncursesw - Curses Wide in this part of the specification. See also the generic specification.

11.6 Data Definitions for libncursesw

This section defines global identifiers and their values that are associated with interfaces contained in libncursesw. These definitions are organized into groups that correspond to system headers. This convention is used as a convenience for the reader, and does not imply the existence of these headers, or their content. Where an interface is defined as requiring a particular system header file all of the data definitions for that system header

file presented here shall be in effect.

This section gives data definitions to promote binary application portability, not to repeat source interface definitions available elsewhere. System providers and application developers should use this ABI to supplement - not to replace - source interface definition specifications.

This specification uses the ISO C (1999) C Language as the reference programming language, and data definitions are specified in ISO C format. The C language is used here as a convenient notation. Using a C language description of these data objects does not preclude their use by other programming languages.

11.6.1 ncursesw/curses.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

11.6.2 ncursesw/ncurses_dll.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

11.6.3 ncursesw/term.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

11.6.4 ncursesw/unctrl.h

```
/*
 * This header is architecture neutral
 * Please refer to the generic specification for details
 */
```

11.7 Interfaces for libutil

Table 11-4 defines the library name and shared object name for the libutil library

Table 11-4 libutil Definition

Library:	libutil
SONAME:	libutil.so.1

The behavior of the interfaces in this library is specified by the following specifications:
[LSB] LSB Core - Generic

11.7.1 Utility Functions

11.7.1.1 Interfaces for Utility Functions

An LSB conforming implementation shall provide the architecture specific functions for Utility Functions specified in Table 11-5, with the full mandatory functionality as de-

scribed in the referenced underlying specification.

Table 11-5 libutil - Utility Functions Function Interfaces

forkpty(GLIBC_2.3) [LSB]	login(GLIBC_2.3) [LSB]	login_tty(GLIBC_2.3) [LSB]	logout(GLIBC_2.3) [LSB]
logwtmp(GLIBC_2.3) [LSB]	openpty(GLIBC_2.3) [LSB]		

V Base Libraries

12 Libraries

An LSB-conforming implementation shall support base libraries which provide interfaces for accessing the operating system, processor and other hardware in the system.

Only those interfaces that are unique to the PowerPC 64 platform are defined here. This section should be used in conjunction with the corresponding section in the Linux Standard Base Specification.

12.1 Interfaces for libstdcxx

Table 12-1 defines the library name and shared object name for the libstdcxx library

Table 12-1 libstdcxx Definition

Library:	libstdcxx
SONAME:	libstdc++.so.6

The behavior of the interfaces in this library is specified by the following specifications:
[CXXABI-1.86] Itanium™ C++ ABI
[ISOCXX] ISO/IEC 14882: 2003 C++ Language
[LSB] LSB Core - Generic

12.1.1 C++ Runtime Support

12.1.1.1 Interfaces for C++ Runtime Support

An LSB conforming implementation shall provide the architecture specific methods for C++ Runtime Support specified in Table 12-2, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-2 libstdcxx - C++ Runtime Support Function Interfaces

operator new[](unsigned long)(GLIBCXX_3.4) [ISOCXX]
operator new[](unsigned long, nothrow_t const&)(GLIBCXX_3.4) [ISOCXX]
operator new(unsigned long)(GLIBCXX_3.4) [ISOCXX]
operator new(unsigned long, nothrow_t const&)(GLIBCXX_3.4) [ISOCXX]

12.1.2 C++ type descriptors for built-in types

12.1.2.1 Interfaces for C++ type descriptors for built-in types

No external methods are defined for libstdcxx - C++ type descriptors for built-in types in this part of the specification. See also the generic specification.

12.1.3 C++ _Rb_tree

12.1.3.1 Interfaces for C++ _Rb_tree

No external methods are defined for libstdcxx - C++ _Rb_tree in this part of the specification. See also the generic specification.

12.1.4 Class type_info

12.1.4.1 Class data for type_info

The virtual table for the std::type_info class is described in the generic part of this specification.

The Run Time Type Information for the std::type_info class is described by Table 12-3

Table 12-3 typeinfo for type_info

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for type_info

12.1.4.2 Interfaces for Class type_info

No external methods are defined for libstdcxx - Class std::type_info in this part of the specification. See also the generic specification.

12.1.5 Class __cxxabiv1::__enum_type_info

12.1.5.1 Class data for __cxxabiv1::__enum_type_info

The virtual table for the __cxxabiv1::__enum_type_info class is described in the generic part of this specification.

The Run Time Type Information for the __cxxabiv1::__enum_type_info class is described by Table 12-4

Table 12-4 typeinfo for __cxxabiv1::__enum_type_info

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __cxxabiv1::__enum_type_info

12.1.5.2 Interfaces for Class __cxxabiv1::__enum_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::__enum_type_info in this part of the specification. See also the generic specification.

12.1.6 Class __cxxabiv1::__array_type_info

12.1.6.1 Class data for __cxxabiv1::__array_type_info

The virtual table for the __cxxabiv1::__array_type_info class is described in the generic part of this specification.

The Run Time Type Information for the __cxxabiv1::__array_type_info class is described by Table 12-5

Table 12-5 typeinfo for __cxxabiv1::__array_type_info

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __cxxabiv1::__array_type_info

12.1.6.2 Interfaces for Class __cxxabiv1::__array_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::__array_type_info in this part of the specification. See also the generic specification.

12.1.7 Class __cxxabiv1::__class_type_info

12.1.7.1 Class data for __cxxabiv1::__class_type_info

The virtual table for the __cxxabiv1::__class_type_info class is described by Table 12-6

Table 12-6 Primary vtable for __cxxabiv1::__class_type_info

Base Offset	0

Virtual Base Offset	0
RTTI	typeinfo for __cxxabiv1::__class_type_info
vfunc[0]:	__cxxabiv1::__class_type_info::~__class_type_info()
vfunc[1]:	__cxxabiv1::__class_type_info::~__class_type_info()
vfunc[2]:	type_info::__is_pointer_p() const
vfunc[3]:	type_info::__is_function_p() const
vfunc[4]:	__cxxabiv1::__class_type_info::__do_catch(type_info const*, void**, unsigned int) const
vfunc[5]:	__cxxabiv1::__class_type_info::__do_upcast(__cxxabiv1::__class_type_info const*, void**) const
vfunc[6]:	__cxxabiv1::__class_type_info::__do_upcast(__cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info::__upcast_result&) const
vfunc[7]:	__cxxabiv1::__class_type_info::__do_dyncast(long, __cxxabiv1::__class_type_info::__sub_kind, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info::__dyncast_result&) const
vfunc[8]:	__cxxabiv1::__class_type_info::__do_find_public_src(long, void const*, __cxxabiv1::__class_type_info const*, void const*) const

The Run Time Type Information for the __cxxabiv1::__class_type_info class is described by Table 12-7

Table 12-7 typeinfo for __cxxabiv1::__class_type_info

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __cxxabiv1::__class_type_info

12.1.7.2 Interfaces for Class __cxxabiv1::__class_type_info

An LSB conforming implementation shall provide the architecture specific methods for Class __cxxabiv1::__class_type_info specified in Table 12-8, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-8 libstdcxx - Class __cxxabiv1::__class_type_info Function Interfaces

__cxxabiv1::__class_type_info::__do_dyncast(long, __cxxabiv1::__class_type_info::__sub_kind, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info::__dyncast_result&) const(CXXABI_1.3)

[CXXABI-1.86]
__cxxabiv1::__class_type_info::__do_find_public_src(long, void const*, __cxxabiv1::__class_type_info const*, void const*) const(CXXABI_1.3) [CXXABI-1.86]

12.1.8 Class __cxxabiv1::__pbase_type_info

12.1.8.1 Class data for __cxxabiv1::__pbase_type_info

The virtual table for the __cxxabiv1::__pbase_type_info class is described in the generic part of this specification.

The Run Time Type Information for the __cxxabiv1::__pbase_type_info class is described by Table 12-9

Table 12-9 typeinfo for __cxxabiv1::__pbase_type_info

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __cxxabiv1::__pbase_type_info

12.1.8.2 Interfaces for Class __cxxabiv1::__pbase_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::__pbase_type_info in this part of the specification. See also the generic specification.

12.1.9 Class __cxxabiv1::__pointer_type_info

12.1.9.1 Class data for __cxxabiv1::__pointer_type_info

The virtual table for the __cxxabiv1::__pointer_type_info class is described in the generic part of this specification.

The Run Time Type Information for the __cxxabiv1::__pointer_type_info class is described by Table 12-10

Table 12-10 typeinfo for __cxxabiv1::__pointer_type_info

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __cxxabiv1::__pointer_type_info

12.1.9.2 Interfaces for Class __cxxabiv1::__pointer_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::__pointer_type_info in this part of the specification. See also the generic specification.

12.1.10 Class __cxxabiv1::__function_type_info

12.1.10.1 Class data for __cxxabiv1::__function_type_info

The virtual table for the __cxxabiv1::__function_type_info class is described in the generic part of this specification.

The Run Time Type Information for the __cxxabiv1::__function_type_info class is described by Table 12-11

Table 12-11 typeinfo for __cxxabiv1::__function_type_info

Base Vtable	vtable for __cxxabiv1::__si_class_type_info

Name	typeinfo name for __cxxabiv1::__function_type_info

12.1.10.2 Interfaces for Class __cxxabiv1::__function_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::__function_type_info in this part of the specification. See also the generic specification.

12.1.11 Class __cxxabiv1::__si_class_type_info

12.1.11.1 Class data for __cxxabiv1::__si_class_type_info

The virtual table for the __cxxabiv1::__si_class_type_info class is described by Table 12-12

Table 12-12 Primary vtable for __cxxabiv1::__si_class_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for __cxxabiv1::__si_class_type_info
vfunc[0]:	__cxxabiv1::__si_class_type_info::~__si_class_type_info()
vfunc[1]:	__cxxabiv1::__si_class_type_info::~__si_class_type_info()
vfunc[2]:	type_info::__is_pointer_p() const
vfunc[3]:	type_info::__is_function_p() const
vfunc[4]:	__cxxabiv1::__class_type_info::__do_catch(type_info const*, void**, unsigned int) const
vfunc[5]:	__cxxabiv1::__class_type_info::__do_upcast(__cxxabiv1::__class_type_info const*, void**) const
vfunc[6]:	__cxxabiv1::__si_class_type_info::__do_upcast(__cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info::__upcast_result&) const
vfunc[7]:	__cxxabiv1::__si_class_type_info::__do_dyncast(long, __cxxabiv1::__class_type_info::__sub_kind, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info::__dyncast_result&) const
vfunc[8]:	__cxxabiv1::__si_class_type_info::__do_find_public_src(long, void const*, __cxxabiv1::__class_type_info const*, void const*) const

The Run Time Type Information for the __cxxabiv1::__si_class_type_info class is described by Table 12-13

Table 12-13 typeinfo for __cxxabiv1::__si_class_type_info

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __cxxabiv1::__si_class_type_info

12.1.11.2 Interfaces for Class __cxxabiv1::__si_class_type_info

An LSB conforming implementation shall provide the architecture specific methods for Class __cxxabiv1::__si_class_type_info specified in Table 12-14, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-14 libstdcxx - Class __cxxabiv1::__si_class_type_info Function Interfaces

__cxxabiv1::__si_class_type_info::__do_dyncast(long, __cxxabiv1::__class_type_info::__sub_kind, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info::__dyncast_result&) const(CXXABI_1.3) [CXXABI-1.86]
__cxxabiv1::__si_class_type_info::__do_find_public_src(long, void const*, __cxxabiv1::__class_type_info const*, void const*) const(CXXABI_1.3) [CXXABI-1.86]

12.1.12 Class __cxxabiv1::__vmi_class_type_info

12.1.12.1 Class data for __cxxabiv1::__vmi_class_type_info

The virtual table for the __cxxabiv1::__vmi_class_type_info class is described by Table 12-15

Table 12-15 Primary vtable for __cxxabiv1::__vmi_class_type_info

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for __cxxabiv1::__vmi_class_type_info
vfunc[0]:	__cxxabiv1::__vmi_class_type_info::~__vmi_class_type_info()
vfunc[1]:	__cxxabiv1::__vmi_class_type_info::~__vmi_class_type_info()
vfunc[2]:	type_info::__is_pointer_p() const
vfunc[3]:	type_info::__is_function_p() const
vfunc[4]:	__cxxabiv1::__class_type_info::__do_catch(type_info const*, void**, unsigned int) const
vfunc[5]:	__cxxabiv1::__class_type_info::__do_upcast(__cxxabiv1::__class_type_info const*, void**) const
vfunc[6]:	__cxxabiv1::__vmi_class_type_info::__do_upcast(__cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info::__upcast_result&) const
vfunc[7]:	__cxxabiv1::__vmi_class_type_info::__do_dyncast(long, __cxxabiv1::__class_type_info::__sub_k

	ind, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info::__dyncast_result&) const
vfunc[8]:	__cxxabiv1::__vmi_class_type_info::__do_find_public_src(long, void const*, __cxxabiv1::__class_type_info const*, void const*) const

The Run Time Type Information for the __cxxabiv1::__vmi_class_type_info class is described by Table 12-16

Table 12-16 typeinfo for __cxxabiv1::__vmi_class_type_info

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __cxxabiv1::__vmi_class_type_info

12.1.12.2 Interfaces for Class __cxxabiv1::__vmi_class_type_info

An LSB conforming implementation shall provide the architecture specific methods for Class __cxxabiv1::__vmi_class_type_info specified in Table 12-17, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-17 libstdcxx - Class __cxxabiv1::__vmi_class_type_info Function Interfaces

__cxxabiv1::__vmi_class_type_info::__do_dyncast(long, __cxxabiv1::__class_type_info::__sub_kind, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info const*, void const*, __cxxabiv1::__class_type_info::__dyncast_result&) const(CXXABI_1.3) [CXXABI-1.86]
__cxxabiv1::__vmi_class_type_info::__do_find_public_src(long, void const*, __cxxabiv1::__class_type_info const*, void const*) const(CXXABI_1.3) [CXXABI-1.86]

12.1.13 Class __cxxabiv1::__fundamental_type_info

12.1.13.1 Class data for __cxxabiv1::__fundamental_type_info

The virtual table for the __cxxabiv1::__fundamental_type_info class is described in the generic part of this specification.

The Run Time Type Information for the __cxxabiv1::__fundamental_type_info class is described by Table 12-18

Table 12-18 typeinfo for __cxxabiv1::__fundamental_type_info

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __cxxabiv1::__fundamental_type_info

12.1.13.2 Interfaces for Class __cxxabiv1::__fundamental_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::__fundamental_type_info in this part of the specification. See also the generic specification.

12.1.14 Class __cxxabiv1::__pointer_to_member_type_info

12.1.14.1 Class data for __cxxabiv1::__pointer_to_member_type_info

The virtual table for the __cxxabiv1::__pointer_to_member_type_info class is described in the generic part of this specification.

The Run Time Type Information for the __cxxabiv1::__pointer_to_member_type_info class is described by Table 12-19

Table 12-19 typeinfo for __cxxabiv1::__pointer_to_member_type_info

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __cxxabiv1::__pointer_to_member_type_info

12.1.14.2 Interfaces for Class __cxxabiv1::__pointer_to_member_type_info

No external methods are defined for libstdcxx - Class __cxxabiv1::__pointer_to_member_type_info in this part of the specification. See also the generic specification.

12.1.15 Class __gnu_cxx::stdio_filebuf<char, char_traits<char> >

12.1.15.1 Interfaces for Class __gnu_cxx::stdio_filebuf<char, char_traits<char> >

No external methods are defined for libstdcxx - Class __gnu_cxx::stdio_filebuf<char, std::char_traits<char> > in this part of the specification. See also the generic specification.

12.1.16 Class __gnu_cxx::stdio_filebuf<wchar_t, char_traits<wchar_t> >

12.1.16.1 Interfaces for Class __gnu_cxx::stdio_filebuf<wchar_t, char_traits<wchar_t> >

No external methods are defined for libstdcxx - Class __gnu_cxx::stdio_filebuf<wchar_t, std::char_traits<wchar_t> > in this part of the specification. See also the generic specification.

12.1.17 Class __gnu_cxx::__pool_alloc_base

12.1.17.1 Interfaces for Class __gnu_cxx::__pool_alloc_base

An LSB conforming implementation shall provide the architecture specific methods for Class __gnu_cxx::__pool_alloc_base specified in Table 12-20, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-20 libstdcxx - Class __gnu_cxx::__pool_alloc_base Function Interfaces

__gnu_cxx::__pool_alloc_base::_M_get_free_list(unsigned long)(GLIBCXX_3.4.2) [LSB]
__gnu_cxx::__pool_alloc_base::_M_refill(unsigned long)(GLIBCXX_3.4.2) [LSB]

12.1.18 Class __gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >

12.1.18.1 Class data for __gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >

The virtual table for the __gnu_cxx::stdio_sync_filebuf<char, std::char_traits<char> > class is described by Table 12-21

Table 12-21 Primary vtable for __gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for __gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >
vfunc[0]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::~stdio_sync_filebuf()
vfunc[1]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::~stdio_sync_filebuf()
vfunc[2]:	basic_streambuf<char, char_traits<char> >::imbue(locale const&)
vfunc[3]:	basic_streambuf<char, char_traits<char> >::setbuf(char*, long)
vfunc[4]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)
vfunc[5]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::seekpos(fpos<__mbstate_t>, _Ios_Openmode)
vfunc[6]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::sync()
vfunc[7]:	basic_streambuf<char, char_traits<char> >::showmanyc()
vfunc[8]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::xsgetn(char*, long)
vfunc[9]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::underflow()
vfunc[10]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::uflow()
vfunc[11]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::pbackfail(int)
vfunc[12]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::xsputn(char const*, long)
vfunc[13]:	__gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >::overflow(int)

12.1.18.2 Interfaces for Class __gnu_cxx::stdio_sync_filebuf<char, char_traits<char> >

No external methods are defined for libstdcxx - Class __gnu_cxx::stdio_sync_filebuf<char, std::char_traits<char> > in this part of the specification. See also the generic specification.

12.1.19 Class __gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >

12.1.19.1 Class data for __gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >

The virtual table for the __gnu_cxx::stdio_sync_filebuf<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-22

Table 12-22 Primary vtable for __gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for __gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >
vfunc[0]:	__gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >::~stdio_sync_filebuf()
vfunc[1]:	__gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >::~stdio_sync_filebuf()
vfunc[2]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::imbue(locale const&)
vfunc[3]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::setbuf(wchar_t*, long)
vfunc[4]:	__gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)
vfunc[5]:	__gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >::seekpos(fpos<__mbstate_t>, _Ios_Openmode)
vfunc[6]:	__gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >::sync()
vfunc[7]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::showmanyc()
vfunc[8]:	__gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >::xsgetn(wchar_t*, long)
vfunc[9]:	__gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >::underflow()
vfunc[10]:	__gnu_cxx::stdio_sync_filebuf<wchar_t,

	char_traits<wchar_t> >::uflow()
vfunc[11]:	__gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >::pbackfail(unsigned int)
vfunc[12]:	__gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >::xsputn(wchar_t const*, long)
vfunc[13]:	__gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >::overflow(unsigned int)

12.1.19.2 Interfaces for Class __gnu_cxx::stdio_sync_filebuf<wchar_t, char_traits<wchar_t> >

No external methods are defined for libstdcxx - Class __gnu_cxx::stdio_sync_filebuf<wchar_t, std::char_traits<wchar_t> > in this part of the specification. See also the generic specification.

12.1.20 Class exception

12.1.20.1 Class data for exception

The virtual table for the std::exception class is described in the generic part of this specification.

The Run Time Type Information for the std::exception class is described by Table 12-23

Table 12-23 typeinfo for exception

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for exception

12.1.20.2 Interfaces for Class exception

No external methods are defined for libstdcxx - Class std::exception in this part of the specification. See also the generic specification.

12.1.21 Class bad_typeid

12.1.21.1 Class data for bad_typeid

The virtual table for the std::bad_typeid class is described in the generic part of this specification.

The Run Time Type Information for the std::bad_typeid class is described by Table 12-24

Table 12-24 typeinfo for bad_typeid

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for bad_typeid

12.1.21.2 Interfaces for Class bad_typeid

No external methods are defined for libstdcxx - Class std::bad_typeid in this part of the specification. See also the generic specification.

12.1.22 Class logic_error

12.1.22.1 Class data for logic_error

The virtual table for the std::logic_error class is described in the generic part of this specification.

The Run Time Type Information for the std::logic_error class is described by Table 12-25

Table 12-25 typeinfo for logic_error

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for logic_error

12.1.22.2 Interfaces for Class logic_error

No external methods are defined for libstdcxx - Class std::logic_error in this part of the specification. See also the generic specification.

12.1.23 Class range_error

12.1.23.1 Class data for range_error

The virtual table for the std::range_error class is described in the generic part of this specification.

The Run Time Type Information for the std::range_error class is described by Table 12-26

Table 12-26 typeinfo for range_error

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for range_error

12.1.23.2 Interfaces for Class range_error

No external methods are defined for libstdcxx - Class std::range_error in this part of the specification. See also the generic specification.

12.1.24 Class domain_error

12.1.24.1 Class data for domain_error

The virtual table for the std::domain_error class is described in the generic part of this specification.

The Run Time Type Information for the std::domain_error class is described by Table 12-27

Table 12-27 typeinfo for domain_error

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for domain_error

12.1.24.2 Interfaces for Class domain_error

No external methods are defined for libstdcxx - Class std::domain_error in this part of the specification. See also the generic specification.

12.1.25 Class length_error

12.1.25.1 Class data for length_error

The virtual table for the std::length_error class is described in the generic part of this specification.

The Run Time Type Information for the std::length_error class is described by Table 12-28

Table 12-28 typeinfo for length_error

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for length_error

12.1.25.2 Interfaces for Class length_error

No external methods are defined for libstdcxx - Class std::length_error in this part of the specification. See also the generic specification.

12.1.26 Class out_of_range

12.1.26.1 Class data for out_of_range

The virtual table for the std::out_of_range class is described in the generic part of this specification.

The Run Time Type Information for the std::out_of_range class is described by Table 12-29

Table 12-29 typeinfo for out_of_range

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for out_of_range

12.1.26.2 Interfaces for Class out_of_range

No external methods are defined for libstdcxx - Class std::out_of_range in this part of the specification. See also the generic specification.

12.1.27 Class bad_exception

12.1.27.1 Class data for bad_exception

The virtual table for the std::bad_exception class is described in the generic part of this specification.

The Run Time Type Information for the std::bad_exception class is described by Table 12-30

Table 12-30 typeinfo for bad_exception

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for bad_exception

12.1.27.2 Interfaces for Class bad_exception

No external methods are defined for libstdcxx - Class std::bad_exception in this part of the specification. See also the generic specification.

12.1.28 Class runtime_error

12.1.28.1 Class data for runtime_error

The virtual table for the std::runtime_error class is described in the generic part of this specification.

The Run Time Type Information for the std::runtime_error class is described by Table 12-31

Table 12-31 typeinfo for runtime_error

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for runtime_error

12.1.28.2 Interfaces for Class runtime_error

No external methods are defined for libstdcxx - Class std::runtime_error in this part of the specification. See also the generic specification.

12.1.29 Class overflow_error

12.1.29.1 Class data for overflow_error

The virtual table for the std::overflow_error class is described in the generic part of this specification.

The Run Time Type Information for the std::overflow_error class is described by Table 12-32

Table 12-32 typeinfo for overflow_error

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for overflow_error

12.1.29.2 Interfaces for Class overflow_error

No external methods are defined for libstdcxx - Class std::overflow_error in this part of the specification. See also the generic specification.

12.1.30 Class underflow_error

12.1.30.1 Class data for underflow_error

The virtual table for the std::underflow_error class is described in the generic part of this specification.

The Run Time Type Information for the std::underflow_error class is described by Table 12-33

Table 12-33 typeinfo for underflow_error

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for underflow_error

12.1.30.2 Interfaces for Class underflow_error

No external methods are defined for libstdcxx - Class std::underflow_error in this part of the specification. See also the generic specification.

12.1.31 Class invalid_argument

12.1.31.1 Class data for invalid_argument

The virtual table for the std::invalid_argument class is described in the generic part of this specification.

The Run Time Type Information for the std::invalid_argument class is described by Table 12-34

Table 12-34 typeinfo for invalid_argument

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for invalid_argument

12.1.31.2 Interfaces for Class invalid_argument

No external methods are defined for libstdcxx - Class std::invalid_argument in this part of the specification. See also the generic specification.

12.1.32 Class bad_cast

12.1.32.1 Class data for bad_cast

The virtual table for the std::bad_cast class is described in the generic part of this specification.

The Run Time Type Information for the std::bad_cast class is described by Table 12-35

Table 12-35 typeinfo for bad_cast

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for bad_cast

12.1.32.2 Interfaces for Class bad_cast

No external methods are defined for libstdcxx - Class std::bad_cast in this part of the specification. See also the generic specification.

12.1.33 Class bad_alloc

12.1.33.1 Class data for bad_alloc

The virtual table for the std::bad_alloc class is described in the generic part of this specification.

The Run Time Type Information for the std::bad_alloc class is described by Table 12-36

Table 12-36 typeinfo for bad_alloc

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for bad_alloc

12.1.33.2 Interfaces for Class bad_alloc

No external methods are defined for libstdcxx - Class std::bad_alloc in this part of the specification. See also the generic specification.

12.1.34 struct __numeric_limits_base

12.1.34.1 Interfaces for struct __numeric_limits_base

No external methods are defined for libstdcxx - struct __numeric_limits_base in this part of the specification. See also the generic specification.

12.1.35 struct numeric_limits<long double>

12.1.35.1 Interfaces for struct numeric_limits<long double>

No external methods are defined for libstdcxx - struct numeric_limits<long double> in this part of the specification. See also the generic specification.

12.1.36 struct numeric_limits<long long>

12.1.36.1 Interfaces for struct numeric_limits<long long>

No external methods are defined for libstdcxx - struct numeric_limits<long long> in this part of the specification. See also the generic specification.

12.1.37 struct numeric_limits<unsigned long long>

12.1.37.1 Interfaces for struct numeric_limits<unsigned long long>

No external methods are defined for libstdcxx - struct numeric_limits<unsigned long long> in this part of the specification. See also the generic specification.

12.1.38 struct numeric_limits<float>

12.1.38.1 Interfaces for struct numeric_limits<float>

No external methods are defined for libstdcxx - struct numeric_limits<float> in this part of the specification. See also the generic specification.

12.1.39 struct numeric_limits<double>

12.1.39.1 Interfaces for struct numeric_limits<double>

No external methods are defined for libstdcxx - struct numeric_limits<double> in this part of the specification. See also the generic specification.

12.1.40 struct numeric_limits<short>

12.1.40.1 Interfaces for struct numeric_limits<short>

No external methods are defined for libstdcxx - struct numeric_limits<short> in this part of the specification. See also the generic specification.

12.1.41 struct numeric_limits<unsigned short>

12.1.41.1 Interfaces for struct numeric_limits<unsigned short>

No external methods are defined for libstdcxx - struct numeric_limits<unsigned short> in this part of the specification. See also the generic specification.

12.1.42 struct numeric_limits<int>

12.1.42.1 Interfaces for struct numeric_limits<int>

No external methods are defined for libstdcxx - struct numeric_limits<int> in this part

of the specification. See also the generic specification.

12.1.43 struct numeric_limits<unsigned int>

12.1.43.1 Interfaces for struct numeric_limits<unsigned int>

No external methods are defined for libstdcxx - struct numeric_limits<unsigned int> in this part of the specification. See also the generic specification.

12.1.44 struct numeric_limits<long>

12.1.44.1 Interfaces for struct numeric_limits<long>

No external methods are defined for libstdcxx - struct numeric_limits<long> in this part of the specification. See also the generic specification.

12.1.45 struct numeric_limits<unsigned long>

12.1.45.1 Interfaces for struct numeric_limits<unsigned long>

No external methods are defined for libstdcxx - struct numeric_limits<unsigned long> in this part of the specification. See also the generic specification.

12.1.46 struct numeric_limits<wchar_t>

12.1.46.1 Interfaces for struct numeric_limits<wchar_t>

No external methods are defined for libstdcxx - struct numeric_limits<wchar_t> in this part of the specification. See also the generic specification.

12.1.47 struct numeric_limits<unsigned char>

12.1.47.1 Interfaces for struct numeric_limits<unsigned char>

No external methods are defined for libstdcxx - struct numeric_limits<unsigned char> in this part of the specification. See also the generic specification.

12.1.48 struct numeric_limits<signed char>

12.1.48.1 Interfaces for struct numeric_limits<signed char>

No external methods are defined for libstdcxx - struct numeric_limits<signed char> in this part of the specification. See also the generic specification.

12.1.49 struct numeric_limits<char>

12.1.49.1 Interfaces for struct numeric_limits<char>

No external methods are defined for libstdcxx - struct numeric_limits<char> in this part of the specification. See also the generic specification.

12.1.50 struct numeric_limits<bool>

12.1.50.1 Interfaces for struct numeric_limits<bool>

No external methods are defined for libstdcxx - struct numeric_limits<bool> in this part of the specification. See also the generic specification.

12.1.51 struct numeric_limits<__float128>

12.1.51.1 Interfaces for struct numeric_limits<__float128>

No external methods are defined for libstdcxx - struct numeric_limits<__float128> in this part of the specification. See also the generic specification.

An LSB conforming implementation shall provide the architecture specific data interfaces for struct numeric_limits<__float128> specified in Table 12-37, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-37 libstdcxx - struct numeric_limits<__float128> Data Interfaces

numeric_limits<__float128>::has_denorm(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::is_bounded(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::is_integer(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::round_style(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::has_infinity(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::max_exponent(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::min_exponent(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::has_quiet_NaN(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::is_specialized(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::max_exponent10(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::min_exponent10(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::has_denorm_loss(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::tinyness_before(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::has_signaling_NaN(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::radix(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::traps(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::digits(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::digits10(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::is_exact(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::is_iec559(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::is_modulo(GLIBCXX_LDBL_3.4) [ISOCXX]
numeric_limits<__float128>::is_signed(GLIBCXX_LDBL_3.4) [ISOCXX]
typeinfo for __float128 const*(CXXABI_LDBL_1.3) [CXXABI-1.86]
typeinfo for __float128*(CXXABI_LDBL_1.3) [CXXABI-1.86]
typeinfo for __float128(CXXABI_LDBL_1.3) [CXXABI-1.86]
typeinfo name for __float128 const*(CXXABI_LDBL_1.3) [CXXABI-1.86]
typeinfo name for __float128*(CXXABI_LDBL_1.3) [CXXABI-1.86]
typeinfo name for __float128(CXXABI_LDBL_1.3) [CXXABI-1.86]

12.1.52 Class ctype_base

12.1.52.1 Class data for ctype_base

The Run Time Type Information for the std::ctype_base class is described by Table 12-38

Table 12-38 typeinfo for ctype_base

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for ctype_base

12.1.52.2 Interfaces for Class ctype_base

No external methods are defined for libstdcxx - Class std::ctype_base in this part of the specification. See also the generic specification.

12.1.53 Class __ctype_abstract_base<char>

12.1.53.1 Class data for __ctype_abstract_base<char>

The virtual table for the std::__ctype_abstract_base<char> class is described in the generic part of this specification.

12.1.53.2 Interfaces for Class __ctype_abstract_base<char>

No external methods are defined for libstdcxx - Class std::__ctype_abstract_base<char> in this part of the specification. See also the generic specification.

12.1.54 Class __ctype_abstract_base<wchar_t>

12.1.54.1 Class data for __ctype_abstract_base<wchar_t>

The virtual table for the std::__ctype_abstract_base<wchar_t> class is described in the generic part of this specification.

12.1.54.2 Interfaces for Class __ctype_abstract_base<wchar_t>

No external methods are defined for libstdcxx - Class std::__ctype_abstract_base<wchar_t> in this part of the specification. See also the generic specification.

12.1.55 Class ctype<char>

12.1.55.1 Class data for ctype<char>

The virtual table for the std::ctype<char> class is described in the generic part of this specification.

12.1.55.2 Interfaces for Class ctype<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::ctype<char> specified in Table 12-39, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-39 libstdcxx - Class ctype<char> Function Interfaces

ctype<char>::ctype(__locale_struct*, unsigned short const*, bool, unsigned long) (GLIBCXX_3.4) [ISOCXX]
ctype<char>::ctype(unsigned short const*, bool, unsigned long)(GLIBCXX_3.4) [ISOCXX]
ctype<char>::ctype(__locale_struct*, unsigned short const*, bool, unsigned long) (GLIBCXX_3.4) [ISOCXX]
ctype<char>::ctype(unsigned short const*, bool, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.56 Class ctype<wchar_t>

12.1.56.1 Class data for ctype<wchar_t>

The virtual table for the std::ctype<wchar_t> class is described in the generic part of this specification.

The Run Time Type Information for the std::ctype<wchar_t> class is described by Table 12-40

Table 12-40 typeinfo for ctype<wchar_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for ctype<wchar_t>

12.1.56.2 Interfaces for Class ctype<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::ctype<wchar_t> specified in Table 12-41, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-41 libstdcxx - Class ctype<wchar_t> Function Interfaces

ctype<wchar_t>::ctype(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
ctype<wchar_t>::ctype(unsigned long)(GLIBCXX_3.4) [ISOCXX]
ctype<wchar_t>::ctype(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
ctype<wchar_t>::ctype(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.57 Class ctype_byname<char>

12.1.57.1 Class data for ctype_byname<char>

The virtual table for the std::ctype_byname<char> class is described in the generic part of this specification.

The Run Time Type Information for the std::ctype_byname<char> class is described by Table 12-42

Table 12-42 typeinfo for ctype_byname<char>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for ctype_byname<char>

12.1.57.2 Interfaces for Class ctype_byname<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::ctype_byname<char> specified in Table 12-43, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-43 libstdcxx - Class ctype_byname<char> Function Interfaces

ctype_byname<char>::ctype_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
ctype_byname<char>::ctype_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.58 Class ctype_byname<wchar_t>

12.1.58.1 Class data for ctype_byname<wchar_t>

The virtual table for the std::ctype_byname<wchar_t> class is described in the generic part of this specification.

The Run Time Type Information for the std::ctype_byname<wchar_t> class is described by Table 12-44

Table 12-44 typeinfo for ctype_byname<wchar_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for ctype_byname<wchar_t>

12.1.58.2 Interfaces for Class ctype_byname<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::ctype_byname<wchar_t> specified in Table 12-45, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-45 libstdcxx - Class ctype_byname<wchar_t> Function Interfaces

ctype_byname<wchar_t>::ctype_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
ctype_byname<wchar_t>::ctype_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]

12.1.59 Class basic_string<char, char_traits<char>, allocator<char> >

12.1.59.1 Interfaces for Class basic_string<char, char_traits<char>, allocator<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_string<char, std::char_traits<char>, std::allocator<char> > specified in Table 12-46, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-46 libstdcxx - Class basic_string<char, char_traits<char>, allocator<char> > Function Interfaces

basic_string<char, char_traits<char>, allocator<char> >::find_last_of(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_last_of(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_last_of(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_last_of(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_first_of(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_first_of(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_first_of(basic_string<char, char_traits<char>, allocator<char> > const&,

unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_first_of(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_M_check_length(unsigned long, unsigned long, char const*) const(GLIBCXX_3.4.5) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_last_not_of(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_last_not_of(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_last_not_of(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_last_not_of(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_first_not_of(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_first_not_of(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_first_not_of(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find_first_not_of(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::at(unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::copy(char*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::find(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::rfind(char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::rfind(char const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::rfind(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::rfind(char, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::substr(unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::compare(unsigned long, unsigned long, char const*) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::compare(unsigned long,

unsigned long, char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::compare(unsigned long, unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::compare(unsigned long, unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_M_check(unsigned long, char const*) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_M_limit(unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::operator[](unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_S_construct(unsigned long, char, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_M_replace_aux(unsigned long, unsigned long, unsigned long, char)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_M_replace_safe(unsigned long, unsigned long, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::at(unsigned long) (GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_Rep::_M_set_length_and_sharable(unsigned long)(GLIBCXX_3.4.5) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_Rep::_M_clone(allocator<char> const&, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_Rep::_S_create(unsigned long, unsigned long, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::erase(unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::append(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::append(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long) (GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::append(unsigned long, char)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::assign(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::assign(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long) (GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::assign(unsigned long, char) (GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::insert(__gnu_cxx::__normal_iterator<char*, basic_string<char, char_traits<char>, allocator<char> > >, unsigned long, char)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::insert(unsigned long, char const*)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::insert(unsigned long, char

const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::insert(unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::insert(unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::insert(unsigned long, unsigned long, char)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::resize(unsigned long) (GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::resize(unsigned long, char) (GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_M_copy(char*, char const*, unsigned long)(GLIBCXX_3.4.5) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_M_move(char*, char const*, unsigned long)(GLIBCXX_3.4.5) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::replace(__gnu_cxx::__normal_iterator<char*, basic_string<char, char_traits<char>, allocator<char> > >, __gnu_cxx::__normal_iterator<char*, basic_string<char, char_traits<char>, allocator<char> > >, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::replace(__gnu_cxx::__normal_iterator<char*, basic_string<char, char_traits<char>, allocator<char> > >, __gnu_cxx::__normal_iterator<char*, basic_string<char, char_traits<char>, allocator<char> > >, unsigned long, char) (GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::replace(unsigned long, unsigned long, char const*)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::replace(unsigned long, unsigned long, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::replace(unsigned long, unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&) (GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::replace(unsigned long, unsigned long, basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::replace(unsigned long, unsigned long, unsigned long, char)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::reserve(unsigned long) (GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_M_assign(char*, unsigned long, char)(GLIBCXX_3.4.5) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::_M_mutate(unsigned long, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::basic_string(char const*, unsigned long, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::basic_string(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char>

>::basic_string(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::basic_string(unsigned long, char, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::basic_string(char const*, unsigned long, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::basic_string(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::basic_string(basic_string<char, char_traits<char>, allocator<char> > const&, unsigned long, unsigned long, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::basic_string(unsigned long, char, allocator<char> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<char, char_traits<char>, allocator<char> >::operator[](unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.60 Class basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

12.1.60.1 Interfaces for Class basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_string<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > specified in Table 12-47, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-47 libstdcxx - Class basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > Function Interfaces

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_last_of(wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_last_of(wchar_t const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_last_of(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_last_of(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_first_of(wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_first_of(wchar_t const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_first_of(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_first_of(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_check_length(unsigned long, unsigned long, char const*) const(GLIBCXX_3.4.5) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_last_not_of(wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_last_not_of(wchar_t const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_last_not_of(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_last_not_of(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_first_not_of(wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_first_not_of(wchar_t const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_first_not_of(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find_first_not_of(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::at(unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::copy(wchar_t*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find(wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find(wchar_t const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::find(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::rfind(wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::rfind(wchar_t const*, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::rfind(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::rfind(wchar_t, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::substr(unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::compare(unsigned long, unsigned long, wchar_t const*) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::compare(unsigned long, unsigned long, wchar_t const*, unsigned long)

const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::compare(unsigned long, unsigned long, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::compare(unsigned long, unsigned long, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_check(unsigned long, char const*) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_limit(unsigned long, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::operator[](unsigned long) const(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_S_construct(unsigned long, wchar_t, allocator<wchar_t> const&) (GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_replace_aux(unsigned long, unsigned long, unsigned long, wchar_t) (GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_replace_safe(unsigned long, unsigned long, wchar_t const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::at(unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_Rep::_M_set_length_and_sharable(unsigned long)(GLIBCXX_3.4.5) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_Rep::_M_clone(allocator<wchar_t> const&, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_Rep::_S_create(unsigned long, unsigned long, allocator<wchar_t> const&) (GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::erase(unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::append(wchar_t const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::append(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::append(unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::assign(wchar_t const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::assign(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::assign(unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t>

>::insert(__gnu_cxx::__normal_iterator<wchar_t*, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > >, unsigned long, wchar_t) (GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::insert(unsigned long, wchar_t const*)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::insert(unsigned long, wchar_t const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::insert(unsigned long, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&) (GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::insert(unsigned long, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::insert(unsigned long, unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::resize(unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::resize(unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_copy(wchar_t*, wchar_t const*, unsigned long)(GLIBCXX_3.4.5) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_move(wchar_t*, wchar_t const*, unsigned long)(GLIBCXX_3.4.5) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::replace(__gnu_cxx::__normal_iterator<wchar_t*, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > >, __gnu_cxx::__normal_iterator<wchar_t*, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > >, wchar_t const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::replace(__gnu_cxx::__normal_iterator<wchar_t*, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > >, __gnu_cxx::__normal_iterator<wchar_t*, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > >, unsigned long, wchar_t) (GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::replace(unsigned long, unsigned long, wchar_t const*)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::replace(unsigned long, unsigned long, wchar_t const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::replace(unsigned long, unsigned long, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::replace(unsigned long, unsigned long, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::replace(unsigned long, unsigned long, unsigned long, wchar_t)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::reserve(unsigned long)(GLIBCXX_3.4) [ISOCXX]

basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_assign(wchar_t*, unsigned long, wchar_t)(GLIBCXX_3.4.5) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_mutate(unsigned long, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::basic_string(wchar_t const*, unsigned long, allocator<wchar_t> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::basic_string(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::basic_string(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned long, allocator<wchar_t> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::basic_string(unsigned long, wchar_t, allocator<wchar_t> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::basic_string(wchar_t const*, unsigned long, allocator<wchar_t> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::basic_string(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::basic_string(basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&, unsigned long, unsigned long, allocator<wchar_t> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::basic_string(unsigned long, wchar_t, allocator<wchar_t> const&)(GLIBCXX_3.4) [ISOCXX]
basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::operator[](unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.61 Class basic_stringstream<char, char_traits<char>, allocator<char> >

12.1.61.1 Class data for basic_stringstream<char, char_traits<char>, allocator<char> >

The virtual table for the std::basic_stringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 12-48

Table 12-48 Primary vtable for basic_stringstream<char, char_traits<char>, allocator<char> >

Base Offset	0
Virtual Base Offset	104
RTTI	typeinfo for basic_stringstream<char, char_traits<char>, allocator<char> >
vfunc[0]:	basic_stringstream<char, char_traits<char>, allocator<char> >::~basic_stringstream()
vfunc[1]:	basic_stringstream<char,

	char_traits<char>, allocator<char> >::~basic_stringstream()

Table 12-49 Secondary vtable for basic_stringstream<char, char_traits<char>, allocator<char> >

Base Offset	-16
Virtual Base Offset	88
RTTI	typeinfo for basic_stringstream<char, char_traits<char>, allocator<char> >
vfunc[0]:	non-virtual thunk to basic_stringstream<char, char_traits<char>, allocator<char> >::~basic_stringstream()
vfunc[1]:	non-virtual thunk to basic_stringstream<char, char_traits<char>, allocator<char> >::~basic_stringstream()

Table 12-50 Secondary vtable for basic_stringstream<char, char_traits<char>, allocator<char> >

Base Offset	-104
Virtual Base Offset	-104
RTTI	typeinfo for basic_stringstream<char, char_traits<char>, allocator<char> >
vfunc[0]:	virtual thunk to basic_stringstream<char, char_traits<char>, allocator<char> >::~basic_stringstream()
vfunc[1]:	virtual thunk to basic_stringstream<char, char_traits<char>, allocator<char> >::~basic_stringstream()

The VTT for the std::basic_stringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 12-51

Table 12-51 VTT for basic_stringstream<char, char_traits<char>, allocator<char> >

VTT Name	_ZTTSt18basic_stringstreamIcSt11char_traitsIcESaIcEE
Number of Entries	10

12.1.61.2 Interfaces for Class basic_stringstream<char, char_traits<char>, allocator<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_stringstream<char, std::char_traits<char>, std::allocator<char> > specified in Table 12-52, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-52 libstdcxx - Class basic_stringstream<char, char_traits<char>, allocator<char> > Function Interfaces

non-virtual thunk to basic_stringstream<char, char_traits<char>, allocator<char> >::~basic_stringstream()(GLIBCXX_3.4) [CXXABI-1.86]
non-virtual thunk to basic_stringstream<char, char_traits<char>, allocator<char> >::~basic_stringstream()(GLIBCXX_3.4) [CXXABI-1.86]

virtual thunk to basic_stringstream<char, char_traits<char>, allocator<char> >::~basic_stringstream()(GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_stringstream<char, char_traits<char>, allocator<char> >::~basic_stringstream()(GLIBCXX_3.4) [CXXABI-1.86]

12.1.62 Class basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

12.1.62.1 Class data for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

The virtual table for the std::basic_stringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 12-53

Table 12-53 Primary vtable for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

Base Offset	0
Virtual Base Offset	104
RTTI	typeinfo for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >
vfunc[0]:	basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringstream()
vfunc[1]:	basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringstream()

Table 12-54 Secondary vtable for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

Base Offset	-16
Virtual Base Offset	88
RTTI	typeinfo for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >
vfunc[0]:	non-virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringstream()
vfunc[1]:	non-virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringstream()

Table 12-55 Secondary vtable for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

Base Offset	-104

Virtual Base Offset	-104
RTTI	typeinfo for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >
vfunc[0]:	virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringstream()
vfunc[1]:	virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringstream()

The VTT for the std::basic_stringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 12-56

Table 12-56 VTT for basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

VTT Name	_ZTTSt18basic_stringstreamIwSt11char_traitsIwESaIwEE
Number of Entries	10

12.1.62.2 Interfaces for Class basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_stringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > specified in Table 12-57, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-57 libstdcxx - Class basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > Function Interfaces

non-virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringstream()(GLIBCXX_3.4) [CXXABI-1.86]
non-virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringstream()(GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringstream()(GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_stringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringstream()(GLIBCXX_3.4) [CXXABI-1.86]

12.1.63 Class basic_istringstream<char, char_traits<char>, allocator<char> >

12.1.63.1 Class data for basic_istringstream<char, char_traits<char>, allocator<char> >

The virtual table for the std::basic_istringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 12-58

Table 12-58 Primary vtable for basic_istringstream<char, char_traits<char>, allocator<char> >

Base Offset	0
Virtual Base Offset	96
RTTI	typeinfo for basic_istringstream<char, char_traits<char>, allocator<char> >
vfunc[0]:	basic_istringstream<char, char_traits<char>, allocator<char> >::~basic_istringstream()
vfunc[1]:	basic_istringstream<char, char_traits<char>, allocator<char> >::~basic_istringstream()

Table 12-59 Secondary vtable for basic_istringstream<char, char_traits<char>, allocator<char> >

Base Offset	-96
Virtual Base Offset	-96
RTTI	typeinfo for basic_istringstream<char, char_traits<char>, allocator<char> >
vfunc[0]:	virtual thunk to basic_istringstream<char, char_traits<char>, allocator<char> >::~basic_istringstream()
vfunc[1]:	virtual thunk to basic_istringstream<char, char_traits<char>, allocator<char> >::~basic_istringstream()

The VTT for the std::basic_istringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 12-60

Table 12-60 VTT for basic_istringstream<char, char_traits<char>, allocator<char> >

VTT Name	_ZTTSt19basic_istringstreamIcSt11char_traitsIcESaIcEE
Number of Entries	4

12.1.63.2 Interfaces for Class basic_istringstream<char, char_traits<char>, allocator<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_istringstream<char, std::char_traits<char>, std::allocator<char> > specified in Table 12-61, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-61 libstdcxx - Class basic_istringstream<char, char_traits<char>, allocator<char> > Function Interfaces

virtual thunk to basic_istringstream<char, char_traits<char>, allocator<char> >::~basic_istringstream()(GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_istringstream<char, char_traits<char>, allocator<char> >::~basic_istringstream()(GLIBCXX_3.4) [CXXABI-1.86]

12.1.64 Class basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

12.1.64.1 Class data for basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

The virtual table for the std::basic_istringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 12-62

Table 12-62 Primary vtable for basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

Base Offset	0
Virtual Base Offset	96
RTTI	typeinfo for basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >
vfunc[0]:	basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_istringstream()
vfunc[1]:	basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_istringstream()

Table 12-63 Secondary vtable for basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

Base Offset	-96
Virtual Base Offset	-96
RTTI	typeinfo for basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >
vfunc[0]:	virtual thunk to basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_istringstream()
vfunc[1]:	virtual thunk to basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_istringstream()

The VTT for the std::basic_istringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 12-64

Table 12-64 VTT for basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

VTT Name	_ZTTSt19basic_istringstreamIwSt11char_traitsIwESaIwEE
Number of Entries	4

12.1.64.2 Interfaces for Class basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_istringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > specified in Table 12-65, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-65 libstdcxx - Class basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > Function Interfaces

virtual thunk to basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_istringstream()(GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_istringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_istringstream()(GLIBCXX_3.4) [CXXABI-1.86]

12.1.65 Class basic_ostringstream<char, char_traits<char>, allocator<char> >

12.1.65.1 Class data for basic_ostringstream<char, char_traits<char>, allocator<char> >

The virtual table for the std::basic_ostringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 12-66

Table 12-66 Primary vtable for basic_ostringstream<char, char_traits<char>, allocator<char> >

Base Offset	0
Virtual Base Offset	88
RTTI	typeinfo for basic_ostringstream<char, char_traits<char>, allocator<char> >
vfunc[0]:	basic_ostringstream<char, char_traits<char>, allocator<char> >::~basic_ostringstream()
vfunc[1]:	basic_ostringstream<char, char_traits<char>, allocator<char> >::~basic_ostringstream()

Table 12-67 Secondary vtable for basic_ostringstream<char, char_traits<char>, allocator<char> >

Base Offset	-88
Virtual Base Offset	-88
RTTI	typeinfo for basic_ostringstream<char, char_traits<char>, allocator<char> >
vfunc[0]:	virtual thunk to basic_ostringstream<char, char_traits<char>, allocator<char> >::~basic_ostringstream()
vfunc[1]:	virtual thunk to basic_ostringstream<char, char_traits<char>, allocator<char> >::~basic_ostringstream()

The VTT for the std::basic_ostringstream<char, std::char_traits<char>, std::allocator<char> > class is described by Table 12-68

Table 12-68 VTT for basic_ostringstream<char, char_traits<char>, allocator<char> >

VTT Name	_ZTTSt19basic_ostringstreamIcSt11char_traitsIcESaIcEE
Number of Entries	4

12.1.65.2 Interfaces for Class basic_ostringstream<char, char_traits<char>, allocator<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ostringstream<char, std::char_traits<char>, std::allocator<char> > specified in Table 12-69, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-69 libstdcxx - Class basic_ostringstream<char, char_traits<char>, allocator<char> > Function Interfaces

virtual thunk to basic_ostringstream<char, char_traits<char>, allocator<char> >::~basic_ostringstream()(GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_ostringstream<char, char_traits<char>, allocator<char> >::~basic_ostringstream()(GLIBCXX_3.4) [CXXABI-1.86]

12.1.66 Class basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

12.1.66.1 Class data for basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

The virtual table for the std::basic_ostringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 12-70

Table 12-70 Primary vtable for basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

Base Offset	0
Virtual Base Offset	88
RTTI	typeinfo for basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >
vfunc[0]:	basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_ostringstream()
vfunc[1]:	basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_ostringstream()

Table 12-71 Secondary vtable for basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

Base Offset	-88
Virtual Base Offset	-88
RTTI	typeinfo for basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

vfunc[0]:	virtual thunk to basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_ostringstream()
vfunc[1]:	virtual thunk to basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_ostringstream()

The VTT for the std::basic_ostringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 12-72

Table 12-72 VTT for basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

VTT Name	_ZTTSt19basic_ostringstreamIwSt11char_traitsIwESaIwEE
Number of Entries	4

12.1.66.2 Interfaces for Class basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ostringstream<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > specified in Table 12-73, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-73 libstdcxx - Class basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > Function Interfaces

virtual thunk to basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_ostringstream()(GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_ostringstream<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_ostringstream()(GLIBCXX_3.4) [CXXABI-1.86]

12.1.67 Class basic_stringbuf<char, char_traits<char>, allocator<char> >

12.1.67.1 Class data for basic_stringbuf<char, char_traits<char>, allocator<char> >

The virtual table for the std::basic_stringbuf<char, std::char_traits<char>, std::allocator<char> > class is described by Table 12-74

Table 12-74 Primary vtable for basic_stringbuf<char, char_traits<char>, allocator<char> >

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for basic_stringbuf<char, char_traits<char>, allocator<char> >
vfunc[0]:	basic_stringbuf<char, char_traits<char>, allocator<char> >::~basic_stringbuf()
vfunc[1]:	basic_stringbuf<char, char_traits<char>, allocator<char> >::~basic_stringbuf()
vfunc[2]:	basic_streambuf<char, char_traits<char>

	>::imbue(locale const&)
vfunc[3]:	basic_stringbuf<char, char_traits<char>, allocator<char> >::setbuf(char*, long)
vfunc[4]:	basic_stringbuf<char, char_traits<char>, allocator<char> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)
vfunc[5]:	basic_stringbuf<char, char_traits<char>, allocator<char> >::seekpos(fpos<__mbstate_t>, _Ios_Openmode)
vfunc[6]:	basic_streambuf<char, char_traits<char> >::sync()
vfunc[7]:	basic_streambuf<char, char_traits<char> >::showmanyc()
vfunc[8]:	basic_streambuf<char, char_traits<char> >::xsgetn(char*, long)
vfunc[9]:	basic_stringbuf<char, char_traits<char>, allocator<char> >::underflow()
vfunc[10]:	basic_streambuf<char, char_traits<char> >::uflow()
vfunc[11]:	basic_stringbuf<char, char_traits<char>, allocator<char> >::pbackfail(int)
vfunc[12]:	basic_streambuf<char, char_traits<char> >::xsputn(char const*, long)
vfunc[13]:	basic_stringbuf<char, char_traits<char>, allocator<char> >::overflow(int)

The Run Time Type Information for the std::basic_stringbuf<char, std::char_traits<char>, std::allocator<char> > class is described by Table 12-75

Table 12-75 typeinfo for basic_stringbuf<char, char_traits<char>, allocator<char> >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for basic_stringbuf<char, char_traits<char>, allocator<char> >

12.1.67.2 Interfaces for Class basic_stringbuf<char, char_traits<char>, allocator<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_stringbuf<char, std::char_traits<char>, std::allocator<char> > specified in Table 12-76, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-76 libstdcxx - Class basic_stringbuf<char, char_traits<char>, allocator<char> > Function Interfaces

basic_stringbuf<char, char_traits<char>, allocator<char> >::setbuf(char*, long) (GLIBCXX_3.4) [ISOCXX]
basic_stringbuf<char, char_traits<char>, allocator<char> >::_M_sync(char*, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_stringbuf<char, char_traits<char>, allocator<char> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]

12.1.68 Class basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

12.1.68.1 Class data for basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

The virtual table for the std::basic_stringbuf<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 12-77

Table 12-77 Primary vtable for basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >
vfunc[0]:	basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringbuf()
vfunc[1]:	basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::~basic_stringbuf()
vfunc[2]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::imbue(locale const&)
vfunc[3]:	basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::setbuf(wchar_t*, long)
vfunc[4]:	basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)
vfunc[5]:	basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::seekpos(fpos<__mbstate_t>, _Ios_Openmode)
vfunc[6]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::sync()
vfunc[7]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::showmanyc()
vfunc[8]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::xsgetn(wchar_t*, long)
vfunc[9]:	basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::underflow()
vfunc[10]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::uflow()
vfunc[11]:	basic_stringbuf<wchar_t,

	char_traits<wchar_t>, allocator<wchar_t> >::pbackfail(unsigned int)
vfunc[12]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::xsputn(wchar_t const*, long)
vfunc[13]:	basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::overflow(unsigned int)

The Run Time Type Information for the std::basic_stringbuf<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > class is described by Table 12-78

Table 12-78 typeinfo for basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

12.1.68.2 Interfaces for Class basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_stringbuf<wchar_t, std::char_traits<wchar_t>, std::allocator<wchar_t> > specified in Table 12-79, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-79 libstdcxx - Class basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > Function Interfaces

basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::setbuf(wchar_t*, long)(GLIBCXX_3.4) [ISOCXX]
basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::_M_sync(wchar_t*, unsigned long, unsigned long)(GLIBCXX_3.4) [ISOCXX]
basic_stringbuf<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]

12.1.69 Class basic_iostream<char, char_traits<char> >

12.1.69.1 Class data for basic_iostream<char, char_traits<char> >

The virtual table for the std::basic_iostream<char, std::char_traits<char> > class is described by Table 12-80

Table 12-80 Primary vtable for basic_iostream<char, char_traits<char> >

Base Offset	0
Virtual Base Offset	24
RTTI	typeinfo for basic_iostream<char, char_traits<char> >
vfunc[0]:	basic_iostream<char, char_traits<char> >::~basic_iostream()

vfunc[1]:	basic_iostream<char, char_traits<char> >::~basic_iostream()

Table 12-81 Secondary vtable for basic_iostream<char, char_traits<char> >

Base Offset	-16
Virtual Base Offset	8
RTTI	typeinfo for basic_iostream<char, char_traits<char> >
vfunc[0]:	non-virtual thunk to basic_iostream<char, char_traits<char> >::~basic_iostream()
vfunc[1]:	non-virtual thunk to basic_iostream<char, char_traits<char> >::~basic_iostream()

Table 12-82 Secondary vtable for basic_iostream<char, char_traits<char> >

Base Offset	-24
Virtual Base Offset	-24
RTTI	typeinfo for basic_iostream<char, char_traits<char> >
vfunc[0]:	virtual thunk to basic_iostream<char, char_traits<char> >::~basic_iostream()
vfunc[1]:	virtual thunk to basic_iostream<char, char_traits<char> >::~basic_iostream()

The VTT for the std::basic_iostream<char, std::char_traits<char> > class is described by Table 12-83

Table 12-83 VTT for basic_iostream<char, char_traits<char> >

VTT Name	_ZTTSd
Number of Entries	7

12.1.69.2 Interfaces for Class basic_iostream<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_iostream<char, std::char_traits<char> > specified in Table 12-84, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-84 libstdcxx - Class basic_iostream<char, char_traits<char> > Function Interfaces

non-virtual thunk to basic_iostream<char, char_traits<char> >::~basic_iostream() (GLIBCXX_3.4) [CXXABI-1.86]
non-virtual thunk to basic_iostream<char, char_traits<char> >::~basic_iostream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_iostream<char, char_traits<char> >::~basic_iostream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_iostream<char, char_traits<char> >::~basic_iostream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.70 Class basic_iostream<wchar_t, char_traits<wchar_t> >

12.1.70.1 Class data for basic_iostream<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_iostream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-85

Table 12-85 Primary vtable for basic_iostream<wchar_t, char_traits<wchar_t> >

Base Offset	0
Virtual Base Offset	24
RTTI	typeinfo for basic_iostream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	basic_iostream<wchar_t, char_traits<wchar_t> >::~basic_iostream()
vfunc[1]:	basic_iostream<wchar_t, char_traits<wchar_t> >::~basic_iostream()

Table 12-86 Secondary vtable for basic_iostream<wchar_t, char_traits<wchar_t> >

Base Offset	-16
Virtual Base Offset	8
RTTI	typeinfo for basic_iostream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	non-virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t> >::~basic_iostream()
vfunc[1]:	non-virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t> >::~basic_iostream()

Table 12-87 Secondary vtable for basic_iostream<wchar_t, char_traits<wchar_t> >

Base Offset	-24
Virtual Base Offset	-24
RTTI	typeinfo for basic_iostream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t> >::~basic_iostream()
vfunc[1]:	virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t> >::~basic_iostream()

The VTT for the std::basic_iostream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-88

Table 12-88 VTT for basic_iostream<wchar_t, char_traits<wchar_t> >

VTT Name	_ZTTSt14basic_iostreamIwSt11char_traitsIwEE
Number of Entries	7

12.1.70.2 Interfaces for Class basic_iostream<wchar_t, char_traits<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_iostream<wchar_t, std::char_traits<wchar_t> > specified in Table 12-89, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-89 libstdcxx - Class basic_iostream<wchar_t, char_traits<wchar_t> > Function Interfaces

non-virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t> >::~basic_iostream()(GLIBCXX_3.4) [CXXABI-1.86]
non-virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t> >::~basic_iostream()(GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t> >::~basic_iostream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_iostream<wchar_t, char_traits<wchar_t> >::~basic_iostream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.71 Class basic_istream<char, char_traits<char> >

12.1.71.1 Class data for basic_istream<char, char_traits<char> >

The virtual table for the std::basic_istream<char, std::char_traits<char> > class is described by Table 12-90

Table 12-90 Primary vtable for basic_istream<char, char_traits<char> >

Base Offset	0
Virtual Base Offset	16
RTTI	typeinfo for basic_istream<char, char_traits<char> >
vfunc[0]:	basic_istream<char, char_traits<char> >::~basic_istream()
vfunc[1]:	basic_istream<char, char_traits<char> >::~basic_istream()

Table 12-91 Secondary vtable for basic_istream<char, char_traits<char> >

Base Offset	-16
Virtual Base Offset	-16
RTTI	typeinfo for basic_istream<char, char_traits<char> >
vfunc[0]:	virtual thunk to basic_istream<char, char_traits<char> >::~basic_istream()
vfunc[1]:	virtual thunk to basic_istream<char, char_traits<char> >::~basic_istream()

The VTT for the std::basic_istream<char, std::char_traits<char> > class is described by

Table 12-92

Table 12-92 VTT for basic_istream<char, char_traits<char> >

VTT Name	_ZTTSi
Number of Entries	2

12.1.71.2 Interfaces for Class basic_istream<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_istream<char, std::char_traits<char> > specified in Table 12-93, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-93 libstdcxx - Class basic_istream<char, char_traits<char> > Function Interfaces

basic_istream<char, char_traits<char> >& basic_istream<char, char_traits<char> >::_M_extract<__float128>(__float128&)(GLIBCXX_LDBL_3.4.7) [LSB]
basic_istream<char, char_traits<char> >::get(char*, long)(GLIBCXX_3.4) [ISOCXX]
basic_istream<char, char_traits<char> >::get(char*, long, char)(GLIBCXX_3.4) [ISOCXX]
basic_istream<char, char_traits<char> >::read(char*, long)(GLIBCXX_3.4) [ISOCXX]
basic_istream<char, char_traits<char> >::seekg(long, _Ios_Seekdir)(GLIBCXX_3.4) [ISOCXX]
basic_istream<char, char_traits<char> >::ignore(long)(GLIBCXX_3.4.5) [ISOCXX]
basic_istream<char, char_traits<char> >::ignore(long, int)(GLIBCXX_3.4) [ISOCXX]
basic_istream<char, char_traits<char> >::getline(char*, long)(GLIBCXX_3.4) [ISOCXX]
basic_istream<char, char_traits<char> >::getline(char*, long, char)(GLIBCXX_3.4) [ISOCXX]
basic_istream<char, char_traits<char> >::readsome(char*, long)(GLIBCXX_3.4) [ISOCXX]
basic_istream<char, char_traits<char> >::operator>>(__float128&) (GLIBCXX_LDBL_3.4) [ISOCXX]
basic_istream<char, char_traits<char> >& operator>><__float128, char, char_traits<char> >(basic_istream<char, char_traits<char> >&, complex<__float128>&)(GLIBCXX_LDBL_3.4) [ISOCXX]
virtual thunk to basic_istream<char, char_traits<char> >::~basic_istream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_istream<char, char_traits<char> >::~basic_istream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.72 Class basic_istream<wchar_t, char_traits<wchar_t> >

12.1.72.1 Class data for basic_istream<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_istream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-94

Table 12-94 Primary vtable for basic_istream<wchar_t, char_traits<wchar_t> >

Base Offset	0
Virtual Base Offset	16
RTTI	typeinfo for basic_istream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	basic_istream<wchar_t, char_traits<wchar_t> >::~basic_istream()
vfunc[1]:	basic_istream<wchar_t, char_traits<wchar_t> >::~basic_istream()

Table 12-95 Secondary vtable for basic_istream<wchar_t, char_traits<wchar_t> >

Base Offset	-16
Virtual Base Offset	-16
RTTI	typeinfo for basic_istream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	virtual thunk to basic_istream<wchar_t, char_traits<wchar_t> >::~basic_istream()
vfunc[1]:	virtual thunk to basic_istream<wchar_t, char_traits<wchar_t> >::~basic_istream()

The VTT for the std::basic_istream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-96

Table 12-96 VTT for basic_istream<wchar_t, char_traits<wchar_t> >

VTT Name	_ZTTSt13basic_istreamIwSt11char_traitsIwEE
Number of Entries	2

12.1.72.2 Interfaces for Class basic_istream<wchar_t, char_traits<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_istream<wchar_t, std::char_traits<wchar_t> > specified in Table 12-97, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-97 libstdcxx - Class basic_istream<wchar_t, char_traits<wchar_t> > Function Interfaces

basic_istream<wchar_t, char_traits<wchar_t> >& basic_istream<wchar_t, char_traits<wchar_t> >::_M_extract<__float128>(__float128&) (GLIBCXX_LDBL_3.4.7) [LSB]
basic_istream<wchar_t, char_traits<wchar_t> >::get(wchar_t*, long) (GLIBCXX_3.4) [ISOCXX]
basic_istream<wchar_t, char_traits<wchar_t> >::get(wchar_t*, long, wchar_t) (GLIBCXX_3.4) [ISOCXX]
basic_istream<wchar_t, char_traits<wchar_t> >::read(wchar_t*, long) (GLIBCXX_3.4) [ISOCXX]
basic_istream<wchar_t, char_traits<wchar_t> >::seekg(long, _Ios_Seekdir) (GLIBCXX_3.4) [ISOCXX]

basic_istream<wchar_t, char_traits<wchar_t> >::ignore(long)(GLIBCXX_3.4.5) [ISOCXX]
basic_istream<wchar_t, char_traits<wchar_t> >::ignore(long, unsigned int) (GLIBCXX_3.4) [ISOCXX]
basic_istream<wchar_t, char_traits<wchar_t> >::getline(wchar_t*, long) (GLIBCXX_3.4) [ISOCXX]
basic_istream<wchar_t, char_traits<wchar_t> >::getline(wchar_t*, long, wchar_t) (GLIBCXX_3.4) [ISOCXX]
basic_istream<wchar_t, char_traits<wchar_t> >::readsome(wchar_t*, long) (GLIBCXX_3.4) [ISOCXX]
basic_istream<wchar_t, char_traits<wchar_t> >::operator>>(__float128&) (GLIBCXX_LDBL_3.4) [ISOCXX]
basic_istream<wchar_t, char_traits<wchar_t> >& operator>><__float128, wchar_t, char_traits<wchar_t> >(basic_istream<wchar_t, char_traits<wchar_t> >&, complex<__float128>&)(GLIBCXX_LDBL_3.4) [ISOCXX]
virtual thunk to basic_istream<wchar_t, char_traits<wchar_t> >::~basic_istream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_istream<wchar_t, char_traits<wchar_t> >::~basic_istream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.73 Class istreambuf_iterator<wchar_t, char_traits<wchar_t> >

12.1.73.1 Interfaces for Class istreambuf_iterator<wchar_t, char_traits<wchar_t> >

No external methods are defined for libstdcxx - Class std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > in this part of the specification. See also the generic specification.

12.1.74 Class istreambuf_iterator<char, char_traits<char> >

12.1.74.1 Interfaces for Class istreambuf_iterator<char, char_traits<char> >

No external methods are defined for libstdcxx - Class std::istreambuf_iterator<char, std::char_traits<char> > in this part of the specification. See also the generic specification.

12.1.75 Class basic_ostream<char, char_traits<char> >

12.1.75.1 Class data for basic_ostream<char, char_traits<char> >

The virtual table for the std::basic_ostream<char, std::char_traits<char> > class is described by Table 12-98

Table 12-98 Primary vtable for basic_ostream<char, char_traits<char> >

Base Offset	0
Virtual Base Offset	8
RTTI	typeinfo for basic_ostream<char, char_traits<char> >

vfunc[0]:	basic_ostream<char, char_traits<char> >::~basic_ostream()
vfunc[1]:	basic_ostream<char, char_traits<char> >::~basic_ostream()

Table 12-99 Secondary vtable for basic_ostream<char, char_traits<char> >

Base Offset	-8
Virtual Base Offset	-8
RTTI	typeinfo for basic_ostream<char, char_traits<char> >
vfunc[0]:	virtual thunk to basic_ostream<char, char_traits<char> >::~basic_ostream()
vfunc[1]:	virtual thunk to basic_ostream<char, char_traits<char> >::~basic_ostream()

The VTT for the std::basic_ostream<char, std::char_traits<char> > class is described by Table 12-100

Table 12-100 VTT for basic_ostream<char, char_traits<char> >

VTT Name	_ZTTSo
Number of Entries	2

12.1.75.2 Interfaces for Class basic_ostream<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ostream<char, std::char_traits<char> > specified in Table 12-101, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-101 libstdcxx - Class basic_ostream<char, char_traits<char> > Function Interfaces

basic_ostream<char, char_traits<char> >::seekp(long, _Ios_Seekdir) (GLIBCXX_3.4) [ISOCXX]
basic_ostream<char, char_traits<char> >::write(char const*, long)(GLIBCXX_3.4) [ISOCXX]
basic_ostream<char, char_traits<char> >::_M_write(char const*, long) (GLIBCXX_3.4) [ISOCXX]
basic_ostream<char, char_traits<char> >& basic_ostream<char, char_traits<char> >::_M_insert<__float128>(__float128)(GLIBCXX_LDBL_3.4.7) [LSB]
basic_ostream<char, char_traits<char> >::operator<<(__float128) (GLIBCXX_LDBL_3.4) [ISOCXX]
basic_ostream<char, char_traits<char> >& operator<< <__float128, char, char_traits<char> >(basic_ostream<char, char_traits<char> >&, complex<__float128> const&)(GLIBCXX_LDBL_3.4) [ISOCXX]
virtual thunk to basic_ostream<char, char_traits<char> >::~basic_ostream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_ostream<char, char_traits<char> >::~basic_ostream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.76 Class basic_ostream<wchar_t, char_traits<wchar_t> >

12.1.76.1 Class data for basic_ostream<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_ostream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-102

Table 12-102 Primary vtable for basic_ostream<wchar_t, char_traits<wchar_t> >

Base Offset	0
Virtual Base Offset	8
RTTI	typeinfo for basic_ostream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	basic_ostream<wchar_t, char_traits<wchar_t> >::~basic_ostream()
vfunc[1]:	basic_ostream<wchar_t, char_traits<wchar_t> >::~basic_ostream()

Table 12-103 Secondary vtable for basic_ostream<wchar_t, char_traits<wchar_t> >

Base Offset	-8
Virtual Base Offset	-8
RTTI	typeinfo for basic_ostream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	virtual thunk to basic_ostream<wchar_t, char_traits<wchar_t> >::~basic_ostream()
vfunc[1]:	virtual thunk to basic_ostream<wchar_t, char_traits<wchar_t> >::~basic_ostream()

The VTT for the std::basic_ostream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-104

Table 12-104 VTT for basic_ostream<wchar_t, char_traits<wchar_t> >

VTT Name	_ZTTSt13basic_ostreamIwSt11char_traitsIwEE
Number of Entries	2

12.1.76.2 Interfaces for Class basic_ostream<wchar_t, char_traits<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ostream<wchar_t, std::char_traits<wchar_t> > specified in Table 12-105, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-105 libstdcxx - Class basic_ostream<wchar_t, char_traits<wchar_t> > Function Interfaces

basic_ostream<wchar_t, char_traits<wchar_t> >::seekp(long, _Ios_Seekdir) (GLIBCXX_3.4) [ISOCXX]

basic_ostream<wchar_t, char_traits<wchar_t> >::write(wchar_t const*, long) (GLIBCXX_3.4) [ISOCXX]
basic_ostream<wchar_t, char_traits<wchar_t> >& basic_ostream<wchar_t, char_traits<wchar_t> >::_M_insert<__float128>(__float128) (GLIBCXX_LDBL_3.4.7) [LSB]
basic_ostream<wchar_t, char_traits<wchar_t> >::operator<<(__float128) (GLIBCXX_LDBL_3.4) [ISOCXX]
basic_ostream<wchar_t, char_traits<wchar_t> >& operator<< <__float128, wchar_t, char_traits<wchar_t> >(basic_ostream<wchar_t, char_traits<wchar_t> >&, complex<__float128> const&)(GLIBCXX_LDBL_3.4) [ISOCXX]
virtual thunk to basic_ostream<wchar_t, char_traits<wchar_t> >::~basic_ostream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_ostream<wchar_t, char_traits<wchar_t> >::~basic_ostream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.77 Class basic_fstream<char, char_traits<char> >

12.1.77.1 Class data for basic_fstream<char, char_traits<char> >

The virtual table for the std::basic_fstream<char, std::char_traits<char> > class is described by Table 12-106

Table 12-106 Primary vtable for basic_fstream<char, char_traits<char> >

Base Offset	0
Virtual Base Offset	264
RTTI	typeinfo for basic_fstream<char, char_traits<char> >
vfunc[0]:	basic_fstream<char, char_traits<char> >::~basic_fstream()
vfunc[1]:	basic_fstream<char, char_traits<char> >::~basic_fstream()

Table 12-107 Secondary vtable for basic_fstream<char, char_traits<char> >

Base Offset	-16
Virtual Base Offset	248
RTTI	typeinfo for basic_fstream<char, char_traits<char> >
vfunc[0]:	non-virtual thunk to basic_fstream<char, char_traits<char> >::~basic_fstream()
vfunc[1]:	non-virtual thunk to basic_fstream<char, char_traits<char> >::~basic_fstream()

Table 12-108 Secondary vtable for basic_fstream<char, char_traits<char> >

Base Offset	-264
Virtual Base Offset	-264
RTTI	typeinfo for basic_fstream<char, char_traits<char> >
vfunc[0]:	virtual thunk to basic_fstream<char, char_traits<char> >::~basic_fstream()
vfunc[1]:	virtual thunk to basic_fstream<char,

	char_traits<char> >::~basic_fstream()

The VTT for the std::basic_fstream<char, std::char_traits<char> > class is described by Table 12-109

Table 12-109 VTT for basic_fstream<char, char_traits<char> >

VTT Name	_ZTTSt13basic_fstreamIcSt11char_traitsIcEE
Number of Entries	10

12.1.77.2 Interfaces for Class basic_fstream<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_fstream<char, std::char_traits<char> > specified in Table 12-110, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-110 libstdcxx - Class basic_fstream<char, char_traits<char> > Function Interfaces

non-virtual thunk to basic_fstream<char, char_traits<char> >::~basic_fstream() (GLIBCXX_3.4) [CXXABI-1.86]
non-virtual thunk to basic_fstream<char, char_traits<char> >::~basic_fstream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_fstream<char, char_traits<char> >::~basic_fstream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_fstream<char, char_traits<char> >::~basic_fstream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.78 Class basic_fstream<wchar_t, char_traits<wchar_t> >

12.1.78.1 Class data for basic_fstream<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_fstream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-111

Table 12-111 Primary vtable for basic_fstream<wchar_t, char_traits<wchar_t> >

Base Offset	0
Virtual Base Offset	264
RTTI	typeinfo for basic_fstream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	basic_fstream<wchar_t, char_traits<wchar_t> >::~basic_fstream()
vfunc[1]:	basic_fstream<wchar_t, char_traits<wchar_t> >::~basic_fstream()

Table 12-112 Secondary vtable for basic_fstream<wchar_t, char_traits<wchar_t> >

Base Offset	-16
Virtual Base Offset	248
RTTI	typeinfo for basic_fstream<wchar_t,

	char_traits<wchar_t> >
vfunc[0]:	non-virtual thunk to basic_fstream<wchar_t, char_traits<wchar_t> >::~basic_fstream()
vfunc[1]:	non-virtual thunk to basic_fstream<wchar_t, char_traits<wchar_t> >::~basic_fstream()

Table 12-113 Secondary vtable for basic_fstream<wchar_t, char_traits<wchar_t> >

Base Offset	-264
Virtual Base Offset	-264
RTTI	typeinfo for basic_fstream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	virtual thunk to basic_fstream<wchar_t, char_traits<wchar_t> >::~basic_fstream()
vfunc[1]:	virtual thunk to basic_fstream<wchar_t, char_traits<wchar_t> >::~basic_fstream()

The VTT for the std::basic_fstream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-114

Table 12-114 VTT for basic_fstream<wchar_t, char_traits<wchar_t> >

VTT Name	_ZTTSt13basic_fstreamIwSt11char_traitsIwEE
Number of Entries	10

12.1.78.2 Interfaces for Class basic_fstream<wchar_t, char_traits<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_fstream<wchar_t, std::char_traits<wchar_t> > specified in Table 12-115, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-115 libstdcxx - Class basic_fstream<wchar_t, char_traits<wchar_t> > Function Interfaces

non-virtual thunk to basic_fstream<wchar_t, char_traits<wchar_t> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI-1.86]
non-virtual thunk to basic_fstream<wchar_t, char_traits<wchar_t> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_fstream<wchar_t, char_traits<wchar_t> >::~basic_fstream()(GLIBCXX_3.4) [CXXABI-1.86]

12.1.79 Class basic_ifstream<char, char_traits<char> >

12.1.79.1 Class data for basic_ifstream<char, char_traits<char> >

The virtual table for the std::basic_ifstream<char, std::char_traits<char> > class is de-

scribed by Table 12-116

Table 12-116 Primary vtable for basic_ifstream<char, char_traits<char> >

Base Offset	0
Virtual Base Offset	256
RTTI	typeinfo for basic_ifstream<char, char_traits<char> >
vfunc[0]:	basic_ifstream<char, char_traits<char> >::~basic_ifstream()
vfunc[1]:	basic_ifstream<char, char_traits<char> >::~basic_ifstream()

Table 12-117 Secondary vtable for basic_ifstream<char, char_traits<char> >

Base Offset	-256
Virtual Base Offset	-256
RTTI	typeinfo for basic_ifstream<char, char_traits<char> >
vfunc[0]:	virtual thunk to basic_ifstream<char, char_traits<char> >::~basic_ifstream()
vfunc[1]:	virtual thunk to basic_ifstream<char, char_traits<char> >::~basic_ifstream()

The VTT for the std::basic_ifstream<char, std::char_traits<char> > class is described by Table 12-118

Table 12-118 VTT for basic_ifstream<char, char_traits<char> >

VTT Name	_ZTTSt14basic_ifstreamIcSt11char_traitsIcEE
Number of Entries	4

12.1.79.2 Interfaces for Class basic_ifstream<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ifstream<char, std::char_traits<char> > specified in Table 12-119, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-119 libstdcxx - Class basic_ifstream<char, char_traits<char> > Function Interfaces

virtual thunk to basic_ifstream<char, char_traits<char> >::~basic_ifstream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_ifstream<char, char_traits<char> >::~basic_ifstream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.80 Class basic_ifstream<wchar_t, char_traits<wchar_t> >

12.1.80.1 Class data for basic_ifstream<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_ifstream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-120

Table 12-120 Primary vtable for basic_ifstream<wchar_t, char_traits<wchar_t> >

Base Offset	0
Virtual Base Offset	256
RTTI	typeinfo for basic_ifstream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	basic_ifstream<wchar_t, char_traits<wchar_t> >::~basic_ifstream()
vfunc[1]:	basic_ifstream<wchar_t, char_traits<wchar_t> >::~basic_ifstream()

Table 12-121 Secondary vtable for basic_ifstream<wchar_t, char_traits<wchar_t> >

Base Offset	-256
Virtual Base Offset	-256
RTTI	typeinfo for basic_ifstream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	virtual thunk to basic_ifstream<wchar_t, char_traits<wchar_t> >::~basic_ifstream()
vfunc[1]:	virtual thunk to basic_ifstream<wchar_t, char_traits<wchar_t> >::~basic_ifstream()

The VTT for the std::basic_ifstream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-122

Table 12-122 VTT for basic_ifstream<wchar_t, char_traits<wchar_t> >

VTT Name	_ZTTSt14basic_ifstreamIwSt11char_traitsIwEE
Number of Entries	4

12.1.80.2 Interfaces for Class basic_ifstream<wchar_t, char_traits<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ifstream<wchar_t, std::char_traits<wchar_t> > specified in Table 12-123, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-123 libstdcxx - Class basic_ifstream<wchar_t, char_traits<wchar_t> > Function Interfaces

virtual thunk to basic_ifstream<wchar_t, char_traits<wchar_t> >::~basic_ifstream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_ifstream<wchar_t, char_traits<wchar_t> >::~basic_ifstream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.81 Class basic_ofstream<char, char_traits<char> >

12.1.81.1 Class data for basic_ofstream<char, char_traits<char> >

The virtual table for the std::basic_ofstream<char, std::char_traits<char> > class is de-

scribed by Table 12-124

Table 12-124 Primary vtable for basic_ofstream<char, char_traits<char> >

Base Offset	0
Virtual Base Offset	248
RTTI	typeinfo for basic_ofstream<char, char_traits<char> >
vfunc[0]:	basic_ofstream<char, char_traits<char> >::~basic_ofstream()
vfunc[1]:	basic_ofstream<char, char_traits<char> >::~basic_ofstream()

Table 12-125 Secondary vtable for basic_ofstream<char, char_traits<char> >

Base Offset	-248
Virtual Base Offset	-248
RTTI	typeinfo for basic_ofstream<char, char_traits<char> >
vfunc[0]:	virtual thunk to basic_ofstream<char, char_traits<char> >::~basic_ofstream()
vfunc[1]:	virtual thunk to basic_ofstream<char, char_traits<char> >::~basic_ofstream()

The VTT for the std::basic_ofstream<char, std::char_traits<char> > class is described by Table 12-126

Table 12-126 VTT for basic_ofstream<char, char_traits<char> >

VTT Name	_ZTTSt14basic_ofstreamIcSt11char_traitsIcEE
Number of Entries	4

12.1.81.2 Interfaces for Class basic_ofstream<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ofstream<char, std::char_traits<char> > specified in Table 12-127, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-127 libstdcxx - Class basic_ofstream<char, char_traits<char> > Function Interfaces

virtual thunk to basic_ofstream<char, char_traits<char> >::~basic_ofstream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_ofstream<char, char_traits<char> >::~basic_ofstream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.82 Class basic_ofstream<wchar_t, char_traits<wchar_t> >

12.1.82.1 Class data for basic_ofstream<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_ofstream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-128

Table 12-128 Primary vtable for basic_ofstream<wchar_t, char_traits<wchar_t> >

Base Offset	0
Virtual Base Offset	248
RTTI	typeinfo for basic_ofstream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	basic_ofstream<wchar_t, char_traits<wchar_t> >::~basic_ofstream()
vfunc[1]:	basic_ofstream<wchar_t, char_traits<wchar_t> >::~basic_ofstream()

Table 12-129 Secondary vtable for basic_ofstream<wchar_t, char_traits<wchar_t> >

Base Offset	-248
Virtual Base Offset	-248
RTTI	typeinfo for basic_ofstream<wchar_t, char_traits<wchar_t> >
vfunc[0]:	virtual thunk to basic_ofstream<wchar_t, char_traits<wchar_t> >::~basic_ofstream()
vfunc[1]:	virtual thunk to basic_ofstream<wchar_t, char_traits<wchar_t> >::~basic_ofstream()

The VTT for the std::basic_ofstream<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-130

Table 12-130 VTT for basic_ofstream<wchar_t, char_traits<wchar_t> >

VTT Name	_ZTTSt14basic_ofstreamIwSt11char_traitsIwEE
Number of Entries	4

12.1.82.2 Interfaces for Class basic_ofstream<wchar_t, char_traits<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_ofstream<wchar_t, std::char_traits<wchar_t> > specified in Table 12-131, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-131 libstdcxx - Class basic_ofstream<wchar_t, char_traits<wchar_t> > Function Interfaces

virtual thunk to basic_ofstream<wchar_t, char_traits<wchar_t> >::~basic_ofstream() (GLIBCXX_3.4) [CXXABI-1.86]
virtual thunk to basic_ofstream<wchar_t, char_traits<wchar_t> >::~basic_ofstream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.83 Class basic_streambuf<char, char_traits<char> >

12.1.83.1 Class data for basic_streambuf<char, char_traits<char> >

The virtual table for the std::basic_streambuf<char, std::char_traits<char> > class is described by Table 12-132

Table 12-132 Primary vtable for basic_streambuf<char, char_traits<char> >

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for basic_streambuf<char, char_traits<char> >
vfunc[0]:	basic_streambuf<char, char_traits<char> >::~basic_streambuf()
vfunc[1]:	basic_streambuf<char, char_traits<char> >::~basic_streambuf()
vfunc[2]:	basic_streambuf<char, char_traits<char> >::imbue(locale const&)
vfunc[3]:	basic_streambuf<char, char_traits<char> >::setbuf(char*, long)
vfunc[4]:	basic_streambuf<char, char_traits<char> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)
vfunc[5]:	basic_streambuf<char, char_traits<char> >::seekpos(fpos<__mbstate_t>, _Ios_Openmode)
vfunc[6]:	basic_streambuf<char, char_traits<char> >::sync()
vfunc[7]:	basic_streambuf<char, char_traits<char> >::showmanyc()
vfunc[8]:	basic_streambuf<char, char_traits<char> >::xsgetn(char*, long)
vfunc[9]:	basic_streambuf<char, char_traits<char> >::underflow()
vfunc[10]:	basic_streambuf<char, char_traits<char> >::uflow()
vfunc[11]:	basic_streambuf<char, char_traits<char> >::pbackfail(int)
vfunc[12]:	basic_streambuf<char, char_traits<char> >::xsputn(char const*, long)
vfunc[13]:	basic_streambuf<char, char_traits<char> >::overflow(int)

The Run Time Type Information for the std::basic_streambuf<char, std::char_traits<char> > class is described by Table 12-133

Table 12-133 typeinfo for basic_streambuf<char, char_traits<char> >

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for basic_streambuf<char, char_traits<char>

	>

12.1.83.2 Interfaces for Class basic_streambuf<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_streambuf<char, std::char_traits<char> > specified in Table 12-134, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-134 libstdcxx - Class basic_streambuf<char, char_traits<char> > Function Interfaces

basic_streambuf<char, char_traits<char> >::pubseekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]
basic_streambuf<char, char_traits<char> >::sgetn(char*, long)(GLIBCXX_3.4) [ISOCXX]
basic_streambuf<char, char_traits<char> >::sputn(char const*, long) (GLIBCXX_3.4) [ISOCXX]
basic_streambuf<char, char_traits<char> >::setbuf(char*, long)(GLIBCXX_3.4) [ISOCXX]
basic_streambuf<char, char_traits<char> >::xsgetn(char*, long)(GLIBCXX_3.4) [ISOCXX]
basic_streambuf<char, char_traits<char> >::xsputn(char const*, long) (GLIBCXX_3.4) [ISOCXX]
basic_streambuf<char, char_traits<char> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]
basic_streambuf<char, char_traits<char> >::pubsetbuf(char*, long)(GLIBCXX_3.4) [ISOCXX]

12.1.84 Class basic_streambuf<wchar_t, char_traits<wchar_t> >

12.1.84.1 Class data for basic_streambuf<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_streambuf<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-135

Table 12-135 Primary vtable for basic_streambuf<wchar_t, char_traits<wchar_t> >

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for basic_streambuf<wchar_t, char_traits<wchar_t> >
vfunc[0]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::~basic_streambuf()
vfunc[1]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::~basic_streambuf()
vfunc[2]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::imbue(locale const&)

vfunc[3]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::setbuf(wchar_t*, long)
vfunc[4]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)
vfunc[5]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::seekpos(fpos<__mbstate_t>, _Ios_Openmode)
vfunc[6]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::sync()
vfunc[7]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::showmanyc()
vfunc[8]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::xsgetn(wchar_t*, long)
vfunc[9]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::underflow()
vfunc[10]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::uflow()
vfunc[11]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::pbackfail(unsigned int)
vfunc[12]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::xsputn(wchar_t const*, long)
vfunc[13]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::overflow(unsigned int)

The Run Time Type Information for the std::basic_streambuf<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-136

Table 12-136 typeinfo for basic_streambuf<wchar_t, char_traits<wchar_t> >

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for basic_streambuf<wchar_t, char_traits<wchar_t> >

12.1.84.2 Interfaces for Class basic_streambuf<wchar_t, char_traits<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_streambuf<wchar_t, std::char_traits<wchar_t> > specified in Table 12-137, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-137 libstdcxx - Class basic_streambuf<wchar_t, char_traits<wchar_t> > Function Interfaces

basic_streambuf<wchar_t, char_traits<wchar_t> >::pubseekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]
basic_streambuf<wchar_t, char_traits<wchar_t> >::sgetn(wchar_t*, long)

(GLIBCXX_3.4) [ISOCXX]
basic_streambuf<wchar_t, char_traits<wchar_t> >::sputn(wchar_t const*, long) (GLIBCXX_3.4) [ISOCXX]
basic_streambuf<wchar_t, char_traits<wchar_t> >::setbuf(wchar_t*, long) (GLIBCXX_3.4) [ISOCXX]
basic_streambuf<wchar_t, char_traits<wchar_t> >::xsgetn(wchar_t*, long) (GLIBCXX_3.4) [ISOCXX]
basic_streambuf<wchar_t, char_traits<wchar_t> >::xsputn(wchar_t const*, long) (GLIBCXX_3.4) [ISOCXX]
basic_streambuf<wchar_t, char_traits<wchar_t> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]
basic_streambuf<wchar_t, char_traits<wchar_t> >::pubsetbuf(wchar_t*, long) (GLIBCXX_3.4) [ISOCXX]

12.1.85 Class basic_filebuf<char, char_traits<char> >

12.1.85.1 Class data for basic_filebuf<char, char_traits<char> >

The virtual table for the std::basic_filebuf<char, std::char_traits<char> > class is described by Table 12-138

Table 12-138 Primary vtable for basic_filebuf<char, char_traits<char> >

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for basic_filebuf<char, char_traits<char> >
vfunc[0]:	basic_filebuf<char, char_traits<char> >::~basic_filebuf()
vfunc[1]:	basic_filebuf<char, char_traits<char> >::~basic_filebuf()
vfunc[2]:	basic_filebuf<char, char_traits<char> >::imbue(locale const&)
vfunc[3]:	basic_filebuf<char, char_traits<char> >::setbuf(char*, long)
vfunc[4]:	basic_filebuf<char, char_traits<char> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)
vfunc[5]:	basic_filebuf<char, char_traits<char> >::seekpos(fpos<__mbstate_t>, _Ios_Openmode)
vfunc[6]:	basic_filebuf<char, char_traits<char> >::sync()
vfunc[7]:	basic_filebuf<char, char_traits<char> >::showmanyc()
vfunc[8]:	basic_filebuf<char, char_traits<char> >::xsgetn(char*, long)
vfunc[9]:	basic_filebuf<char, char_traits<char> >::underflow()
vfunc[10]:	basic_streambuf<char, char_traits<char> >::uflow()
vfunc[11]:	basic_filebuf<char, char_traits<char>

	>::pbackfail(int)
vfunc[12]:	basic_filebuf<char, char_traits<char> >::xsputn(char const*, long)
vfunc[13]:	basic_filebuf<char, char_traits<char> >::overflow(int)

The Run Time Type Information for the std::basic_filebuf<char, std::char_traits<char> > class is described by Table 12-139

Table 12-139 typeinfo for basic_filebuf<char, char_traits<char> >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for basic_filebuf<char, char_traits<char> >

12.1.85.2 Interfaces for Class basic_filebuf<char, char_traits<char> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_filebuf<char, std::char_traits<char> > specified in Table 12-140, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-140 libstdcxx - Class basic_filebuf<char, char_traits<char> > Function Interfaces

basic_filebuf<char, char_traits<char> >::_M_set_buffer(long)(GLIBCXX_3.4) [ISOCXX]
basic_filebuf<char, char_traits<char> >::_M_convert_to_external(char*, long)(GLIBCXX_3.4) [ISOCXX]
basic_filebuf<char, char_traits<char> >::setbuf(char*, long)(GLIBCXX_3.4) [ISOCXX]
basic_filebuf<char, char_traits<char> >::xsgetn(char*, long)(GLIBCXX_3.4) [ISOCXX]
basic_filebuf<char, char_traits<char> >::xsputn(char const*, long)(GLIBCXX_3.4) [ISOCXX]
basic_filebuf<char, char_traits<char> >::_M_seek(long, _Ios_Seekdir, __mbstate_t)(GLIBCXX_3.4) [ISOCXX]
basic_filebuf<char, char_traits<char> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]

12.1.86 Class basic_filebuf<wchar_t, char_traits<wchar_t> >

12.1.86.1 Class data for basic_filebuf<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_filebuf<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-141

Table 12-141 Primary vtable for basic_filebuf<wchar_t, char_traits<wchar_t> >

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for basic_filebuf<wchar_t, char_traits<wchar_t> >

vfunc[0]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::~basic_filebuf()
vfunc[1]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::~basic_filebuf()
vfunc[2]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::imbue(locale const&)
vfunc[3]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::setbuf(wchar_t*, long)
vfunc[4]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)
vfunc[5]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::seekpos(fpos<__mbstate_t>, _Ios_Openmode)
vfunc[6]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::sync()
vfunc[7]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::showmanyc()
vfunc[8]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::xsgetn(wchar_t*, long)
vfunc[9]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::underflow()
vfunc[10]:	basic_streambuf<wchar_t, char_traits<wchar_t> >::uflow()
vfunc[11]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::pbackfail(unsigned int)
vfunc[12]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::xsputn(wchar_t const*, long)
vfunc[13]:	basic_filebuf<wchar_t, char_traits<wchar_t> >::overflow(unsigned int)

The Run Time Type Information for the std::basic_filebuf<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-142

Table 12-142 typeinfo for basic_filebuf<wchar_t, char_traits<wchar_t> >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for basic_filebuf<wchar_t, char_traits<wchar_t> >

12.1.86.2 Interfaces for Class basic_filebuf<wchar_t, char_traits<wchar_t> >

An LSB conforming implementation shall provide the architecture specific methods for Class std::basic_filebuf<wchar_t, std::char_traits<wchar_t> > specified in Table 12-143,

with the full mandatory functionality as described in the referenced underlying specification.

Table 12-143 libstdcxx - Class basic_filebuf<wchar_t, char_traits<wchar_t> > Function Interfaces

basic_filebuf<wchar_t, char_traits<wchar_t> >::_M_set_buffer(long) (GLIBCXX_3.4) [ISOCXX]
basic_filebuf<wchar_t, char_traits<wchar_t> >::_M_convert_to_external(wchar_t*, long)(GLIBCXX_3.4) [ISOCXX]
basic_filebuf<wchar_t, char_traits<wchar_t> >::setbuf(wchar_t*, long) (GLIBCXX_3.4) [ISOCXX]
basic_filebuf<wchar_t, char_traits<wchar_t> >::xsgetn(wchar_t*, long) (GLIBCXX_3.4) [ISOCXX]
basic_filebuf<wchar_t, char_traits<wchar_t> >::xsputn(wchar_t const*, long) (GLIBCXX_3.4) [ISOCXX]
basic_filebuf<wchar_t, char_traits<wchar_t> >::_M_seek(long, _Ios_Seekdir, __mbstate_t)(GLIBCXX_3.4) [ISOCXX]
basic_filebuf<wchar_t, char_traits<wchar_t> >::seekoff(long, _Ios_Seekdir, _Ios_Openmode)(GLIBCXX_3.4) [ISOCXX]
basic_ostream<wchar_t, char_traits<wchar_t> >::_M_write(wchar_t const*, long) (GLIBCXX_3.4) [ISOCXX]
virtual thunk to basic_fstream<wchar_t, char_traits<wchar_t> >::~basic_fstream() (GLIBCXX_3.4) [CXXABI-1.86]

12.1.87 Class ios_base

12.1.87.1 Class data for ios_base

The virtual table for the std::ios_base class is described in the generic part of this specification.

The Run Time Type Information for the std::ios_base class is described by Table 12-144

Table 12-144 typeinfo for ios_base

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for ios_base

12.1.87.2 Interfaces for Class ios_base

No external methods are defined for libstdcxx - Class std::ios_base in this part of the specification. See also the generic specification.

12.1.88 Class basic_ios<char, char_traits<char> >

12.1.88.1 Class data for basic_ios<char, char_traits<char> >

The virtual table for the std::basic_ios<char, std::char_traits<char> > class is described in the generic part of this specification.

12.1.88.2 Interfaces for Class basic_ios<char, char_traits<char> >

No external methods are defined for libstdcxx - Class std::basic_ios<char, std::char_traits<char> > in this part of the specification. See also the generic specification.

12.1.89 Class basic_ios<wchar_t, char_traits<wchar_t> >

12.1.89.1 Class data for basic_ios<wchar_t, char_traits<wchar_t> >

The virtual table for the std::basic_ios<wchar_t, std::char_traits<wchar_t> > class is described in the generic part of this specification.

The Run Time Type Information for the std::basic_ios<wchar_t, std::char_traits<wchar_t> > class is described by Table 12-145

Table 12-145 typeinfo for basic_ios<wchar_t, char_traits<wchar_t> >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info	
Name	typeinfo name for basic_ios<wchar_t, char_traits<wchar_t> >	
flags:	8	
basetype:	typeinfo for ios_base	1026

12.1.89.2 Interfaces for Class basic_ios<wchar_t, char_traits<wchar_t> >

No external methods are defined for libstdcxx - Class std::basic_ios<wchar_t, std::char_traits<wchar_t> > in this part of the specification. See also the generic specification.

12.1.90 Class ios_base::failure

12.1.90.1 Class data for ios_base::failure

The virtual table for the std::ios_base::failure class is described in the generic part of this specification.

The Run Time Type Information for the std::ios_base::failure class is described by Table 12-146

Table 12-146 typeinfo for ios_base::failure

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for ios_base::failure

12.1.90.2 Interfaces for Class ios_base::failure

No external methods are defined for libstdcxx - Class std::ios_base::failure in this part of the specification. See also the generic specification.

12.1.91 Class __timepunct<char>

12.1.91.1 Class data for __timepunct<char>

The virtual table for the std::__timepunct<char> class is described in the generic part of this specification.

The Run Time Type Information for the std::__timepunct<char> class is described by Table 12-147

Table 12-147 typeinfo for __timepunct<char>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __timepunct<char>

12.1.91.2 Interfaces for Class __timepunct<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::__timepunct<char> specified in Table 12-148, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-148 libstdcxx - Class __timepunct<char> Function Interfaces

__timepunct<char>::_M_put(char*, unsigned long, char const*, tm const*) const(GLIBCXX_3.4) [ISOCXX]
__timepunct<char>::__timepunct(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
__timepunct<char>::__timepunct(__timepunct_cache<char>*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
__timepunct<char>::__timepunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]
__timepunct<char>::__timepunct(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
__timepunct<char>::__timepunct(__timepunct_cache<char>*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
__timepunct<char>::__timepunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.92 Class __timepunct<wchar_t>

12.1.92.1 Class data for __timepunct<wchar_t>

The virtual table for the std::__timepunct<wchar_t> class is described in the generic part of this specification.

The Run Time Type Information for the std::__timepunct<wchar_t> class is described by Table 12-149

Table 12-149 typeinfo for __timepunct<wchar_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for __timepunct<wchar_t>

12.1.92.2 Interfaces for Class __timepunct<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::__timepunct<wchar_t> specified in Table 12-150, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-150 libstdcxx - Class __timepunct<wchar_t> Function Interfaces

__timepunct<wchar_t>::_M_put(wchar_t*, unsigned long, wchar_t const*, tm const*) const(GLIBCXX_3.4) [ISOCXX]
__timepunct<wchar_t>::__timepunct(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
__timepunct<wchar_t>::__timepunct(__timepunct_cache<wchar_t>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
__timepunct<wchar_t>::__timepunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

__timepunct<wchar_t>::__timepunct(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
__timepunct<wchar_t>::__timepunct(__timepunct_cache<wchar_t>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
__timepunct<wchar_t>::__timepunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.93 Class messages_base

12.1.93.1 Class data for messages_base

The Run Time Type Information for the std::messages_base class is described by Table 12-151

Table 12-151 typeinfo for messages_base

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for messages_base

12.1.93.2 Interfaces for Class messages_base

No external methods are defined for libstdcxx - Class std::messages_base in this part of the specification. See also the generic specification.

12.1.94 Class messages<char>

12.1.94.1 Class data for messages<char>

The virtual table for the std::messages<char> class is described in the generic part of this specification.

12.1.94.2 Interfaces for Class messages<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::messages<char> specified in Table 12-152, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-152 libstdcxx - Class messages<char> Function Interfaces

messages<char>::messages(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
messages<char>::messages(unsigned long)(GLIBCXX_3.4) [ISOCXX]
messages<char>::messages(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
messages<char>::messages(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.95 Class messages<wchar_t>

12.1.95.1 Class data for messages<wchar_t>

The virtual table for the std::messages<wchar_t> class is described in the generic part of this specification.

12.1.95.2 Interfaces for Class messages<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::messages<wchar_t> specified in Table 12-153, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-153 libstdcxx - Class messages<wchar_t> Function Interfaces

messages<wchar_t>::messages(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
messages<wchar_t>::messages(unsigned long)(GLIBCXX_3.4) [ISOCXX]
messages<wchar_t>::messages(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
messages<wchar_t>::messages(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.96 Class messages_byname<char>

12.1.96.1 Class data for messages_byname<char>

The virtual table for the std::messages_byname<char> class is described in the generic part of this specification.

The Run Time Type Information for the std::messages_byname<char> class is described by Table 12-154

Table 12-154 typeinfo for messages_byname<char>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for messages_byname<char>

12.1.96.2 Interfaces for Class messages_byname<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::messages_byname<char> specified in Table 12-155, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-155 libstdcxx - Class messages_byname<char> Function Interfaces

messages_byname<char>::messages_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
messages_byname<char>::messages_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]

12.1.97 Class messages_byname<wchar_t>

12.1.97.1 Class data for messages_byname<wchar_t>

The virtual table for the std::messages_byname<wchar_t> class is described in the generic part of this specification.

The Run Time Type Information for the std::messages_byname<wchar_t> class is described by Table 12-156

Table 12-156 typeinfo for messages_byname<wchar_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for messages_byname<wchar_t>

12.1.97.2 Interfaces for Class messages_byname<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::messages_byname<wchar_t> specified in Table 12-157, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-157 libstdcxx - Class messages_byname<wchar_t> Function Interfaces

messages_byname<wchar_t>::messages_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
messages_byname<wchar_t>::messages_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]

12.1.98 Class numpunct<char>

12.1.98.1 Class data for numpunct<char>

The virtual table for the std::numpunct<char> class is described in the generic part of this specification.

The Run Time Type Information for the std::numpunct<char> class is described by Table 12-158

Table 12-158 typeinfo for numpunct<char>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for numpunct<char>

12.1.98.2 Interfaces for Class numpunct<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::numpunct<char> specified in Table 12-159, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-159 libstdcxx - Class numpunct<char> Function Interfaces

numpunct<char>::numpunct(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
numpunct<char>::numpunct(__numpunct_cache<char>*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
numpunct<char>::numpunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]
numpunct<char>::numpunct(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
numpunct<char>::numpunct(__numpunct_cache<char>*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
numpunct<char>::numpunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.99 Class numpunct<wchar_t>

12.1.99.1 Class data for numpunct<wchar_t>

The virtual table for the std::numpunct<wchar_t> class is described in the generic part of this specification.

The Run Time Type Information for the std::numpunct<wchar_t> class is described by Table 12-160

Table 12-160 typeinfo for numpunct<wchar_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for numpunct<wchar_t>

12.1.99.2 Interfaces for Class numpunct<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for

Class std::numpunct<wchar_t> specified in Table 12-161, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-161 libstdcxx - Class numpunct<wchar_t> Function Interfaces

numpunct<wchar_t>::numpunct(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
numpunct<wchar_t>::numpunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]
numpunct<wchar_t>::numpunct(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
numpunct<wchar_t>::numpunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.100 Class numpunct_byname<char>

12.1.100.1 Class data for numpunct_byname<char>

The virtual table for the std::numpunct_byname<char> class is described in the generic part of this specification.

The Run Time Type Information for the std::numpunct_byname<char> class is described by Table 12-162

Table 12-162 typeinfo for numpunct_byname<char>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for numpunct_byname<char>

12.1.100.2 Interfaces for Class numpunct_byname<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::numpunct_byname<char> specified in Table 12-163, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-163 libstdcxx - Class numpunct_byname<char> Function Interfaces

numpunct_byname<char>::numpunct_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
numpunct_byname<char>::numpunct_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]

12.1.101 Class numpunct_byname<wchar_t>

12.1.101.1 Class data for numpunct_byname<wchar_t>

The virtual table for the std::numpunct_byname<wchar_t> class is described in the generic part of this specification.

The Run Time Type Information for the std::numpunct_byname<wchar_t> class is described by Table 12-164

Table 12-164 typeinfo for numpunct_byname<wchar_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for numpunct_byname<wchar_t>

12.1.101.2 Interfaces for Class numpunct_byname<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for

Class std::numpunct_byname<wchar_t> specified in Table 12-165, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-165 libstdcxx - Class numpunct_byname<wchar_t> Function Interfaces

numpunct_byname<wchar_t>::numpunct_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
numpunct_byname<wchar_t>::numpunct_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]

12.1.102 Class __codecvt_abstract_base<char, char, __mbstate_t>

12.1.102.1 Class data for __codecvt_abstract_base<char, char, __mbstate_t>

The virtual table for the std::__codecvt_abstract_base<char, char, __mbstate_t> class is described in the generic part of this specification.

12.1.102.2 Interfaces for Class __codecvt_abstract_base<char, char, __mbstate_t>

No external methods are defined for libstdcxx - Class std::__codecvt_abstract_base<char, char, __mbstate_t> in this part of the specification. See also the generic specification.

12.1.103 Class __codecvt_abstract_base<wchar_t, char, __mbstate_t>

12.1.103.1 Class data for __codecvt_abstract_base<wchar_t, char, __mbstate_t>

The virtual table for the std::__codecvt_abstract_base<wchar_t, char, __mbstate_t> class is described in the generic part of this specification.

12.1.103.2 Interfaces for Class __codecvt_abstract_base<wchar_t, char, __mbstate_t>

No external methods are defined for libstdcxx - Class std::__codecvt_abstract_base<wchar_t, char, __mbstate_t> in this part of the specification. See also the generic specification.

12.1.104 Class codecvt_base

12.1.104.1 Class data for codecvt_base

The Run Time Type Information for the std::codecvt_base class is described by Table 12-166

Table 12-166 typeinfo for codecvt_base

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for codecvt_base

12.1.104.2 Interfaces for Class codecvt_base

No external methods are defined for libstdcxx - Class std::codecvt_base in this part of the specification. See also the generic specification.

12.1.105 Class codecvt<char, char, __mbstate_t>

12.1.105.1 Class data for codecvt<char, char, __mbstate_t>

The virtual table for the std::codecvt<char, char, __mbstate_t> class is described by Table 12-167

Table 12-167 Primary vtable for codecvt<char, char, __mbstate_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for codecvt<char, char, __mbstate_t>
vfunc[0]:	codecvt<char, char, __mbstate_t>::~codecvt()
vfunc[1]:	codecvt<char, char, __mbstate_t>::~codecvt()
vfunc[2]:	codecvt<char, char, __mbstate_t>::do_out(__mbstate_t&, char const*, char const*, char const*&, char*, char*, char*&) const
vfunc[3]:	codecvt<char, char, __mbstate_t>::do_unshift(__mbstate_t& , char*, char*, char*&) const
vfunc[4]:	codecvt<char, char, __mbstate_t>::do_in(__mbstate_t&, char const*, char const*, char const*&, char*, char*, char*&) const
vfunc[5]:	codecvt<char, char, __mbstate_t>::do_encoding() const
vfunc[6]:	codecvt<char, char, __mbstate_t>::do_always_noconv() const
vfunc[7]:	codecvt<char, char, __mbstate_t>::do_length(__mbstate_t&, char const*, char const*, unsigned long) const
vfunc[8]:	codecvt<char, char, __mbstate_t>::do_max_length() const

The Run Time Type Information for the std::codecvt<char, char, __mbstate_t> class is described by Table 12-168

Table 12-168 typeinfo for codecvt<char, char, __mbstate_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for codecvt<char, char, __mbstate_t>

12.1.105.2 Interfaces for Class codecvt<char, char, __mbstate_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::codecvt<char, char, __mbstate_t> specified in Table 12-169, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-169 libstdcxx - Class codecvt<char, char, __mbstate_t> Function Interfaces

codecvt<char, char, __mbstate_t>::do_length(__mbstate_t&, char const*, char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
codecvt<char, char, __mbstate_t>::codecvt(__locale_struct*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
codecvt<char, char, __mbstate_t>::codecvt(unsigned long)(GLIBCXX_3.4) [ISOCXX]
codecvt<char, char, __mbstate_t>::codecvt(__locale_struct*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
codecvt<char, char, __mbstate_t>::codecvt(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.106 Class codecvt<wchar_t, char, __mbstate_t>

12.1.106.1 Class data for codecvt<wchar_t, char, __mbstate_t>

The virtual table for the std::codecvt<wchar_t, char, __mbstate_t> class is described by Table 12-170

Table 12-170 Primary vtable for codecvt<wchar_t, char, __mbstate_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for codecvt<wchar_t, char, __mbstate_t>
vfunc[0]:	codecvt<wchar_t, char, __mbstate_t>::~codecvt()
vfunc[1]:	codecvt<wchar_t, char, __mbstate_t>::~codecvt()
vfunc[2]:	codecvt<wchar_t, char, __mbstate_t>::do_out(__mbstate_t&, wchar_t const*, wchar_t const*, wchar_t const*&, char*, char*, char*&) const
vfunc[3]:	codecvt<wchar_t, char, __mbstate_t>::do_unshift(__mbstate_t&, char*, char*, char*&) const
vfunc[4]:	codecvt<wchar_t, char, __mbstate_t>::do_in(__mbstate_t&, char const*, char const*, char const*&, wchar_t*, wchar_t*, wchar_t*&) const
vfunc[5]:	codecvt<wchar_t, char, __mbstate_t>::do_encoding() const
vfunc[6]:	codecvt<wchar_t, char, __mbstate_t>::do_always_noconv() const
vfunc[7]:	codecvt<wchar_t, char, __mbstate_t>::do_length(__mbstate_t&, char const*, char const*, unsigned long) const
vfunc[8]:	codecvt<wchar_t, char, __mbstate_t>::do_max_length() const

The Run Time Type Information for the std::codecvt<wchar_t, char, __mbstate_t> class

is described by Table 12-171

Table 12-171 typeinfo for codecvt<wchar_t, char, __mbstate_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for codecvt<wchar_t, char, __mbstate_t>

12.1.106.2 Interfaces for Class codecvt<wchar_t, char, __mbstate_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::codecvt<wchar_t, char, __mbstate_t> specified in Table 12-172, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-172 libstdcxx - Class codecvt<wchar_t, char, __mbstate_t> Function Interfaces

codecvt<wchar_t, char, __mbstate_t>::do_length(__mbstate_t&, char const*, char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
codecvt<wchar_t, char, __mbstate_t>::codecvt(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
codecvt<wchar_t, char, __mbstate_t>::codecvt(unsigned long)(GLIBCXX_3.4) [ISOCXX]
codecvt<wchar_t, char, __mbstate_t>::codecvt(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
codecvt<wchar_t, char, __mbstate_t>::codecvt(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.107 Class codecvt_byname<char, char, __mbstate_t>

12.1.107.1 Class data for codecvt_byname<char, char, __mbstate_t>

The virtual table for the std::codecvt_byname<char, char, __mbstate_t> class is described by Table 12-173

Table 12-173 Primary vtable for codecvt_byname<char, char, __mbstate_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for codecvt_byname<char, char, __mbstate_t>
vfunc[0]:	codecvt_byname<char, char, __mbstate_t>::~codecvt_byname()
vfunc[1]:	codecvt_byname<char, char, __mbstate_t>::~codecvt_byname()
vfunc[2]:	codecvt<char, char, __mbstate_t>::do_out(__mbstate_t&, char const*, char const*, char const*&, char*, char*, char*&) const
vfunc[3]:	codecvt<char, char, __mbstate_t>::do_unshift(__mbstate_t&, char*, char*, char*&) const
vfunc[4]:	codecvt<char, char,

	__mbstate_t>::do_in(__mbstate_t&, char const*, char const*, char const*&, char*, char*, char*&) const
vfunc[5]:	codecvt<char, char, __mbstate_t>::do_encoding() const
vfunc[6]:	codecvt<char, char, __mbstate_t>::do_always_noconv() const
vfunc[7]:	codecvt<char, char, __mbstate_t>::do_length(__mbstate_t&, char const*, char const*, unsigned long) const
vfunc[8]:	codecvt<char, char, __mbstate_t>::do_max_length() const

The Run Time Type Information for the std::codecvt_byname<char, char, __mbstate_t> class is described by Table 12-174

Table 12-174 typeinfo for codecvt_byname<char, char, __mbstate_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for codecvt_byname<char, char, __mbstate_t>

12.1.107.2 Interfaces for Class codecvt_byname<char, char, __mbstate_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::codecvt_byname<char, char, __mbstate_t> specified in Table 12-175, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-175 libstdcxx - Class codecvt_byname<char, char, __mbstate_t> Function Interfaces

codecvt_byname<char, char, __mbstate_t>::codecvt_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
codecvt_byname<char, char, __mbstate_t>::codecvt_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.108 Class codecvt_byname<wchar_t, char, __mbstate_t>

12.1.108.1 Class data for codecvt_byname<wchar_t, char, __mbstate_t>

The virtual table for the std::codecvt_byname<wchar_t, char, __mbstate_t> class is described by Table 12-176

Table 12-176 Primary vtable for codecvt_byname<wchar_t, char, __mbstate_t>

Base Offset	0
Virtual Base Offset	0
RTTI	typeinfo for codecvt_byname<wchar_t, char, __mbstate_t>
vfunc[0]:	codecvt_byname<wchar_t, char,

	__mbstate_t>::~codecvt_byname()
vfunc[1]:	codecvt_byname<wchar_t, char, __mbstate_t>::~codecvt_byname()
vfunc[2]:	codecvt<wchar_t, char, __mbstate_t>::do_out(__mbstate_t&, wchar_t const*, wchar_t const*, wchar_t const*&, char*, char*, char*&) const
vfunc[3]:	codecvt<wchar_t, char, __mbstate_t>::do_unshift(__mbstate_t&, char*, char*, char*&) const
vfunc[4]:	codecvt<wchar_t, char, __mbstate_t>::do_in(__mbstate_t&, char const*, char const*, char const*&, wchar_t*, wchar_t*, wchar_t*&) const
vfunc[5]:	codecvt<wchar_t, char, __mbstate_t>::do_encoding() const
vfunc[6]:	codecvt<wchar_t, char, __mbstate_t>::do_always_noconv() const
vfunc[7]:	codecvt<wchar_t, char, __mbstate_t>::do_length(__mbstate_t&, char const*, char const*, unsigned long) const
vfunc[8]:	codecvt<wchar_t, char, __mbstate_t>::do_max_length() const

The Run Time Type Information for the std::codecvt_byname<wchar_t, char, __mbstate_t> class is described by Table 12-177

Table 12-177 typeinfo for codecvt_byname<wchar_t, char, __mbstate_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for codecvt_byname<wchar_t, char, __mbstate_t>

12.1.108.2 Interfaces for Class codecvt_byname<wchar_t, char, __mbstate_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::codecvt_byname<wchar_t, char, __mbstate_t> specified in Table 12-178, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-178 libstdcxx - Class codecvt_byname<wchar_t, char, __mbstate_t> Function Interfaces

codecvt_byname<wchar_t, char, __mbstate_t>::codecvt_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
codecvt_byname<wchar_t, char, __mbstate_t>::codecvt_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.109 Class collate<char>

12.1.109.1 Class data for collate<char>

The virtual table for the std::collate<char> class is described in the generic part of this specification.

The Run Time Type Information for the std::collate<char> class is described by Table 12-179

Table 12-179 typeinfo for collate<char>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for collate<char>

12.1.109.2 Interfaces for Class collate<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::collate<char> specified in Table 12-180, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-180 libstdcxx - Class collate<char> Function Interfaces

collate<char>::_M_transform(char*, char const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
collate<char>::collate(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
collate<char>::collate(unsigned long)(GLIBCXX_3.4) [ISOCXX]
collate<char>::collate(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
collate<char>::collate(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.110 Class collate<wchar_t>

12.1.110.1 Class data for collate<wchar_t>

The virtual table for the std::collate<wchar_t> class is described in the generic part of this specification.

The Run Time Type Information for the std::collate<wchar_t> class is described by Table 12-181

Table 12-181 typeinfo for collate<wchar_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for collate<wchar_t>

12.1.110.2 Interfaces for Class collate<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::collate<wchar_t> specified in Table 12-182, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-182 libstdcxx - Class collate<wchar_t> Function Interfaces

collate<wchar_t>::_M_transform(wchar_t*, wchar_t const*, unsigned long) const(GLIBCXX_3.4) [ISOCXX]
collate<wchar_t>::collate(__locale_struct*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
collate<wchar_t>::collate(unsigned long)(GLIBCXX_3.4) [ISOCXX]
collate<wchar_t>::collate(__locale_struct*, unsigned long)(GLIBCXX_3.4)

[ISOCXX]
collate<wchar_t>::collate(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.111 Class collate_byname<char>

12.1.111.1 Class data for collate_byname<char>

The virtual table for the std::collate_byname<char> class is described in the generic part of this specification.

The Run Time Type Information for the std::collate_byname<char> class is described by Table 12-183

Table 12-183 typeinfo for collate_byname<char>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for collate_byname<char>

12.1.111.2 Interfaces for Class collate_byname<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::collate_byname<char> specified in Table 12-184, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-184 libstdcxx - Class collate_byname<char> Function Interfaces

collate_byname<char>::collate_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
collate_byname<char>::collate_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]

12.1.112 Class collate_byname<wchar_t>

12.1.112.1 Class data for collate_byname<wchar_t>

The virtual table for the std::collate_byname<wchar_t> class is described in the generic part of this specification.

The Run Time Type Information for the std::collate_byname<wchar_t> class is described by Table 12-185

Table 12-185 typeinfo for collate_byname<wchar_t>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for collate_byname<wchar_t>

12.1.112.2 Interfaces for Class collate_byname<wchar_t>

An LSB conforming implementation shall provide the architecture specific methods for Class std::collate_byname<wchar_t> specified in Table 12-186, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-186 libstdcxx - Class collate_byname<wchar_t> Function Interfaces

collate_byname<wchar_t>::collate_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
collate_byname<wchar_t>::collate_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]

12.1.113 Class time_base

12.1.113.1 Class data for time_base

The Run Time Type Information for the std::time_base class is described by Table 12-187

Table 12-187 typeinfo for time_base

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for time_base

12.1.113.2 Interfaces for Class time_base

No external methods are defined for libstdcxx - Class std::time_base in this part of the specification. See also the generic specification.

12.1.114 Class time_get_byname<char, istreambuf_iterator<char, char_traits<char> > >

12.1.114.1 Class data for time_get_byname<char, istreambuf_iterator<char, char_traits<char> > >

The virtual table for the std::time_get_byname<char, std::istreambuf_iterator<char, std::char_traits<char> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::time_get_byname<char, std::istreambuf_iterator<char, std::char_traits<char> > > class is described by Table 12-188

Table 12-188 typeinfo for time_get_byname<char, istreambuf_iterator<char, char_traits<char> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for time_get_byname<char, istreambuf_iterator<char, char_traits<char> > >

12.1.114.2 Interfaces for Class time_get_byname<char, istreambuf_iterator<char, char_traits<char> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_get_byname<char, std::istreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-189, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-189 libstdcxx - Class time_get_byname<char, istreambuf_iterator<char, char_traits<char> > > Function Interfaces

time_get_byname<char, istreambuf_iterator<char, char_traits<char> > >::time_get_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
time_get_byname<char, istreambuf_iterator<char, char_traits<char> > >::time_get_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.115 Class time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.115.1 Class data for time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

The virtual table for the std::time_get_byname<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::time_get_byname<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described by Table 12-190

Table 12-190 typeinfo for time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.115.2 Interfaces for Class time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_get_byname<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-191, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-191 libstdcxx - Class time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > Function Interfaces

time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::time_get_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
time_get_byname<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::time_get_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.116 Class time_put_byname<char, ostreambuf_iterator<char, char_traits<char> > >

12.1.116.1 Class data for time_put_byname<char, ostreambuf_iterator<char, char_traits<char> > >

The virtual table for the std::time_put_byname<char, std::ostreambuf_iterator<char, std::char_traits<char> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::time_put_byname<char, std::ostreambuf_iterator<char, std::char_traits<char> > > class is described by Table 12-192

Table 12-192 typeinfo for time_put_byname<char, ostreambuf_iterator<char, char_traits<char> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for time_put_byname<char,

	ostreambuf_iterator<char, char_traits<char> > >

12.1.116.2 Interfaces for Class time_put_byname<char, ostreambuf_iterator<char, char_traits<char> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_put_byname<char, std::ostreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-193, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-193 libstdcxx - Class time_put_byname<char, ostreambuf_iterator<char, char_traits<char> > > Function Interfaces

time_put_byname<char, ostreambuf_iterator<char, char_traits<char> > >::time_put_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
time_put_byname<char, ostreambuf_iterator<char, char_traits<char> > >::time_put_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.117 Class time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.117.1 Class data for time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

The virtual table for the std::time_put_byname<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::time_put_byname<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described by Table 12-194

Table 12-194 typeinfo for time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.117.2 Interfaces for Class time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_put_byname<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-195, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-195 libstdcxx - Class time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > Function Interfaces

time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::time_put_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
time_put_byname<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::time_put_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.118 Class time_get<char, istreambuf_iterator<char, char_traits<char> > >

12.1.118.1 Class data for time_get<char, istreambuf_iterator<char, char_traits<char> > >

The virtual table for the std::time_get<char, std::istreambuf_iterator<char, std::char_traits<char> > > class is described in the generic part of this specification.

12.1.118.2 Interfaces for Class time_get<char, istreambuf_iterator<char, char_traits<char> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_get<char, std::istreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-196, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-196 libstdcxx - Class time_get<char, istreambuf_iterator<char, char_traits<char> > > Function Interfaces

time_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract_num(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, int&, int, int, unsigned long, ios_base&, _Ios_Iostate&) const(GLIBCXX_3.4) [ISOCXX]
time_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract_name(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, int&, char const**, unsigned long, ios_base&, _Ios_Iostate&) const(GLIBCXX_3.4) [ISOCXX]
time_get<char, istreambuf_iterator<char, char_traits<char> > >::time_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]
time_get<char, istreambuf_iterator<char, char_traits<char> > >::time_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.119 Class time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.119.1 Class data for time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

The virtual table for the std::time_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described in the generic part of this specification.

12.1.119.2 Interfaces for Class time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-197, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-197 libstdcxx - Class time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > Function Interfaces

time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract_num(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, int&, int, int, unsigned long, ios_base&, _Ios_Iostate&) const(GLIBCXX_3.4) [ISOCXX]

time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract_name(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, int&, wchar_t const**, unsigned long, ios_base&, _Ios_Iostate&) const(GLIBCXX_3.4) [ISOCXX]
time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::time_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]
time_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::time_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.120 Class time_put<char, ostreambuf_iterator<char, char_traits<char> > >

12.1.120.1 Class data for time_put<char, ostreambuf_iterator<char, char_traits<char> > >

The virtual table for the std::time_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::time_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > class is described by Table 12-198

Table 12-198 typeinfo for time_put<char, ostreambuf_iterator<char, char_traits<char> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info	
Name	typeinfo name for time_put<char, ostreambuf_iterator<char, char_traits<char> > >	
flags:	8	
basetype:	typeinfo for locale::facet	2
basetype:	typeinfo for time_base	2

12.1.120.2 Interfaces for Class time_put<char, ostreambuf_iterator<char, char_traits<char> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-199, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-199 libstdcxx - Class time_put<char, ostreambuf_iterator<char, char_traits<char> > > Function Interfaces

time_put<char, ostreambuf_iterator<char, char_traits<char> > >::time_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]
time_put<char, ostreambuf_iterator<char, char_traits<char> > >::time_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.121 Class time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.121.1 Class data for time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

The virtual table for the std::time_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::time_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described by Table 12-200

Table 12-200 typeinfo for time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info	
Name	typeinfo name for time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >	
flags:	8	
basetype:	typeinfo for locale::facet	2
basetype:	typeinfo for time_base	2

12.1.121.2 Interfaces for Class time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::time_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-201, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-201 libstdcxx - Class time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > Function Interfaces

time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::time_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]
time_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::time_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.122 Class moneypunct<char, false>

12.1.122.1 Class data for moneypunct<char, false>

The virtual table for the std::moneypunct<char, false> class is described in the generic part of this specification.

12.1.122.2 Interfaces for Class moneypunct<char, false>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct<char, false> specified in Table 12-202, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-202 libstdcxx - Class moneypunct<char, false> Function Interfaces

moneypunct<char, false>::moneypunct(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
moneypunct<char, false>::moneypunct(__moneypunct_cache<char, false>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<char, false>::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<char, false>::moneypunct(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
moneypunct<char, false>::moneypunct(__moneypunct_cache<char, false>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<char, false>::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.123 Class moneypunct<char, true>

12.1.123.1 Class data for moneypunct<char, true>

The virtual table for the std::moneypunct<char, true> class is described in the generic part of this specification.

12.1.123.2 Interfaces for Class moneypunct<char, true>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct<char, true> specified in Table 12-203, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-203 libstdcxx - Class moneypunct<char, true> Function Interfaces

moneypunct<char, true>::moneypunct(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
moneypunct<char, true>::moneypunct(__moneypunct_cache<char, true>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<char, true>::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<char, true>::moneypunct(__locale_struct*, char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
moneypunct<char, true>::moneypunct(__moneypunct_cache<char, true>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<char, true>::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.124 Class moneypunct<wchar_t, false>

12.1.124.1 Class data for moneypunct<wchar_t, false>

The virtual table for the std::moneypunct<wchar_t, false> class is described in the generic part of this specification.

12.1.124.2 Interfaces for Class moneypunct<wchar_t, false>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct<wchar_t, false> specified in Table 12-204, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-204 libstdcxx - Class moneypunct<wchar_t, false> Function Interfaces

moneypunct<wchar_t, false>::moneypunct(__locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<wchar_t, false>::moneypunct(__moneypunct_cache<wchar_t, false>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

moneypunct<wchar_t, false>::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<wchar_t, false>::moneypunct(__locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<wchar_t, false>::moneypunct(__moneypunct_cache<wchar_t, false>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<wchar_t, false>::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.125 Class moneypunct<wchar_t, true>

12.1.125.1 Class data for moneypunct<wchar_t, true>

The virtual table for the std::moneypunct<wchar_t, true> class is described in the generic part of this specification.

12.1.125.2 Interfaces for Class moneypunct<wchar_t, true>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct<wchar_t, true> specified in Table 12-205, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-205 libstdcxx - Class moneypunct<wchar_t, true> Function Interfaces

moneypunct<wchar_t, true>::moneypunct(__locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<wchar_t, true>::moneypunct(__moneypunct_cache<wchar_t, true>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<wchar_t, true>::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<wchar_t, true>::moneypunct(__locale_struct*, char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<wchar_t, true>::moneypunct(__moneypunct_cache<wchar_t, true>*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct<wchar_t, true>::moneypunct(unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.126 Class moneypunct_byname<char, false>

12.1.126.1 Class data for moneypunct_byname<char, false>

The virtual table for the std::moneypunct_byname<char, false> class is described in the generic part of this specification.

The Run Time Type Information for the std::moneypunct_byname<char, false> class is described by Table 12-206

Table 12-206 typeinfo for moneypunct_byname<char, false>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for moneypunct_byname<char, false>

12.1.126.2 Interfaces for Class moneypunct_byname<char, false>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct_byname<char, false> specified in Table 12-207, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-207 libstdcxx - Class moneypunct_byname<char, false> Function Interfaces

moneypunct_byname<char, false>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct_byname<char, false>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.127 Class moneypunct_byname<char, true>

12.1.127.1 Class data for moneypunct_byname<char, true>

The virtual table for the std::moneypunct_byname<char, true> class is described in the generic part of this specification.

The Run Time Type Information for the std::moneypunct_byname<char, true> class is described by Table 12-208

Table 12-208 typeinfo for moneypunct_byname<char, true>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for moneypunct_byname<char, true>

12.1.127.2 Interfaces for Class moneypunct_byname<char, true>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct_byname<char, true> specified in Table 12-209, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-209 libstdcxx - Class moneypunct_byname<char, true> Function Interfaces

moneypunct_byname<char, true>::moneypunct_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]
moneypunct_byname<char, true>::moneypunct_byname(char const*, unsigned long) (GLIBCXX_3.4) [ISOCXX]

12.1.128 Class moneypunct_byname<wchar_t, false>

12.1.128.1 Class data for moneypunct_byname<wchar_t, false>

The virtual table for the std::moneypunct_byname<wchar_t, false> class is described in the generic part of this specification.

The Run Time Type Information for the std::moneypunct_byname<wchar_t, false> class is described by Table 12-210

Table 12-210 typeinfo for moneypunct_byname<wchar_t, false>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for moneypunct_byname<wchar_t, false>

12.1.128.2 Interfaces for Class moneypunct_byname<wchar_t, false>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct_byname<wchar_t, false> specified in Table 12-211, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-211 libstdcxx - Class moneypunct_byname<wchar_t, false> Function Interfaces

moneypunct_byname<wchar_t, false>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct_byname<wchar_t, false>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.129 Class moneypunct_byname<wchar_t, true>

12.1.129.1 Class data for moneypunct_byname<wchar_t, true>

The virtual table for the std::moneypunct_byname<wchar_t, true> class is described in the generic part of this specification.

The Run Time Type Information for the std::moneypunct_byname<wchar_t, true> class is described by Table 12-212

Table 12-212 typeinfo for moneypunct_byname<wchar_t, true>

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for moneypunct_byname<wchar_t, true>

12.1.129.2 Interfaces for Class moneypunct_byname<wchar_t, true>

An LSB conforming implementation shall provide the architecture specific methods for Class std::moneypunct_byname<wchar_t, true> specified in Table 12-213, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-213 libstdcxx - Class moneypunct_byname<wchar_t, true> Function Interfaces

moneypunct_byname<wchar_t, true>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]
moneypunct_byname<wchar_t, true>::moneypunct_byname(char const*, unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.130 Class money_base

12.1.130.1 Class data for money_base

The Run Time Type Information for the std::money_base class is described by Table 12-214

Table 12-214 typeinfo for money_base

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for money_base

12.1.130.2 Interfaces for Class money_base

No external methods are defined for libstdcxx - Class std::money_base in this part of the specification. See also the generic specification.

12.1.131 Class money_get<char, istreambuf_iterator<char, char_traits<char> > >

12.1.131.1 Class data for money_get<char, istreambuf_iterator<char, char_traits<char> > >

The virtual table for the std::money_get<char, std::istreambuf_iterator<char, std::char_traits<char> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::money_get<char, std::istreambuf_iterator<char, std::char_traits<char> > > class is described by Table 12-215

Table 12-215 typeinfo for money_get<char, istreambuf_iterator<char, char_traits<char> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for money_get<char, istreambuf_iterator<char, char_traits<char> > >

12.1.131.2 Interfaces for Class money_get<char, istreambuf_iterator<char, char_traits<char> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::money_get<char, std::istreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-216, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-216 libstdcxx - Class money_get<char, istreambuf_iterator<char, char_traits<char> > > Function Interfaces

istreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract<false>(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, basic_string<char, char_traits<char>, allocator<char> >&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract<true>(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, basic_string<char, char_traits<char>, allocator<char> >&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, bool, ios_base&, _Ios_Iostate&, basic_string<char, char_traits<char>, allocator<char> >&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, bool, ios_base&, _Ios_Iostate&, __float128&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::money_get(unsigned long)(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::money_get(unsigned long)(GLIBCXX_LDBL_3.4) [LSB]
money_get<char, istreambuf_iterator<char, char_traits<char> >

>::money_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]
money_get<char, istreambuf_iterator<char, char_traits<char> > >::money_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

An LSB conforming implementation shall provide the architecture specific data interfaces for Class std::money_get<char, std::istreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-217, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-217 libstdcxx - Class money_get<char, istreambuf_iterator<char, char_traits<char> > > Data Interfaces

typeinfo for __gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
typeinfo name for __gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]

12.1.132 Class money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.132.1 Class data for money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

The virtual table for the std::money_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::money_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described by Table 12-218

Table 12-218 typeinfo for money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.132.2 Interfaces for Class money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::money_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-219, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-219 libstdcxx - Class money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > Function Interfaces

istreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract<false>(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, basic_string<char, char_traits<char>, allocator<char> >&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract<true>(istreambuf_iterator<wchar_t,

char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, basic_string<char, char_traits<char>, allocator<char> >&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, bool, ios_base&, _Ios_Iostate&, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, bool, ios_base&, _Ios_Iostate&, __float128&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, bool, ios_base&, _Ios_Iostate&, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> >&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, bool, ios_base&, _Ios_Iostate&, __float128&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::__do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, bool, ios_base&, _Ios_Iostate&, double&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::money_get(unsigned long)(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::money_get(unsigned long)(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~money_get()(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~money_get()(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~money_get()(GLIBCXX_LDBL_3.4) [LSB]
money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::money_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]
money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::money_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

An LSB conforming implementation shall provide the architecture specific data interfaces for Class std::money_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-220, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-220 libstdcxx - Class money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > Data Interfaces

typeinfo for __gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
typeinfo name for __gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
vtable for __gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t,

char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]

12.1.133 Class money_put<char, ostreambuf_iterator<char, char_traits<char> > >

12.1.133.1 Class data for money_put<char, ostreambuf_iterator<char, char_traits<char> > >

The virtual table for the std::money_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::money_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > class is described by Table 12-221

Table 12-221 typeinfo for money_put<char, ostreambuf_iterator<char, char_traits<char> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for money_put<char, ostreambuf_iterator<char, char_traits<char> > >

12.1.133.2 Interfaces for Class money_put<char, ostreambuf_iterator<char, char_traits<char> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::money_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-222, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-222 libstdcxx - Class money_put<char, ostreambuf_iterator<char, char_traits<char> > > Function Interfaces

__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::put(ostreambuf_iterator<char, char_traits<char> >, bool, ios_base&, char, basic_string<char, char_traits<char>, allocator<char> > const&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::put(ostreambuf_iterator<char, char_traits<char> >, bool, ios_base&, char, __float128) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::do_put(ostreambuf_iterator<char, char_traits<char> >, bool, ios_base&, char, basic_string<char, char_traits<char>, allocator<char> > const&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::do_put(ostreambuf_iterator<char, char_traits<char> >, bool, ios_base&, char, __float128) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::__do_put(ostreambuf_iterator<char, char_traits<char> >, bool, ios_base&, char, double) const(GLIBCXX_LDBL_3.4) [ISOCXX]
ostreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_insert<false>(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, basic_string<char, char_traits<char>, allocator<char> > const&) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<char, char_traits<char> >

__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_insert<true>(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, basic_string<char, char_traits<char>, allocator<char> > const&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::money_put(unsigned long)(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::money_put(unsigned long)(GLIBCXX_LDBL_3.4) [LSB]
money_put<char, ostreambuf_iterator<char, char_traits<char> > >::money_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]
money_put<char, ostreambuf_iterator<char, char_traits<char> > >::money_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

An LSB conforming implementation shall provide the architecture specific data interfaces for Class std::money_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-223, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-223 libstdcxx - Class money_put<char, ostreambuf_iterator<char, char_traits<char> > > Data Interfaces

typeinfo for __gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
typeinfo name for __gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]

12.1.134 Class money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.134.1 Class data for money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

The virtual table for the std::money_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::money_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described by Table 12-224

Table 12-224 typeinfo for money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.134.2 Interfaces for Class money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::money_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-225, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-225 libstdcxx - Class money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > Function Interfaces

__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, bool, ios_base&, wchar_t, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, bool, ios_base&, wchar_t, __float128) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, bool, ios_base&, wchar_t, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, bool, ios_base&, wchar_t, __float128) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::__do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, bool, ios_base&, wchar_t, double) const(GLIBCXX_LDBL_3.4) [ISOCXX]
ostreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_insert<false>(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_insert<true>(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, basic_string<wchar_t, char_traits<wchar_t>, allocator<wchar_t> > const&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::money_put(unsigned long)(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::money_put(unsigned long)(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~money_put()(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~money_put()(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~money_put()(GLIBCXX_LDBL_3.4) [LSB]
money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::money_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]
money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::money_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

An LSB conforming implementation shall provide the architecture specific data interfaces for Class std::money_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-226, with the full mandatory func-

tionality as described in the referenced underlying specification.

Table 12-226 libstdcxx - Class money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > Data Interfaces

typeinfo for __gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
typeinfo name for __gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
vtable for __gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]

12.1.135 Class locale

12.1.135.1 Interfaces for Class locale

An LSB conforming implementation shall provide the architecture specific methods for Class std::locale specified in Table 12-227, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-227 libstdcxx - Class locale Function Interfaces

locale::_Impl::_Impl(char const*, unsigned long)(GLIBCXX_3.4) [LSB]
locale::_Impl::_Impl(locale::_Impl const&, unsigned long)(GLIBCXX_3.4) [LSB]
locale::_Impl::_Impl(unsigned long)(GLIBCXX_3.4) [LSB]
locale::_Impl::_Impl(char const*, unsigned long)(GLIBCXX_3.4) [LSB]
locale::_Impl::_Impl(locale::_Impl const&, unsigned long)(GLIBCXX_3.4) [LSB]
locale::_Impl::_Impl(unsigned long)(GLIBCXX_3.4) [LSB]

12.1.136 Class locale::facet

12.1.136.1 Class data for locale::facet

The virtual table for the std::locale::facet class is described in the generic part of this specification.

The Run Time Type Information for the std::locale::facet class is described by Table 12-228

Table 12-228 typeinfo for locale::facet

Base Vtable	vtable for __cxxabiv1::__class_type_info
Name	typeinfo name for locale::facet

12.1.136.2 Interfaces for Class locale::facet

No external methods are defined for libstdcxx - Class std::locale::facet in this part of the specification. See also the generic specification.

12.1.137 facet functions

12.1.137.1 Interfaces for facet functions

An LSB conforming implementation shall provide the architecture specific methods for facet functions specified in Table 12-229, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-229 libstdcxx - facet functions Function Interfaces

void __convert_to_v<__float128>(char const*, __float128&, _Ios_Iostate&, __locale_struct* const&)(GLIBCXX_LDBL_3.4) [ISOCXX]
bool has_facet<__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > > >(locale const&)(GLIBCXX_LDBL_3.4) [LSB]
bool has_facet<__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > >(locale const&) (GLIBCXX_LDBL_3.4) [LSB]
bool has_facet<__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > > >(locale const&)(GLIBCXX_LDBL_3.4) [LSB]
bool has_facet<__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > >(locale const&) (GLIBCXX_LDBL_3.4) [LSB]
bool has_facet<__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > > >(locale const&)(GLIBCXX_LDBL_3.4) [LSB]
bool has_facet<__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > >(locale const&) (GLIBCXX_LDBL_3.4) [LSB]
bool has_facet<__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > > >(locale const&)(GLIBCXX_LDBL_3.4) [LSB]
bool has_facet<__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > >(locale const&) (GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > > const& use_facet<__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > > >(locale const&)(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > const& use_facet<__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > >(locale const&) (GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > > const& use_facet<__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > > >(locale const&)(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > const& use_facet<__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > >(locale const&) (GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > > const& use_facet<__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > > >(locale const&) (GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > const& use_facet<__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > >(locale const&)(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > > const& use_facet<__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > > >(locale const&) (GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > const& use_facet<__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t,

char_traits<wchar_t> > > >(locale const&)(GLIBCXX_LDBL_3.4) [LSB]

12.1.138 Class __num_base

12.1.138.1 Class data for __num_base

12.1.138.2 Interfaces for Class __num_base

No external methods are defined for libstdcxx - Class std::__num_base in this part of the specification. See also the generic specification.

12.1.139 Class num_get<char, istreambuf_iterator<char, char_traits<char> > >

12.1.139.1 Class data for num_get<char, istreambuf_iterator<char, char_traits<char> > >

The virtual table for the std::num_get<char, std::istreambuf_iterator<char, std::char_traits<char> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::num_get<char, std::istreambuf_iterator<char, std::char_traits<char> > > class is described by Table 12-230

Table 12-230 typeinfo for num_get<char, istreambuf_iterator<char, char_traits<char> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for num_get<char, istreambuf_iterator<char, char_traits<char> > >
basetype:	typeinfo for locale::facet

12.1.139.2 Interfaces for Class num_get<char, istreambuf_iterator<char, char_traits<char> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::num_get<char, std::istreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-231, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-231 libstdcxx - Class num_get<char, istreambuf_iterator<char, char_traits<char> > > Function Interfaces

istreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract_int<unsigned int>(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned int&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract_int<long>(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, long&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract_int<unsigned long>(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned long&)

const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract_int<unsigned short>(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned short&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract_int<long long>(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, long long&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract_int<unsigned long long>(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned long long&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::_M_extract_float(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, basic_string<char, char_traits<char>, allocator<char> >&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, void*&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, bool&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, double&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, float&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, __float128&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned int&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]

__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned short&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, long long&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned long long&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, void*&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, bool&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, double&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, float&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, __float128&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned int&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned short&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, long long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >

>::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, unsigned long long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::__do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, ios_base&, _Ios_Iostate&, double&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::num_get(unsigned long)(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::num_get(unsigned long)(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::~num_get()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::~num_get()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::~num_get()(GLIBCXX_LDBL_3.4) [ISOCXX]
num_get<char, istreambuf_iterator<char, char_traits<char> > >::num_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]
num_get<char, istreambuf_iterator<char, char_traits<char> > >::num_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

An LSB conforming implementation shall provide the architecture specific data interfaces for Class std::num_get<char, std::istreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-232, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-232 libstdcxx - Class num_get<char, istreambuf_iterator<char, char_traits<char> > > Data Interfaces

typeinfo for __gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
typeinfo name for __gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]

12.1.140 Class num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.140.1 Class data for num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

The virtual table for the std::num_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::num_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described by Table 12-233

Table 12-233 typeinfo for num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

basetype:	typeinfo for locale::facet

12.1.140.2 Interfaces for Class num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::num_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-234, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-234 libstdcxx - Class num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > Function Interfaces

istreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract_int<unsigned int>(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned int&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract_int<long>(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, long&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract_int<unsigned long>(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned long&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract_int<unsigned short>(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned short&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract_int<long long>(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, long long&) const(GLIBCXX_LDBL_3.4) [LSB]
istreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract_int<unsigned long long>(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned long long&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_extract_float(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, basic_string<char, char_traits<char>, allocator<char> >&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, void*&) const(GLIBCXX_LDBL_3.4) [ISOCXX]

__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, bool&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, double&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, float&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, __float128&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned int&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned short&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, long long&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned long long&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, void*&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, bool&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, double&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t,

char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, float&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, __float128&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned int&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned short&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, long long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, unsigned long long&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::__do_get(istreambuf_iterator<wchar_t, char_traits<wchar_t> >, istreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, _Ios_Iostate&, double&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::num_get(unsigned long)(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::num_get(unsigned long)(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~num_get()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~num_get()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~num_get()(GLIBCXX_LDBL_3.4) [ISOCXX]
num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::num_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]
num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> >

>::num_get(unsigned long)(GLIBCXX_3.4) [ISOCXX]

An LSB conforming implementation shall provide the architecture specific data interfaces for Class std::num_get<wchar_t, std::istreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-235, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-235 libstdcxx - Class num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > > Data Interfaces

typeinfo for __gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
typeinfo name for __gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]

12.1.141 Class num_put<char, ostreambuf_iterator<char, char_traits<char> > >

12.1.141.1 Class data for num_put<char, ostreambuf_iterator<char, char_traits<char> > >

The virtual table for the std::num_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::num_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > class is described by Table 12-236

Table 12-236 typeinfo for num_put<char, ostreambuf_iterator<char, char_traits<char> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for num_put<char, ostreambuf_iterator<char, char_traits<char> > >
basetype:	typeinfo for locale::facet

12.1.141.2 Interfaces for Class num_put<char, ostreambuf_iterator<char, char_traits<char> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::num_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-237, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-237 libstdcxx - Class num_put<char, ostreambuf_iterator<char, char_traits<char> > > Function Interfaces

__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_group_int(char const*, unsigned long, char, ios_base&, char*, char*, int&) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_insert_int<long>(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, long) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_insert_int<unsigned

long>(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, unsigned long) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_insert_int<long long>(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, long long) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_insert_int<unsigned long long>(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, unsigned long long) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_group_float(char const*, unsigned long, char, char const*, char*, char*, int&) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_insert_float<double>(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, char, double) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<char, char_traits<char> > __gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_insert_float<__float128>(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, char, __float128) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, void const*) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, bool) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, double) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, __float128) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, unsigned long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, long long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, unsigned long long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_pad(char, long, ios_base&, char*, char const*, int&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::do_put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, void const*) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> >

>::do_put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, bool) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::do_put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, double) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::do_put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, __float128) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::do_put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::do_put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, unsigned long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::do_put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, long long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::do_put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, unsigned long long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::__do_put(ostreambuf_iterator<char, char_traits<char> >, ios_base&, char, double) const(GLIBCXX_LDBL_3.4) [ISOCXX]
num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_group_int(char const*, unsigned long, char, ios_base&, char*, char*, int&) const(GLIBCXX_3.4) [ISOCXX]
num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_group_float(char const*, unsigned long, char, char const*, char*, char*, int&) const(GLIBCXX_3.4) [ISOCXX]
num_put<char, ostreambuf_iterator<char, char_traits<char> > >::_M_pad(char, long, ios_base&, char*, char const*, int&) const(GLIBCXX_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::num_put(unsigned long)(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::num_put(unsigned long)(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::~num_put()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::~num_put()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::~num_put()(GLIBCXX_LDBL_3.4) [ISOCXX]
num_put<char, ostreambuf_iterator<char, char_traits<char> > >::num_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]
num_put<char, ostreambuf_iterator<char, char_traits<char> > >::num_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

An LSB conforming implementation shall provide the architecture specific data interfaces for Class std::num_put<char, std::ostreambuf_iterator<char, std::char_traits<char> > > specified in Table 12-238, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-238 libstdcxx - Class num_put<char, ostreambuf_iterator<char, char_traits<char> > > Data Interfaces

typeinfo for __gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
typeinfo name for __gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]

12.1.142 Class num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

12.1.142.1 Class data for num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

The virtual table for the std::num_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described in the generic part of this specification.

The Run Time Type Information for the std::num_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > class is described by Table 12-239

Table 12-239 typeinfo for num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

Base Vtable	vtable for __cxxabiv1::__si_class_type_info
Name	typeinfo name for num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >
basetype:	typeinfo for locale::facet

12.1.142.2 Interfaces for Class num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >

An LSB conforming implementation shall provide the architecture specific methods for Class std::num_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-240, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-240 libstdcxx - Class num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > Function Interfaces

__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_group_int(char const*, unsigned long, wchar_t, ios_base&, wchar_t*, wchar_t*, int&) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_insert_int<long>(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, long) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_insert_int<unsigned long>(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, unsigned long) const(GLIBCXX_LDBL_3.4) [LSB]

ostreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_insert_int<long long>(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, long long) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_insert_int<unsigned long long>(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, unsigned long long) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_group_float(char const*, unsigned long, wchar_t, wchar_t const*, wchar_t*, wchar_t*, int&) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_insert_float<double>(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, char, double) const(GLIBCXX_LDBL_3.4) [LSB]
ostreambuf_iterator<wchar_t, char_traits<wchar_t> > __gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_insert_float<__float128>(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, char, __float128) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, void const*) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, bool) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, double) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, __float128) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, unsigned long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, long long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, unsigned long long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_pad(wchar_t, long, ios_base&, wchar_t*, wchar_t const*, int&) const(GLIBCXX_LDBL_3.4) [LSB]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, void const*)

const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, bool) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, double) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, __float128) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, unsigned long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, long long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, unsigned long long) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::__do_put(ostreambuf_iterator<wchar_t, char_traits<wchar_t> >, ios_base&, wchar_t, double) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, bool, ios_base&, _Ios_Iostate&, basic_string<char, char_traits<char>, allocator<char> >&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, bool, ios_base&, _Ios_Iostate&, __float128&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::__do_get(istreambuf_iterator<char, char_traits<char> >, istreambuf_iterator<char, char_traits<char> >, bool, ios_base&, _Ios_Iostate&, double&) const(GLIBCXX_LDBL_3.4) [ISOCXX]
num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_group_int(char const*, unsigned long, wchar_t, ios_base&, wchar_t*, wchar_t*, int&) const(GLIBCXX_3.4) [ISOCXX]
num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_group_float(char const*, unsigned long, wchar_t, wchar_t const*, wchar_t*, wchar_t*, int&) const(GLIBCXX_3.4) [ISOCXX]
num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::_M_pad(wchar_t, long, ios_base&, wchar_t*, wchar_t const*, int&)

const(GLIBCXX_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::num_put(unsigned long)(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::num_put(unsigned long)(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~num_put()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~num_put()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::~num_put()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::~money_get()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::~money_get()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::~money_get()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::~money_put()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::~money_put()(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::~money_put()(GLIBCXX_LDBL_3.4) [ISOCXX]
num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::num_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]
num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::num_put(unsigned long)(GLIBCXX_3.4) [ISOCXX]

An LSB conforming implementation shall provide the architecture specific data interfaces for Class std::num_put<wchar_t, std::ostreambuf_iterator<wchar_t, std::char_traits<wchar_t> > > specified in Table 12-241, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-241 libstdcxx - Class num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > > Data Interfaces

guard variable for __gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::id(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
guard variable for __gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::id(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
guard variable for __gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::id(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
guard variable for __gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::id(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
guard variable for __gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::id(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
guard variable for __gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::id(GLIBCXX_LDBL_3.4) [CXXABI-1.86]

guard variable for __gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::id(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
guard variable for __gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::id(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
__gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >::id(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::id(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >::id(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::id(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >::id(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >::id(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >::id(GLIBCXX_LDBL_3.4) [ISOCXX]
__gnu_cxx_ldbl128::money_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >::id(GLIBCXX_LDBL_3.4) [ISOCXX]
typeinfo for __gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
typeinfo name for __gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
vtable for __gnu_cxx_ldbl128::num_get<char, istreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
vtable for __gnu_cxx_ldbl128::num_get<wchar_t, istreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
vtable for __gnu_cxx_ldbl128::num_put<char, ostreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
vtable for __gnu_cxx_ldbl128::num_put<wchar_t, ostreambuf_iterator<wchar_t, char_traits<wchar_t> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
vtable for __gnu_cxx_ldbl128::money_get<char, istreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]
vtable for __gnu_cxx_ldbl128::money_put<char, ostreambuf_iterator<char, char_traits<char> > >(GLIBCXX_LDBL_3.4) [CXXABI-1.86]

12.1.143 Class gslice

12.1.143.1 Class data for gslice

12.1.143.2 Interfaces for Class gslice

An LSB conforming implementation shall provide the architecture specific methods for Class std::gslice specified in Table 12-242, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-242 libstdcxx - Class gslice Function Interfaces

gslice::_Indexer::_Indexer(unsigned long, valarray<unsigned long> const&, valarray<unsigned long> const&)(GLIBCXX_3.4) [ISOCXX]

gslice::_Indexer::_Indexer(unsigned long, valarray<unsigned long> const&, valarray<unsigned long> const&)(GLIBCXX_3.4) [ISOCXX]

12.1.144 Class __basic_file<char>

12.1.144.1 Class data for __basic_file<char>

12.1.144.2 Interfaces for Class __basic_file<char>

An LSB conforming implementation shall provide the architecture specific methods for Class std::__basic_file<char> specified in Table 12-243, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-243 libstdcxx - Class __basic_file<char> Function Interfaces

__basic_file<char>::xsgetn(char*, long)(GLIBCXX_3.4) [ISOCXX]
__basic_file<char>::xsputn(char const*, long)(GLIBCXX_3.4) [ISOCXX]
__basic_file<char>::seekoff(long, _Ios_Seekdir)(GLIBCXX_3.4) [ISOCXX]
__basic_file<char>::xsputn_2(char const*, long, char const*, long)(GLIBCXX_3.4) [ISOCXX]

12.1.145 Class _List_node_base

12.1.145.1 Interfaces for Class _List_node_base

No external methods are defined for libstdcxx - Class std::_List_node_base in this part of the specification. See also the generic specification.

12.1.146 Class valarray<unsigned int>

12.1.146.1 Class data for valarray<unsigned int>

12.1.146.2 Interfaces for Class valarray<unsigned int>

An LSB conforming implementation shall provide the architecture specific methods for Class std::valarray<unsigned int> specified in Table 12-244, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-244 libstdcxx - Class valarray<unsigned int> Function Interfaces

valarray<unsigned long>::size() const(GLIBCXX_3.4) [ISOCXX]
valarray<unsigned long>::valarray(valarray<unsigned long> const&)(GLIBCXX_3.4) [ISOCXX]
valarray<unsigned long>::valarray(unsigned long)(GLIBCXX_3.4) [ISOCXX]
valarray<unsigned long>::valarray(valarray<unsigned long> const&)(GLIBCXX_3.4) [ISOCXX]
valarray<unsigned long>::valarray(unsigned long)(GLIBCXX_3.4) [ISOCXX]
valarray<unsigned long>::~valarray()(GLIBCXX_3.4) [ISOCXX]
valarray<unsigned long>::~valarray()(GLIBCXX_3.4) [ISOCXX]
valarray<unsigned long>::operator[](unsigned long)(GLIBCXX_3.4) [ISOCXX]

12.1.147 Class allocator<char>

12.1.147.1 Class data for allocator<char>

12.1.147.2 Interfaces for Class allocator<char>

No external methods are defined for libstdcxx - Class std::allocator<char> in this part of the specification. See also the generic specification.

12.1.148 Class allocator<wchar_t>

12.1.148.1 Class data for allocator<wchar_t>

12.1.148.2 Interfaces for Class allocator<wchar_t>

No external methods are defined for libstdcxx - Class std::allocator<wchar_t> in this part of the specification. See also the generic specification.

12.1.149 Class __gnu_cxx::__pool<true>

12.1.149.1 Interfaces for Class __gnu_cxx::__pool<true>

An LSB conforming implementation shall provide the architecture specific methods for Class __gnu_cxx::__pool<true> specified in Table 12-245, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-245 libstdcxx - Class __gnu_cxx::__pool<true> Function Interfaces

__gnu_cxx::__pool<true>::_M_reclaim_block(char*, unsigned long) (GLIBCXX_3.4.4) [LSB]
__gnu_cxx::__pool<true>::_M_reserve_block(unsigned long, unsigned long) (GLIBCXX_3.4.4) [LSB]

12.1.150 Class __gnu_cxx::__pool<false>

12.1.150.1 Interfaces for Class __gnu_cxx::__pool<false>

An LSB conforming implementation shall provide the architecture specific methods for Class __gnu_cxx::__pool<false> specified in Table 12-246, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-246 libstdcxx - Class __gnu_cxx::__pool<false> Function Interfaces

__gnu_cxx::__pool<false>::_M_reclaim_block(char*, unsigned long) (GLIBCXX_3.4.4) [LSB]
__gnu_cxx::__pool<false>::_M_reserve_block(unsigned long, unsigned long) (GLIBCXX_3.4.4) [LSB]

12.1.151 Class __gnu_cxx::free_list

12.1.151.1 Interfaces for Class __gnu_cxx::free_list

An LSB conforming implementation shall provide the architecture specific methods for Class __gnu_cxx::free_list specified in Table 12-247, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-247 libstdcxx - Class __gnu_cxx::free_list Function Interfaces

__gnu_cxx::free_list::_M_get(unsigned long)(GLIBCXX_3.4.4) [LSB]

12.1.152 Class locale::_Impl

12.1.152.1 Interfaces for Class locale::_Impl

An LSB conforming implementation shall provide the architecture specific methods for Class std::locale::_Impl specified in Table 12-248, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-248 libstdcxx - Class locale::_Impl Function Interfaces

locale::_Impl::_M_install_cache(locale::facet const*, unsigned long) (GLIBCXX_3.4.7) [ISOCXX]

12.1.153 Namespace std Functions

12.1.153.1 Interfaces for Namespace std Functions

An LSB conforming implementation shall provide the architecture specific methods for Namespace std Functions specified in Table 12-249, with the full mandatory functionality as described in the referenced underlying specification.

Table 12-249 libstdcxx - Namespace std Functions Function Interfaces

long __copy_streambufs<char, char_traits<char> >(basic_streambuf<char, char_traits<char> >*, basic_streambuf<char, char_traits<char> >*) (GLIBCXX_3.4.8) [ISOCXX]
long __copy_streambufs<wchar_t, char_traits<wchar_t> >(basic_streambuf<wchar_t, char_traits<wchar_t> >*, basic_streambuf<wchar_t, char_traits<wchar_t> >*)(GLIBCXX_3.4.8) [ISOCXX]

12.1.154 Class char_traits<char>

12.1.154.1 Interfaces for Class char_traits<char>

No external methods are defined for libstdcxx - Class std::char_traits<char> in this part of the specification. See also the generic specification.

12.1.155 Class char_traits<wchar_t>

12.1.155.1 Interfaces for Class char_traits<wchar_t>

No external methods are defined for libstdcxx - Class std::char_traits<wchar_t> in this part of the specification. See also the generic specification.

12.2 Interface Definitions for libstdcxx

The interfaces defined on the following pages are included in libstdcxx and are defined by this specification. Unless otherwise noted, these interfaces shall be included in the source standard.

Other interfaces listed in Section 12.1 shall behave as described in the referenced base document. For interfaces referencing LSB and not listed below, please see the generic part of the specification.

VI Package Format and Installation

13 Software Installation

13.1 Package Dependencies

The LSB runtime environment shall provde the following dependencies.

lsb-core-ppc64

This dependency is used to indicate that the application is dependent on features contained in the LSB-Core specification.

This dependency shall have a version of 5.0.

Other LSB modules may add additional dependencies; such dependencies shall have the format `lsb-`*`module`*`-ppc64`.

13.2 Package Architecture Considerations

All packages must specify an architecture of `ppc64`. A LSB runtime environment must accept an architecture of `ppc64` even if the native architecture is different.

The `archnum` value in the Lead Section shall be 0x0010.

Annex A Alphabetical Listing of Interfaces by Library

A.1 libc

The behavior of the interfaces in this library is specified by the following Standards.

Large File Support [LFS]
LSB Core - Generic [LSB]
RFC 5531/4506 RPC & XDR [RPC + XDR]
SUSv2 [SUSv2]
POSIX 1003.1-2001 (ISO/IEC 9945-2003) [SUSv3]
POSIX 1003.1-2008 (ISO/IEC 9945-2009) [SUSv4]
SVID Issue 4 [SVID.4]

Table A-1 libc Function Interfaces

_Exit(GLIBC_2.3) [SUSv4]	getpagesize(GLIBC_2.3) [LSB]	setpriority(GLIBC_2.3) [SUSv4]
_IO_feof(GLIBC_2.3) [LSB]	getpeername(GLIBC_2.3) [SUSv4]	setprotoent(GLIBC_2.3) [SUSv4]
_IO_getc(GLIBC_2.3) [LSB]	getpgid(GLIBC_2.3) [SUSv4]	setpwent(GLIBC_2.3) [SUSv4]
_IO_putc(GLIBC_2.3) [LSB]	getpgrp(GLIBC_2.3) [SUSv4]	setregid(GLIBC_2.3) [SUSv4]
_IO_puts(GLIBC_2.3) [LSB]	getpid(GLIBC_2.3) [SUSv4]	setreuid(GLIBC_2.3) [SUSv4]
__assert_fail(GLIBC_2.3) [LSB]	getppid(GLIBC_2.3) [SUSv4]	setrlimit(GLIBC_2.3) [LSB]
__ctype_get_mb_cur_max(GLIBC_2.3)[LSB]	getpriority(GLIBC_2.3) [SUSv4]	setrlimit64(GLIBC_2.3) [LFS]
__cxa_atexit(GLIBC_2.3) [LSB]	getprotobyname(GLIBC_2.3)[SUSv4]	setservent(GLIBC_2.3) [SUSv4]
__cxa_finalize(GLIBC_2.3)[LSB]	getprotobyname_r(GLIBC_2.3)[LSB]	setsid(GLIBC_2.3) [SUSv4]
__errno_location(GLIBC_2.3)[LSB]	getprotobynumber(GLIBC_2.3)[SUSv4]	setsockopt(GLIBC_2.3) [LSB]
__fpending(GLIBC_2.3) [LSB]	getprotobynumber_r(GLIBC_2.3)[LSB]	setstate(GLIBC_2.3) [SUSv4]
__fprintf_chk(GLIBC_2.4)[LSB]	getprotoent(GLIBC_2.3) [SUSv4]	setstate_r(GLIBC_2.3) [LSB]
__fxstat(GLIBC_2.3) [LSB]	getprotoent_r(GLIBC_2.3)[LSB]	setuid(GLIBC_2.3) [SUSv4]
__fxstat64(GLIBC_2.3) [LSB]	getpwent(GLIBC_2.3) [SUSv4]	setutent(GLIBC_2.3) [LSB]
__getpagesize(GLIBC_2.3)[LSB]	getpwent_r(GLIBC_2.3) [LSB]	setutxent(GLIBC_2.3) [SUSv4]
__getpgid(GLIBC_2.3) [LSB]	getpwnam(GLIBC_2.3) [SUSv4]	setvbuf(GLIBC_2.3) [SUSv4]
__h_errno_location(GLIBC_2.3)[LSB]	getpwnam_r(GLIBC_2.3) [SUSv4]	shmat(GLIBC_2.3) [SUSv4]
__isinf(GLIBC_2.3) [LSB]	getpwuid(GLIBC_2.3) [SUSv4]	shmctl(GLIBC_2.3) [SUSv4]
__isinff(GLIBC_2.3)	getpwuid_r(GLIBC_2.3)	shmdt(GLIBC_2.3)

[LSB]	[SUSv4]	[SUSv4]
__isinfl(GLIBC_2.3) [LSB]	getrlimit(GLIBC_2.3) [LSB]	shmget(GLIBC_2.3) [SUSv4]
__isinfl(GLIBC_2.4) [LSB]	getrlimit64(GLIBC_2.3) [LFS]	shutdown(GLIBC_2.3) [SUSv4]
__isnan(GLIBC_2.3) [LSB]	getrusage(GLIBC_2.3) [SUSv4]	sigaction(GLIBC_2.3) [SUSv4]
__isnanf(GLIBC_2.3) [LSB]	getservbyname(GLIBC_2.3)[SUSv4]	sigaddset(GLIBC_2.3) [SUSv4]
__isnanl(GLIBC_2.3) [LSB]	getservbyname_r(GLIBC_2.3)[LSB]	sigaltstack(GLIBC_2.3) [SUSv4]
__isnanl(GLIBC_2.4) [LSB]	getservbyport(GLIBC_2.3)[SUSv4]	sigandset(GLIBC_2.3) [LSB]
__libc_current_sigrtmax(GLIBC_2.3)[LSB]	getservbyport_r(GLIBC_2.3)[LSB]	sigdelset(GLIBC_2.3) [SUSv4]
__libc_current_sigrtmin(GLIBC_2.3)[LSB]	getservent(GLIBC_2.3) [SUSv4]	sigemptyset(GLIBC_2.3) [SUSv4]
__libc_start_main(GLIBC_2.3)[LSB]	getservent_r(GLIBC_2.3) [LSB]	sigfillset(GLIBC_2.3) [SUSv4]
__lxstat(GLIBC_2.3) [LSB]	getsid(GLIBC_2.3) [SUSv4]	sighold(GLIBC_2.3) [SUSv4]
__lxstat64(GLIBC_2.3) [LSB]	getsockname(GLIBC_2.3)[SUSv4]	sigignore(GLIBC_2.3) [SUSv4]
__mempcpy(GLIBC_2.3) [LSB]	getsockopt(GLIBC_2.3) [LSB]	siginterrupt(GLIBC_2.3) [SUSv4]
__printf_chk(GLIBC_2.4)[LSB]	getsubopt(GLIBC_2.3) [SUSv4]	sigisemptyset(GLIBC_2.3)[LSB]
__rawmemchr(GLIBC_2.3)[LSB]	gettext(GLIBC_2.3) [LSB]	sigismember(GLIBC_2.3) [SUSv4]
__sigsetjmp(GLIBC_2.3.4)[LSB]	gettimeofday(GLIBC_2.3)[SUSv4]	siglongjmp(GLIBC_2.3.4)[SUSv4]
__snprintf_chk(GLIBC_2.4)[LSB]	getuid(GLIBC_2.3) [SUSv4]	signal(GLIBC_2.3) [SUSv4]
__sprintf_chk(GLIBC_2.4)[LSB]	getutent(GLIBC_2.3) [LSB]	sigorset(GLIBC_2.3) [LSB]
__stpcpy(GLIBC_2.3) [LSB]	getutent_r(GLIBC_2.3) [LSB]	sigpause(GLIBC_2.3) [LSB]
__strdup(GLIBC_2.3) [LSB]	getutxent(GLIBC_2.3) [SUSv4]	sigpending(GLIBC_2.3) [SUSv4]
__strtod_internal(GLIBC_2.3)[LSB]	getutxid(GLIBC_2.3) [SUSv4]	sigprocmask(GLIBC_2.3) [SUSv4]
__strtof_internal(GLIBC_2.3)[LSB]	getutxline(GLIBC_2.3) [SUSv4]	sigqueue(GLIBC_2.3) [SUSv4]
__strtok_r(GLIBC_2.3) [LSB]	getw(GLIBC_2.3) [SUSv2]	sigrelse(GLIBC_2.3) [SUSv4]
__strtol_internal(GLIBC_2.3)[LSB]	getwc(GLIBC_2.3) [SUSv4]	sigreturn(GLIBC_2.3) [LSB]
__strtold_internal(GLIBC_2.3)[LSB]	getwc_unlocked(GLIBC_2.3)[LSB]	sigset(GLIBC_2.3) [SUSv4]

__strtold_internal(GLIBC_2.4)[LSB]	getwchar(GLIBC_2.3)[SUSv4]	sigsuspend(GLIBC_2.3)[SUSv4]
__strtoll_internal(GLIBC_2.3)[LSB]	getwchar_unlocked(GLIBC_2.3)[LSB]	sigtimedwait(GLIBC_2.3)[SUSv4]
__strtoul_internal(GLIBC_2.3)[LSB]	getwd(GLIBC_2.3)[SUSv3]	sigwait(GLIBC_2.3)[SUSv4]
__strtoull_internal(GLIBC_2.3)[LSB]	glob(GLIBC_2.3)[SUSv4]	sigwaitinfo(GLIBC_2.3)[SUSv4]
__sysconf(GLIBC_2.3)[LSB]	glob64(GLIBC_2.3)[LSB]	sleep(GLIBC_2.3)[SUSv4]
__sysv_signal(GLIBC_2.3)[LSB]	globfree(GLIBC_2.3)[SUSv4]	snprintf(GLIBC_2.3)[SUSv4]
__vfprintf_chk(GLIBC_2.4)[LSB]	globfree64(GLIBC_2.3)[LSB]	snprintf(GLIBC_2.4)[SUSv4]
__vprintf_chk(GLIBC_2.4)[LSB]	gmtime(GLIBC_2.3)[SUSv4]	sockatmark(GLIBC_2.3)[SUSv4]
__vsnprintf_chk(GLIBC_2.4)[LSB]	gmtime_r(GLIBC_2.3)[SUSv4]	socket(GLIBC_2.3)[SUSv4]
__vsprintf_chk(GLIBC_2.4)[LSB]	gnu_get_libc_release(GLIBC_2.3)[LSB]	socketpair(GLIBC_2.3)[SUSv4]
__wcstod_internal(GLIBC_2.3)[LSB]	gnu_get_libc_version(GLIBC_2.3)[LSB]	sprintf(GLIBC_2.3)[SUSv4]
__wcstof_internal(GLIBC_2.3)[LSB]	grantpt(GLIBC_2.3)[SUSv4]	sprintf(GLIBC_2.4)[SUSv4]
__wcstol_internal(GLIBC_2.3)[LSB]	hcreate(GLIBC_2.3)[SUSv4]	srand(GLIBC_2.3)[SUSv4]
__wcstold_internal(GLIBC_2.3)[LSB]	hcreate_r(GLIBC_2.3)[LSB]	srand48(GLIBC_2.3)[SUSv4]
__wcstold_internal(GLIBC_2.4)[LSB]	hdestroy(GLIBC_2.3)[SUSv4]	srand48_r(GLIBC_2.3)[LSB]
__wcstoul_internal(GLIBC_2.3)[LSB]	hdestroy_r(GLIBC_2.3)[LSB]	srandom(GLIBC_2.3)[SUSv4]
__xmknod(GLIBC_2.3)[LSB]	hsearch(GLIBC_2.3)[SUSv4]	srandom_r(GLIBC_2.3)[LSB]
__xpg_basename(GLIBC_2.3)[LSB]	hsearch_r(GLIBC_2.3)[LSB]	sscanf(GLIBC_2.3)[LSB]
__xpg_sigpause(GLIBC_2.3)[LSB]	htonl(GLIBC_2.3)[SUSv4]	sscanf(GLIBC_2.4)[LSB]
__xpg_strerror_r(GLIBC_2.3.4)[LSB]	htons(GLIBC_2.3)[SUSv4]	statfs(GLIBC_2.3)[LSB]
__xstat(GLIBC_2.3)[LSB]	iconv(GLIBC_2.3)[SUSv4]	statfs64(GLIBC_2.3)[LSB]
__xstat64(GLIBC_2.3)[LSB]	iconv_close(GLIBC_2.3)[SUSv4]	statvfs(GLIBC_2.3)[SUSv4]
_exit(GLIBC_2.3)[SUSv4]	iconv_open(GLIBC_2.3)[SUSv4]	statvfs64(GLIBC_2.3)[LFS]
_longjmp(GLIBC_2.3.4)[SUSv4]	if_freenameindex(GLIBC_2.3)[SUSv4]	stime(GLIBC_2.3)[LSB]
_setjmp(GLIBC_2.3.4)[SUSv4]	if_indextoname(GLIBC_2.3)[SUSv4]	stpcpy(GLIBC_2.3)[SUSv4]

_tolower(GLIBC_2.3) [SUSv4]	if_nameindex(GLIBC_2.3)[SUSv4]	stpncpy(GLIBC_2.3) [SUSv4]
_toupper(GLIBC_2.3) [SUSv4]	if_nametoindex(GLIBC_2.3)[SUSv4]	strcasecmp(GLIBC_2.3) [SUSv4]
a64l(GLIBC_2.3) [SUSv4]	imaxabs(GLIBC_2.3) [SUSv4]	strcasestr(GLIBC_2.3) [LSB]
abort(GLIBC_2.3) [SUSv4]	imaxdiv(GLIBC_2.3) [SUSv4]	strcat(GLIBC_2.3) [SUSv4]
abs(GLIBC_2.3)[SUSv4]	index(GLIBC_2.3) [SUSv3]	strchr(GLIBC_2.3) [SUSv4]
accept(GLIBC_2.3) [SUSv4]	inet_addr(GLIBC_2.3) [SUSv4]	strcmp(GLIBC_2.3) [SUSv4]
access(GLIBC_2.3) [SUSv4]	inet_aton(GLIBC_2.3) [LSB]	strcoll(GLIBC_2.3) [SUSv4]
acct(GLIBC_2.3)[LSB]	inet_ntoa(GLIBC_2.3) [SUSv4]	strcpy(GLIBC_2.3) [SUSv4]
adjtime(GLIBC_2.3) [LSB]	inet_ntop(GLIBC_2.3) [SUSv4]	strcspn(GLIBC_2.3) [SUSv4]
alarm(GLIBC_2.3) [SUSv4]	inet_pton(GLIBC_2.3) [SUSv4]	strdup(GLIBC_2.3) [SUSv4]
alphasort(GLIBC_2.3) [SUSv4]	initgroups(GLIBC_2.3) [LSB]	strerror(GLIBC_2.3) [SUSv4]
alphasort64(GLIBC_2.3) [LSB]	initstate(GLIBC_2.3) [SUSv4]	strerror_r(GLIBC_2.3) [LSB]
argz_add(GLIBC_2.3) [LSB]	initstate_r(GLIBC_2.3) [LSB]	strfmon(GLIBC_2.3) [SUSv4]
argz_add_sep(GLIBC_2.3)[LSB]	insque(GLIBC_2.3) [SUSv4]	strfmon(GLIBC_2.4) [SUSv4]
argz_append(GLIBC_2.3) [LSB]	ioctl(GLIBC_2.3)[LSB]	strftime(GLIBC_2.3) [SUSv4]
argz_count(GLIBC_2.3) [LSB]	isalnum(GLIBC_2.3) [SUSv4]	strlen(GLIBC_2.3) [SUSv4]
argz_create(GLIBC_2.3) [LSB]	isalpha(GLIBC_2.3) [SUSv4]	strncasecmp(GLIBC_2.3) [SUSv4]
argz_create_sep(GLIBC_2.3)[LSB]	isascii(GLIBC_2.3) [SUSv4]	strncat(GLIBC_2.3) [SUSv4]
argz_delete(GLIBC_2.3) [LSB]	isatty(GLIBC_2.3) [SUSv4]	strncmp(GLIBC_2.3) [SUSv4]
argz_extract(GLIBC_2.3) [LSB]	isblank(GLIBC_2.3) [SUSv4]	strncpy(GLIBC_2.3) [SUSv4]
argz_insert(GLIBC_2.3) [LSB]	iscntrl(GLIBC_2.3) [SUSv4]	strndup(GLIBC_2.3) [SUSv4]
argz_next(GLIBC_2.3) [LSB]	isdigit(GLIBC_2.3) [SUSv4]	strnlen(GLIBC_2.3) [SUSv4]
argz_replace(GLIBC_2.3) [LSB]	isgraph(GLIBC_2.3) [SUSv4]	strpbrk(GLIBC_2.3) [SUSv4]
argz_stringify(GLIBC_2.3)[LSB]	islower(GLIBC_2.3) [SUSv4]	strptime(GLIBC_2.3) [LSB]
asctime(GLIBC_2.3) [SUSv4]	isprint(GLIBC_2.3) [SUSv4]	strrchr(GLIBC_2.3) [SUSv4]

asctime_r(GLIBC_2.3) [SUSv4]	ispunct(GLIBC_2.3) [SUSv4]	strsep(GLIBC_2.3)[LSB]
asprintf(GLIBC_2.3) [LSB]	isspace(GLIBC_2.3) [SUSv4]	strsignal(GLIBC_2.3) [SUSv4]
asprintf(GLIBC_2.4) [LSB]	isupper(GLIBC_2.3) [SUSv4]	strspn(GLIBC_2.3) [SUSv4]
atof(GLIBC_2.3)[SUSv4]	iswalnum(GLIBC_2.3) [SUSv4]	strstr(GLIBC_2.3) [SUSv4]
atoi(GLIBC_2.3)[SUSv4]	iswalpha(GLIBC_2.3) [SUSv4]	strtod(GLIBC_2.3) [SUSv4]
atol(GLIBC_2.3)[SUSv4]	iswblank(GLIBC_2.3) [SUSv4]	strtof(GLIBC_2.3) [SUSv4]
atoll(GLIBC_2.3) [SUSv4]	iswcntrl(GLIBC_2.3) [SUSv4]	strtoimax(GLIBC_2.3) [SUSv4]
authnone_create(GLIBC_2.3)[SVID.4]	iswctype(GLIBC_2.3) [SUSv4]	strtok(GLIBC_2.3) [SUSv4]
backtrace(GLIBC_2.3) [LSB]	iswdigit(GLIBC_2.3) [SUSv4]	strtok_r(GLIBC_2.3) [SUSv4]
backtrace_symbols(GLIBC_2.3)[LSB]	iswgraph(GLIBC_2.3) [SUSv4]	strtol(GLIBC_2.3) [SUSv4]
backtrace_symbols_fd(GLIBC_2.3)[LSB]	iswlower(GLIBC_2.3) [SUSv4]	strtold(GLIBC_2.3) [SUSv4]
basename(GLIBC_2.3) [LSB]	iswprint(GLIBC_2.3) [SUSv4]	strtold(GLIBC_2.4) [SUSv4]
bcmp(GLIBC_2.3) [SUSv3]	iswpunct(GLIBC_2.3) [SUSv4]	strtoll(GLIBC_2.3) [SUSv4]
bcopy(GLIBC_2.3) [SUSv3]	iswspace(GLIBC_2.3) [SUSv4]	strtoq(GLIBC_2.3)[LSB]
bind(GLIBC_2.3) [SUSv4]	iswupper(GLIBC_2.3) [SUSv4]	strtoul(GLIBC_2.3) [SUSv4]
bind_textdomain_codeset(GLIBC_2.3)[LSB]	iswxdigit(GLIBC_2.3) [SUSv4]	strtoull(GLIBC_2.3) [SUSv4]
bindresvport(GLIBC_2.3) [LSB]	isxdigit(GLIBC_2.3) [SUSv4]	strtoumax(GLIBC_2.3) [SUSv4]
bindtextdomain(GLIBC_2.3)[LSB]	jrand48(GLIBC_2.3) [SUSv4]	strtouq(GLIBC_2.3) [LSB]
brk(GLIBC_2.3)[SUSv2]	jrand48_r(GLIBC_2.3) [LSB]	strxfrm(GLIBC_2.3) [SUSv4]
bsd_signal(GLIBC_2.3) [SUSv3]	key_decryptsession(GLIBC_2.3)[SVID.4]	svc_getreqset(GLIBC_2.3)[SVID.4]
bsearch(GLIBC_2.3) [SUSv4]	kill(GLIBC_2.3)[LSB]	svc_register(GLIBC_2.3) [LSB]
btowc(GLIBC_2.3) [SUSv4]	killpg(GLIBC_2.3) [SUSv4]	svc_run(GLIBC_2.3) [LSB]
bzero(GLIBC_2.3) [SUSv3]	l64a(GLIBC_2.3) [SUSv4]	svc_sendreply(GLIBC_2.3)[LSB]
calloc(GLIBC_2.3) [SUSv4]	labs(GLIBC_2.3)[SUSv4]	svcerr_auth(GLIBC_2.3) [SVID.4]
callrpc(GLIBC_2.3)[RPC + XDR]	lchown(GLIBC_2.3) [SUSv4]	svcerr_decode(GLIBC_2.3)[SVID.4]

catclose(GLIBC_2.3) [SUSv4]	lcong48(GLIBC_2.3) [SUSv4]	svcerr_noproc(GLIBC_2.3)[SVID.4]
catgets(GLIBC_2.3) [SUSv4]	lcong48_r(GLIBC_2.3) [LSB]	svcerr_noprog(GLIBC_2.3)[SVID.4]
catopen(GLIBC_2.3) [SUSv4]	ldiv(GLIBC_2.3)[SUSv4]	svcerr_progvers(GLIBC_2.3)[SVID.4]
cfgetispeed(GLIBC_2.3) [SUSv4]	lfind(GLIBC_2.3) [SUSv4]	svcerr_systemerr(GLIBC_2.3)[SVID.4]
cfgetospeed(GLIBC_2.3) [SUSv4]	link(GLIBC_2.3)[LSB]	svcerr_weakauth(GLIBC_2.3)[SVID.4]
cfmakeraw(GLIBC_2.3) [LSB]	listen(GLIBC_2.3) [SUSv4]	svcfd_create(GLIBC_2.3) [RPC + XDR]
cfsetispeed(GLIBC_2.3) [SUSv4]	llabs(GLIBC_2.3) [SUSv4]	svcraw_create(GLIBC_2.3)[RPC + XDR]
cfsetospeed(GLIBC_2.3) [SUSv4]	lldiv(GLIBC_2.3) [SUSv4]	svctcp_create(GLIBC_2.3)[LSB]
cfsetspeed(GLIBC_2.3) [LSB]	localeconv(GLIBC_2.3) [SUSv4]	svcudp_create(GLIBC_2.3)[LSB]
chdir(GLIBC_2.3) [SUSv4]	localtime(GLIBC_2.3) [SUSv4]	swab(GLIBC_2.3) [SUSv4]
chmod(GLIBC_2.3) [SUSv4]	localtime_r(GLIBC_2.3) [SUSv4]	swapcontext(GLIBC_2.3.4)[SUSv3]
chown(GLIBC_2.3) [SUSv4]	lockf(GLIBC_2.3) [SUSv4]	swprintf(GLIBC_2.3) [SUSv4]
chroot(GLIBC_2.3) [SUSv2]	lockf64(GLIBC_2.3) [LFS]	swprintf(GLIBC_2.4) [SUSv4]
clearerr(GLIBC_2.3) [SUSv4]	longjmp(GLIBC_2.3.4) [SUSv4]	swscanf(GLIBC_2.3) [LSB]
clearerr_unlocked(GLIBC_2.3)[LSB]	lrand48(GLIBC_2.3) [SUSv4]	swscanf(GLIBC_2.4) [LSB]
clnt_create(GLIBC_2.3) [SVID.4]	lrand48_r(GLIBC_2.3) [LSB]	symlink(GLIBC_2.3) [SUSv4]
clnt_pcreateerror(GLIBC_2.3)[SVID.4]	lsearch(GLIBC_2.3) [SUSv4]	sync(GLIBC_2.3) [SUSv4]
clnt_perrno(GLIBC_2.3) [SVID.4]	lseek(GLIBC_2.3) [SUSv4]	sysconf(GLIBC_2.3) [LSB]
clnt_perror(GLIBC_2.3) [SVID.4]	lseek64(GLIBC_2.3) [LFS]	sysinfo(GLIBC_2.3) [LSB]
clnt_spcreateerror(GLIBC_2.3)[SVID.4]	makecontext(GLIBC_2.3) [SUSv3]	syslog(GLIBC_2.3) [SUSv4]
clnt_sperrno(GLIBC_2.3) [SVID.4]	malloc(GLIBC_2.3) [SUSv4]	syslog(GLIBC_2.4) [SUSv4]
clnt_sperror(GLIBC_2.3) [SVID.4]	mblen(GLIBC_2.3) [SUSv4]	system(GLIBC_2.3) [LSB]
clntraw_create(GLIBC_2.3)[RPC + XDR]	mbrlen(GLIBC_2.3) [SUSv4]	tcdrain(GLIBC_2.3) [SUSv4]
clnttcp_create(GLIBC_2.3)[RPC + XDR]	mbrtowc(GLIBC_2.3) [SUSv4]	tcflow(GLIBC_2.3) [SUSv4]
clntudp_bufcreate(GLIBC_2.3)[RPC + XDR]	mbsinit(GLIBC_2.3) [SUSv4]	tcflush(GLIBC_2.3) [SUSv4]

clntudp_create(GLIBC_2.3)[RPC + XDR]	mbsnrtowcs(GLIBC_2.3)[SUSv4]	tcgetattr(GLIBC_2.3)[SUSv4]
clock(GLIBC_2.3)[SUSv4]	mbsrtowcs(GLIBC_2.3)[SUSv4]	tcgetpgrp(GLIBC_2.3)[SUSv4]
close(GLIBC_2.3)[SUSv4]	mbstowcs(GLIBC_2.3)[SUSv4]	tcgetsid(GLIBC_2.3)[SUSv4]
closedir(GLIBC_2.3)[SUSv4]	mbtowc(GLIBC_2.3)[SUSv4]	tcsendbreak(GLIBC_2.3)[SUSv4]
closelog(GLIBC_2.3)[SUSv4]	memccpy(GLIBC_2.3)[SUSv4]	tcsetattr(GLIBC_2.3)[SUSv4]
confstr(GLIBC_2.3)[SUSv4]	memchr(GLIBC_2.3)[SUSv4]	tcsetpgrp(GLIBC_2.3)[SUSv4]
connect(GLIBC_2.3)[SUSv4]	memcmp(GLIBC_2.3)[SUSv4]	tdelete(GLIBC_2.3)[SUSv4]
creat(GLIBC_2.3)[SUSv4]	memcpy(GLIBC_2.3)[SUSv4]	telldir(GLIBC_2.3)[SUSv4]
creat64(GLIBC_2.3)[LFS]	memmem(GLIBC_2.3)[LSB]	tempnam(GLIBC_2.3)[SUSv4]
ctermid(GLIBC_2.3)[SUSv4]	memmove(GLIBC_2.3)[SUSv4]	textdomain(GLIBC_2.3)[LSB]
ctime(GLIBC_2.3)[SUSv4]	memrchr(GLIBC_2.3)[LSB]	tfind(GLIBC_2.3)[SUSv4]
ctime_r(GLIBC_2.3)[SUSv4]	memset(GLIBC_2.3)[SUSv4]	time(GLIBC_2.3)[SUSv4]
cuserid(GLIBC_2.3)[SUSv2]	mkdir(GLIBC_2.3)[SUSv4]	times(GLIBC_2.3)[SUSv4]
daemon(GLIBC_2.3)[LSB]	mkdtemp(GLIBC_2.3)[SUSv4]	tmpfile(GLIBC_2.3)[SUSv4]
dcgettext(GLIBC_2.3)[LSB]	mkfifo(GLIBC_2.3)[SUSv4]	tmpfile64(GLIBC_2.3)[LFS]
dcngettext(GLIBC_2.3)[LSB]	mkstemp(GLIBC_2.3)[SUSv4]	tmpnam(GLIBC_2.3)[SUSv4]
dgettext(GLIBC_2.3)[LSB]	mkstemp64(GLIBC_2.3)[LSB]	toascii(GLIBC_2.3)[SUSv4]
difftime(GLIBC_2.3)[SUSv4]	mktemp(GLIBC_2.3)[SUSv3]	tolower(GLIBC_2.3)[SUSv4]
dirfd(GLIBC_2.3)[SUSv4]	mktime(GLIBC_2.3)[SUSv4]	toupper(GLIBC_2.3)[SUSv4]
dirname(GLIBC_2.3)[SUSv4]	mlock(GLIBC_2.3)[SUSv4]	towctrans(GLIBC_2.3)[SUSv4]
div(GLIBC_2.3)[SUSv4]	mlockall(GLIBC_2.3)[SUSv4]	towlower(GLIBC_2.3)[SUSv4]
dl_iterate_phdr(GLIBC_2.3)[LSB]	mmap(GLIBC_2.3)[SUSv4]	towupper(GLIBC_2.3)[SUSv4]
dngettext(GLIBC_2.3)[LSB]	mmap64(GLIBC_2.3)[LFS]	truncate(GLIBC_2.3)[SUSv4]
dprintf(GLIBC_2.3)[SUSv4]	mprotect(GLIBC_2.3)[SUSv4]	truncate64(GLIBC_2.3)[LFS]
drand48(GLIBC_2.3)[SUSv4]	mrand48(GLIBC_2.3)[SUSv4]	tsearch(GLIBC_2.3)[SUSv4]

drand48_r(GLIBC_2.3) [LSB]	mrand48_r(GLIBC_2.3) [LSB]	ttyname(GLIBC_2.3) [SUSv4]
dup(GLIBC_2.3)[SUSv4]	mremap(GLIBC_2.3) [LSB]	ttyname_r(GLIBC_2.3) [SUSv4]
dup2(GLIBC_2.3) [SUSv4]	msgctl(GLIBC_2.3) [SUSv4]	twalk(GLIBC_2.3) [SUSv4]
ecvt(GLIBC_2.3) [SUSv3]	msgget(GLIBC_2.3) [SUSv4]	tzset(GLIBC_2.3) [SUSv4]
endgrent(GLIBC_2.3) [SUSv4]	msgrcv(GLIBC_2.3) [SUSv4]	ualarm(GLIBC_2.3) [SUSv3]
endprotoent(GLIBC_2.3) [SUSv4]	msgsnd(GLIBC_2.3) [SUSv4]	ulimit(GLIBC_2.3) [SUSv4]
endpwent(GLIBC_2.3) [SUSv4]	msync(GLIBC_2.3) [SUSv4]	umask(GLIBC_2.3) [SUSv4]
endservent(GLIBC_2.3) [SUSv4]	munlock(GLIBC_2.3) [SUSv4]	uname(GLIBC_2.3) [SUSv4]
endutent(GLIBC_2.3) [LSB]	munlockall(GLIBC_2.3) [SUSv4]	ungetc(GLIBC_2.3) [SUSv4]
endutxent(GLIBC_2.3) [SUSv4]	munmap(GLIBC_2.3) [SUSv4]	ungetwc(GLIBC_2.3) [SUSv4]
envz_add(GLIBC_2.3) [LSB]	nanosleep(GLIBC_2.3) [SUSv4]	unlink(GLIBC_2.3)[LSB]
envz_entry(GLIBC_2.3) [LSB]	nftw(GLIBC_2.3.3) [SUSv4]	unlockpt(GLIBC_2.3) [SUSv4]
envz_get(GLIBC_2.3) [LSB]	nftw64(GLIBC_2.3.3) [LFS]	unsetenv(GLIBC_2.3) [SUSv4]
envz_merge(GLIBC_2.3) [LSB]	ngettext(GLIBC_2.3) [LSB]	usleep(GLIBC_2.3) [SUSv3]
envz_remove(GLIBC_2.3)[LSB]	nice(GLIBC_2.3) [SUSv4]	utime(GLIBC_2.3) [SUSv4]
envz_strip(GLIBC_2.3) [LSB]	nl_langinfo(GLIBC_2.3) [SUSv4]	utimes(GLIBC_2.3) [SUSv4]
erand48(GLIBC_2.3) [SUSv4]	nrand48(GLIBC_2.3) [SUSv4]	utmpname(GLIBC_2.3) [LSB]
erand48_r(GLIBC_2.3) [LSB]	nrand48_r(GLIBC_2.3) [LSB]	vasprintf(GLIBC_2.3) [LSB]
err(GLIBC_2.3)[LSB]	ntohl(GLIBC_2.3) [SUSv4]	vasprintf(GLIBC_2.4) [LSB]
error(GLIBC_2.3)[LSB]	ntohs(GLIBC_2.3) [SUSv4]	vdprintf(GLIBC_2.3) [SUSv4]
errx(GLIBC_2.3)[LSB]	open(GLIBC_2.3) [SUSv4]	vdprintf(GLIBC_2.4) [SUSv4]
execl(GLIBC_2.3) [SUSv4]	open64(GLIBC_2.3) [LFS]	verrx(GLIBC_2.3)[LSB]
execle(GLIBC_2.3) [SUSv4]	open_memstream(GLIBC _2.3)[SUSv4]	vfork(GLIBC_2.3) [SUSv3]
execlp(GLIBC_2.3) [SUSv4]	opendir(GLIBC_2.3) [SUSv4]	vfprintf(GLIBC_2.3) [SUSv4]
execv(GLIBC_2.3) [SUSv4]	openlog(GLIBC_2.3) [SUSv4]	vfprintf(GLIBC_2.4) [SUSv4]

execve(GLIBC_2.3) [SUSv4]	pathconf(GLIBC_2.3) [SUSv4]	vfscanf(GLIBC_2.3) [LSB]
execvp(GLIBC_2.3) [SUSv4]	pause(GLIBC_2.3) [SUSv4]	vfscanf(GLIBC_2.4) [LSB]
exit(GLIBC_2.3)[SUSv4]	pclose(GLIBC_2.3) [SUSv4]	vfwprintf(GLIBC_2.3) [SUSv4]
fchdir(GLIBC_2.3) [SUSv4]	perror(GLIBC_2.3) [SUSv4]	vfwprintf(GLIBC_2.4) [SUSv4]
fchmod(GLIBC_2.3) [SUSv4]	pipe(GLIBC_2.3) [SUSv4]	vfwscanf(GLIBC_2.3) [LSB]
fchown(GLIBC_2.3) [SUSv4]	pmap_getport(GLIBC_2.3)[LSB]	vfwscanf(GLIBC_2.4) [LSB]
fclose(GLIBC_2.3) [SUSv4]	pmap_set(GLIBC_2.3) [LSB]	vprintf(GLIBC_2.3) [SUSv4]
fcntl(GLIBC_2.3)[LSB]	pmap_unset(GLIBC_2.3) [LSB]	vprintf(GLIBC_2.4) [SUSv4]
fcvt(GLIBC_2.3)[SUSv3]	poll(GLIBC_2.3)[SUSv4]	vscanf(GLIBC_2.3)[LSB]
fdatasync(GLIBC_2.3) [SUSv4]	popen(GLIBC_2.3) [SUSv4]	vscanf(GLIBC_2.4)[LSB]
fdopen(GLIBC_2.3) [SUSv4]	posix_fadvise(GLIBC_2.3)[SUSv4]	vsnprintf(GLIBC_2.3) [SUSv4]
feof(GLIBC_2.3)[SUSv4]	posix_fadvise64(GLIBC_2.3)[LSB]	vsnprintf(GLIBC_2.4) [SUSv4]
feof_unlocked(GLIBC_2.3)[LSB]	posix_fallocate(GLIBC_2.3)[SUSv4]	vsprintf(GLIBC_2.3) [SUSv4]
ferror(GLIBC_2.3) [SUSv4]	posix_fallocate64(GLIBC_2.3)[LSB]	vsprintf(GLIBC_2.4) [SUSv4]
ferror_unlocked(GLIBC_2.3)[LSB]	posix_madvise(GLIBC_2.3)[SUSv4]	vsscanf(GLIBC_2.3) [LSB]
fexecve(GLIBC_2.3) [SUSv4]	posix_memalign(GLIBC_2.3)[SUSv4]	vsscanf(GLIBC_2.4) [LSB]
fflush(GLIBC_2.3) [SUSv4]	posix_openpt(GLIBC_2.3)[SUSv4]	vswprintf(GLIBC_2.3) [SUSv4]
fflush_unlocked(GLIBC_2.3)[LSB]	posix_spawn(GLIBC_2.15)[SUSv4]	vswprintf(GLIBC_2.4) [SUSv4]
ffs(GLIBC_2.3)[SUSv4]	posix_spawn_file_actions_addclose(GLIBC_2.3) [SUSv4]	vswscanf(GLIBC_2.3) [LSB]
fgetc(GLIBC_2.3) [SUSv4]	posix_spawn_file_actions_adddup2(GLIBC_2.3) [SUSv4]	vswscanf(GLIBC_2.4) [LSB]
fgetc_unlocked(GLIBC_2.3)[LSB]	posix_spawn_file_actions_addopen(GLIBC_2.3) [SUSv4]	vsyslog(GLIBC_2.3) [LSB]
fgetpos(GLIBC_2.3) [SUSv4]	posix_spawn_file_actions_destroy(GLIBC_2.3) [SUSv4]	vsyslog(GLIBC_2.4) [LSB]
fgetpos64(GLIBC_2.3) [LFS]	posix_spawn_file_actions_init(GLIBC_2.3) [SUSv4]	vwprintf(GLIBC_2.3) [SUSv4]

fgets(GLIBC_2.3) [SUSv4]	posix_spawnattr_destroy(GLIBC_2.3)[SUSv4]	vwprintf(GLIBC_2.4) [SUSv4]
fgets_unlocked(GLIBC_2.3)[LSB]	posix_spawnattr_getflags(GLIBC_2.3)[SUSv4]	vwscanf(GLIBC_2.3) [LSB]
fgetwc(GLIBC_2.3) [SUSv4]	posix_spawnattr_getpgroup(GLIBC_2.3)[SUSv4]	vwscanf(GLIBC_2.4) [LSB]
fgetwc_unlocked(GLIBC_2.3)[LSB]	posix_spawnattr_getschedparam(GLIBC_2.3) [SUSv4]	wait(GLIBC_2.3) [SUSv4]
fgetws(GLIBC_2.3) [SUSv4]	posix_spawnattr_getschedpolicy(GLIBC_2.3) [SUSv4]	wait4(GLIBC_2.3)[LSB]
fgetws_unlocked(GLIBC_2.3)[LSB]	posix_spawnattr_getsigdefault(GLIBC_2.3) [SUSv4]	waitid(GLIBC_2.3) [SUSv4]
fileno(GLIBC_2.3) [SUSv4]	posix_spawnattr_getsigmask(GLIBC_2.3)[SUSv4]	waitpid(GLIBC_2.3) [SUSv4]
fileno_unlocked(GLIBC_2.3)[LSB]	posix_spawnattr_init(GLIBC_2.3)[SUSv4]	warn(GLIBC_2.3)[LSB]
flock(GLIBC_2.3)[LSB]	posix_spawnattr_setflags(GLIBC_2.3)[SUSv4]	warnx(GLIBC_2.3)[LSB]
flockfile(GLIBC_2.3) [SUSv4]	posix_spawnattr_setpgroup(GLIBC_2.3)[SUSv4]	wcpcpy(GLIBC_2.3) [SUSv4]
fmemopen(GLIBC_2.3) [SUSv4]	posix_spawnattr_setschedparam(GLIBC_2.3) [SUSv4]	wcpncpy(GLIBC_2.3) [SUSv4]
fmtmsg(GLIBC_2.3) [SUSv4]	posix_spawnattr_setschedpolicy(GLIBC_2.3) [SUSv4]	wcrtomb(GLIBC_2.3) [SUSv4]
fnmatch(GLIBC_2.3) [LSB]	posix_spawnattr_setsigdefault(GLIBC_2.3) [SUSv4]	wcscasecmp(GLIBC_2.3) [SUSv4]
fopen(GLIBC_2.3) [SUSv4]	posix_spawnattr_setsigmask(GLIBC_2.3)[SUSv4]	wcscat(GLIBC_2.3) [SUSv4]
fopen64(GLIBC_2.3) [LFS]	posix_spawnp(GLIBC_2.15)[SUSv4]	wcschr(GLIBC_2.3) [SUSv4]
fork(GLIBC_2.3) [SUSv4]	pread(GLIBC_2.3) [SUSv4]	wcscmp(GLIBC_2.3) [SUSv4]
fpathconf(GLIBC_2.3) [SUSv4]	pread64(GLIBC_2.3) [LSB]	wcscoll(GLIBC_2.3) [SUSv4]
fprintf(GLIBC_2.3) [SUSv4]	printf(GLIBC_2.3) [SUSv4]	wcscpy(GLIBC_2.3) [SUSv4]
fprintf(GLIBC_2.4) [SUSv4]	printf(GLIBC_2.4) [SUSv4]	wcscspn(GLIBC_2.3) [SUSv4]
fputc(GLIBC_2.3) [SUSv4]	pselect(GLIBC_2.3) [SUSv4]	wcsdup(GLIBC_2.3) [SUSv4]
fputc_unlocked(GLIBC_2.3)[LSB]	psignal(GLIBC_2.3) [SUSv4]	wcsftime(GLIBC_2.3) [SUSv4]
fputs(GLIBC_2.3) [SUSv4]	ptrace(GLIBC_2.3)[LSB]	wcslen(GLIBC_2.3) [SUSv4]

fputs_unlocked(GLIBC_2.3)[LSB]	ptsname(GLIBC_2.3)[SUSv4]	wcsncasecmp(GLIBC_2.3)[SUSv4]
fputwc(GLIBC_2.3)[SUSv4]	putc(GLIBC_2.3)[SUSv4]	wcsncat(GLIBC_2.3)[SUSv4]
fputwc_unlocked(GLIBC_2.3)[LSB]	putc_unlocked(GLIBC_2.3)[SUSv4]	wcsncmp(GLIBC_2.3)[SUSv4]
fputws(GLIBC_2.3)[SUSv4]	putchar(GLIBC_2.3)[SUSv4]	wcsncpy(GLIBC_2.3)[SUSv4]
fputws_unlocked(GLIBC_2.3)[LSB]	putchar_unlocked(GLIBC_2.3)[SUSv4]	wcsnlen(GLIBC_2.3)[SUSv4]
fread(GLIBC_2.3)[SUSv4]	putenv(GLIBC_2.3)[SUSv4]	wcsnrtombs(GLIBC_2.3)[SUSv4]
fread_unlocked(GLIBC_2.3)[LSB]	puts(GLIBC_2.3)[SUSv4]	wcspbrk(GLIBC_2.3)[SUSv4]
free(GLIBC_2.3)[SUSv4]	pututxline(GLIBC_2.3)[SUSv4]	wcsrchr(GLIBC_2.3)[SUSv4]
freeaddrinfo(GLIBC_2.3)[SUSv4]	putw(GLIBC_2.3)[SUSv2]	wcsrtombs(GLIBC_2.3)[SUSv4]
freopen(GLIBC_2.3)[SUSv4]	putwc(GLIBC_2.3)[SUSv4]	wcsspn(GLIBC_2.3)[SUSv4]
freopen64(GLIBC_2.3)[LFS]	putwc_unlocked(GLIBC_2.3)[LSB]	wcsstr(GLIBC_2.3)[SUSv4]
fscanf(GLIBC_2.3)[LSB]	putwchar(GLIBC_2.3)[SUSv4]	wcstod(GLIBC_2.3)[SUSv4]
fscanf(GLIBC_2.4)[LSB]	putwchar_unlocked(GLIBC_2.3)[LSB]	wcstof(GLIBC_2.3)[SUSv4]
fseek(GLIBC_2.3)[SUSv4]	pwrite(GLIBC_2.3)[SUSv4]	wcstoimax(GLIBC_2.3)[SUSv4]
fseeko(GLIBC_2.3)[SUSv4]	pwrite64(GLIBC_2.3)[LSB]	wcstok(GLIBC_2.3)[SUSv4]
fseeko64(GLIBC_2.3)[LFS]	qsort(GLIBC_2.3)[SUSv4]	wcstol(GLIBC_2.3)[SUSv4]
fsetpos(GLIBC_2.3)[SUSv4]	raise(GLIBC_2.3)[SUSv4]	wcstold(GLIBC_2.3)[SUSv4]
fsetpos64(GLIBC_2.3)[LFS]	rand(GLIBC_2.3)[SUSv4]	wcstold(GLIBC_2.4)[SUSv4]
fstatfs(GLIBC_2.3)[LSB]	rand_r(GLIBC_2.3)[SUSv4]	wcstoll(GLIBC_2.3)[SUSv4]
fstatfs64(GLIBC_2.3)[LSB]	random(GLIBC_2.3)[SUSv4]	wcstombs(GLIBC_2.3)[SUSv4]
fstatvfs(GLIBC_2.3)[SUSv4]	random_r(GLIBC_2.3)[LSB]	wcstoq(GLIBC_2.3)[LSB]
fstatvfs64(GLIBC_2.3)[LFS]	read(GLIBC_2.3)[SUSv4]	wcstoul(GLIBC_2.3)[SUSv4]
fsync(GLIBC_2.3)[SUSv4]	readdir(GLIBC_2.3)[SUSv4]	wcstoull(GLIBC_2.3)[SUSv4]
ftell(GLIBC_2.3)[SUSv4]	readdir64(GLIBC_2.3)[LFS]	wcstoumax(GLIBC_2.3)[SUSv4]
ftello(GLIBC_2.3)[SUSv4]	readdir64_r(GLIBC_2.3)[LSB]	wcstouq(GLIBC_2.3)[LSB]

ftello64(GLIBC_2.3) [LFS]	readdir_r(GLIBC_2.3) [SUSv4]	wcswcs(GLIBC_2.3) [SUSv3]
ftime(GLIBC_2.3) [SUSv3]	readlink(GLIBC_2.3) [SUSv4]	wcswidth(GLIBC_2.3) [SUSv4]
ftok(GLIBC_2.3)[SUSv4]	readv(GLIBC_2.3) [SUSv4]	wcsxfrm(GLIBC_2.3) [SUSv4]
ftruncate(GLIBC_2.3) [SUSv4]	realloc(GLIBC_2.3) [SUSv4]	wctob(GLIBC_2.3) [SUSv4]
ftruncate64(GLIBC_2.3) [LFS]	realpath(GLIBC_2.3) [SUSv4]	wctomb(GLIBC_2.3) [SUSv4]
ftrylockfile(GLIBC_2.3) [SUSv4]	recv(GLIBC_2.3) [SUSv4]	wctrans(GLIBC_2.3) [SUSv4]
ftw(GLIBC_2.3)[SUSv4]	recvfrom(GLIBC_2.3) [SUSv4]	wctype(GLIBC_2.3) [SUSv4]
ftw64(GLIBC_2.3)[LFS]	recvmsg(GLIBC_2.3) [SUSv4]	wcwidth(GLIBC_2.3) [SUSv4]
funlockfile(GLIBC_2.3) [SUSv4]	regcomp(GLIBC_2.3) [SUSv4]	wmemchr(GLIBC_2.3) [SUSv4]
fwide(GLIBC_2.3) [SUSv4]	regerror(GLIBC_2.3) [SUSv4]	wmemcmp(GLIBC_2.3) [SUSv4]
fwprintf(GLIBC_2.3) [SUSv4]	regexec(GLIBC_2.3.4) [LSB]	wmemcpy(GLIBC_2.3) [SUSv4]
fwprintf(GLIBC_2.4) [SUSv4]	regfree(GLIBC_2.3) [SUSv4]	wmemmove(GLIBC_2.3) [SUSv4]
fwrite(GLIBC_2.3) [SUSv4]	remove(GLIBC_2.3) [SUSv4]	wmemset(GLIBC_2.3) [SUSv4]
fwrite_unlocked(GLIBC_2.3)[LSB]	remque(GLIBC_2.3) [SUSv4]	wordexp(GLIBC_2.3) [SUSv4]
fwscanf(GLIBC_2.3) [LSB]	rename(GLIBC_2.3) [SUSv4]	wordfree(GLIBC_2.3) [SUSv4]
fwscanf(GLIBC_2.4) [LSB]	rewind(GLIBC_2.3) [SUSv4]	wprintf(GLIBC_2.3) [SUSv4]
gai_strerror(GLIBC_2.3) [SUSv4]	rewinddir(GLIBC_2.3) [SUSv4]	wprintf(GLIBC_2.4) [SUSv4]
gcvt(GLIBC_2.3) [SUSv3]	rindex(GLIBC_2.3) [SUSv3]	write(GLIBC_2.3) [SUSv4]
getaddrinfo(GLIBC_2.3) [SUSv4]	rmdir(GLIBC_2.3) [SUSv4]	writev(GLIBC_2.3) [SUSv4]
getc(GLIBC_2.3) [SUSv4]	sbrk(GLIBC_2.3) [SUSv2]	wscanf(GLIBC_2.3) [LSB]
getc_unlocked(GLIBC_2.3)[SUSv4]	scandir(GLIBC_2.3) [SUSv4]	wscanf(GLIBC_2.4) [LSB]
getchar(GLIBC_2.3) [SUSv4]	scandir64(GLIBC_2.3) [LSB]	xdr_accepted_reply(GLIBC_2.3)[SVID.4]
getchar_unlocked(GLIBC_2.3)[SUSv4]	scanf(GLIBC_2.3)[LSB]	xdr_array(GLIBC_2.3) [SVID.4]
getcontext(GLIBC_2.3.4) [SUSv3]	scanf(GLIBC_2.4)[LSB]	xdr_bool(GLIBC_2.3) [SVID.4]
getcwd(GLIBC_2.3) [LSB]	sched_get_priority_max(GLIBC_2.3)[SUSv4]	xdr_bytes(GLIBC_2.3) [SVID.4]

getdate(GLIBC_2.3) [SUSv4]	sched_get_priority_min(GLIBC_2.3)[SUSv4]	xdr_callhdr(GLIBC_2.3) [SVID.4]
getdelim(GLIBC_2.3) [SUSv4]	sched_getparam(GLIBC_ 2.3)[SUSv4]	xdr_callmsg(GLIBC_2.3) [SVID.4]
getdomainname(GLIBC_ 2.3)[LSB]	sched_getscheduler(GLIB C_2.3)[SUSv4]	xdr_char(GLIBC_2.3) [SVID.4]
getdtablesize(GLIBC_2.3)[LSB]	sched_rr_get_interval(GL IBC_2.3)[SUSv4]	xdr_double(GLIBC_2.3) [SVID.4]
getegid(GLIBC_2.3) [SUSv4]	sched_setparam(GLIBC_ 2.3)[SUSv4]	xdr_enum(GLIBC_2.3) [SVID.4]
getenv(GLIBC_2.3) [SUSv4]	sched_setscheduler(GLIB C_2.3)[LSB]	xdr_float(GLIBC_2.3) [SVID.4]
geteuid(GLIBC_2.3) [SUSv4]	sched_yield(GLIBC_2.3) [SUSv4]	xdr_free(GLIBC_2.3) [SVID.4]
getgid(GLIBC_2.3) [SUSv4]	seed48(GLIBC_2.3) [SUSv4]	xdr_int(GLIBC_2.3) [SVID.4]
getgrent(GLIBC_2.3) [SUSv4]	seed48_r(GLIBC_2.3) [LSB]	xdr_long(GLIBC_2.3) [SVID.4]
getgrent_r(GLIBC_2.3) [LSB]	seekdir(GLIBC_2.3) [SUSv4]	xdr_opaque(GLIBC_2.3) [SVID.4]
getgrgid(GLIBC_2.3) [SUSv4]	select(GLIBC_2.3) [SUSv4]	xdr_opaque_auth(GLIBC _2.3)[SVID.4]
getgrgid_r(GLIBC_2.3) [SUSv4]	semctl(GLIBC_2.3) [SUSv4]	xdr_pointer(GLIBC_2.3) [SVID.4]
getgrnam(GLIBC_2.3) [SUSv4]	semget(GLIBC_2.3) [SUSv4]	xdr_reference(GLIBC_2. 3)[SVID.4]
getgrnam_r(GLIBC_2.3) [SUSv4]	semop(GLIBC_2.3) [SUSv4]	xdr_rejected_reply(GLIB C_2.3)[SVID.4]
getgrouplist(GLIBC_2.3) [LSB]	send(GLIBC_2.3) [SUSv4]	xdr_replymsg(GLIBC_2. 3)[SVID.4]
getgroups(GLIBC_2.3) [SUSv4]	sendfile(GLIBC_2.3) [LSB]	xdr_short(GLIBC_2.3) [SVID.4]
gethostbyaddr(GLIBC_2. 3)[SUSv3]	sendmsg(GLIBC_2.3) [SUSv4]	xdr_string(GLIBC_2.3) [SVID.4]
gethostbyaddr_r(GLIBC_ 2.3)[LSB]	sendto(GLIBC_2.3) [SUSv4]	xdr_u_char(GLIBC_2.3) [SVID.4]
gethostbyname(GLIBC_2 .3)[SUSv3]	setbuf(GLIBC_2.3) [SUSv4]	xdr_u_int(GLIBC_2.3) [LSB]
gethostbyname2(GLIBC_ 2.3)[LSB]	setbuffer(GLIBC_2.3) [LSB]	xdr_u_long(GLIBC_2.3) [SVID.4]
gethostbyname2_r(GLIB C_2.3)[LSB]	setcontext(GLIBC_2.3.4) [SUSv3]	xdr_u_short(GLIBC_2.3) [SVID.4]
gethostbyname_r(GLIBC _2.3)[LSB]	setegid(GLIBC_2.3) [SUSv4]	xdr_union(GLIBC_2.3) [SVID.4]
gethostid(GLIBC_2.3) [SUSv4]	setenv(GLIBC_2.3) [SUSv4]	xdr_vector(GLIBC_2.3) [SVID.4]
gethostname(GLIBC_2.3) [SUSv4]	seteuid(GLIBC_2.3) [SUSv4]	xdr_void(GLIBC_2.3) [SVID.4]
getitimer(GLIBC_2.3) [SUSv4]	setgid(GLIBC_2.3) [SUSv4]	xdr_wrapstring(GLIBC_2 .3)[SVID.4]

getline(GLIBC_2.3) [SUSv4]	setgrent(GLIBC_2.3) [SUSv4]	xdrmem_create(GLIBC_2.3)[SVID.4]
getloadavg(GLIBC_2.3) [LSB]	setgroups(GLIBC_2.3) [LSB]	xdrrec_create(GLIBC_2.3)[SVID.4]
getlogin(GLIBC_2.3) [SUSv4]	sethostname(GLIBC_2.3) [LSB]	xdrrec_endofrecord(GLIBC_2.3)[RPC + XDR]
getlogin_r(GLIBC_2.3) [SUSv4]	setitimer(GLIBC_2.3) [SUSv4]	xdrrec_eof(GLIBC_2.3) [SVID.4]
getnameinfo(GLIBC_2.3) [SUSv4]	setlocale(GLIBC_2.3) [SUSv4]	xdrrec_skiprecord(GLIBC_2.3)[RPC + XDR]
getopt(GLIBC_2.3)[LSB]	setlogmask(GLIBC_2.3) [SUSv4]	xdrstdio_create(GLIBC_2.3)[LSB]
getopt_long(GLIBC_2.3) [LSB]	setpgid(GLIBC_2.3) [SUSv4]	
getopt_long_only(GLIBC_2.3)[LSB]	setpgrp(GLIBC_2.3) [SUSv4]	

Table A-2 libc Data Interfaces

__daylight[LSB]	__tzname[LSB]	in6addr_loopback[SUSv3]
__environ[LSB]	_sys_errlist[LSB]	
__timezone[LSB]	in6addr_any[SUSv3]	

A.2 libcrypt

The behavior of the interfaces in this library is specified by the following Standards.
LSB Core - Generic [LSB]
POSIX 1003.1-2008 (ISO/IEC 9945-2009) [SUSv4]

Table A-3 libcrypt Function Interfaces

crypt(GLIBC_2.3) [SUSv4]	encrypt(GLIBC_2.3) [SUSv4]	setkey(GLIBC_2.3) [SUSv4]
crypt_r(GLIBC_2.3) [LSB]	encrypt_r(GLIBC_2.3) [LSB]	setkey_r(GLIBC_2.3) [LSB]

A.3 libdl

The behavior of the interfaces in this library is specified by the following Standards.
LSB Core - Generic [LSB]
POSIX 1003.1-2008 (ISO/IEC 9945-2009) [SUSv4]

Table A-4 libdl Function Interfaces

dladdr(GLIBC_2.3)[LSB]	dlerror(GLIBC_2.3) [SUSv4]	dlsym(GLIBC_2.3)[LSB]
dlclose(GLIBC_2.3) [SUSv4]	dlopen(GLIBC_2.3) [LSB]	dlvsym(GLIBC_2.3) [LSB]

A.4 libgcc_s

The behavior of the interfaces in this library is specified by the following Standards.
LSB Core - Generic [LSB]

Table A-5 libgcc_s Function Interfaces

_Unwind_Backtrace(GC	_Unwind_GetDataRelBas	_Unwind_RaiseException

C_3.3)[LSB]	e(GCC_3.0)[LSB]	(GCC_3.0)[LSB]
_Unwind_DeleteException(GCC_3.0)[LSB]	_Unwind_GetGR(GCC_3.0)[LSB]	_Unwind_Resume(GCC_3.0)[LSB]
_Unwind_FindEnclosingFunction(GCC_3.3)[LSB]	_Unwind_GetIP(GCC_3.0)[LSB]	_Unwind_Resume_or_Rethrow(GCC_3.3)[LSB]
_Unwind_Find_FDE(GCC_3.0)[LSB]	_Unwind_GetLanguageSpecificData(GCC_3.0)[LSB]	_Unwind_SetGR(GCC_3.0)[LSB]
_Unwind_ForcedUnwind(GCC_3.0)[LSB]	_Unwind_GetRegionStart(GCC_3.0)[LSB]	_Unwind_SetIP(GCC_3.0)[LSB]
_Unwind_GetCFA(GCC_3.3)[LSB]	_Unwind_GetTextRelBase(GCC_3.0)[LSB]	

A.5 libm

The behavior of the interfaces in this library is specified by the following Standards.

LSB Core - Generic [LSB]
POSIX 1003.1-2001 (ISO/IEC 9945-2003) [SUSv3]
POSIX 1003.1-2008 (ISO/IEC 9945-2009) [SUSv4]

Table A-6 libm Function Interfaces

__finite(GLIBC_2.3) [LSB]	csinl(GLIBC_2.3) [SUSv4]	log10(GLIBC_2.3) [SUSv4]
__finitef(GLIBC_2.3) [LSB]	csinl(GLIBC_2.4) [SUSv4]	log10f(GLIBC_2.3) [SUSv4]
__finitel(GLIBC_2.3) [LSB]	csqrt(GLIBC_2.3) [SUSv4]	log10l(GLIBC_2.3) [SUSv4]
__finitel(GLIBC_2.4) [LSB]	csqrtf(GLIBC_2.3) [SUSv4]	log10l(GLIBC_2.4) [SUSv4]
__fpclassify(GLIBC_2.3) [LSB]	csqrtl(GLIBC_2.3) [SUSv4]	log1p(GLIBC_2.3) [SUSv4]
__fpclassifyf(GLIBC_2.3)[LSB]	csqrtl(GLIBC_2.4) [SUSv4]	log1pf(GLIBC_2.3) [SUSv4]
__fpclassifyl(GLIBC_2.4)[LSB]	ctan(GLIBC_2.3) [SUSv4]	log1pl(GLIBC_2.3) [SUSv4]
__signbit(GLIBC_2.3) [LSB]	ctanf(GLIBC_2.3) [SUSv4]	log1pl(GLIBC_2.4) [SUSv4]
__signbitf(GLIBC_2.3) [LSB]	ctanh(GLIBC_2.3) [SUSv4]	log2(GLIBC_2.3) [SUSv4]
__signbitl(GLIBC_2.4) [LSB]	ctanhf(GLIBC_2.3) [SUSv4]	log2f(GLIBC_2.3) [SUSv4]
acos(GLIBC_2.3) [SUSv4]	ctanhl(GLIBC_2.3) [SUSv4]	log2l(GLIBC_2.3) [SUSv4]
acosf(GLIBC_2.3) [SUSv4]	ctanhl(GLIBC_2.4) [SUSv4]	log2l(GLIBC_2.4) [SUSv4]
acosh(GLIBC_2.3) [SUSv4]	ctanl(GLIBC_2.3) [SUSv4]	logb(GLIBC_2.3) [SUSv4]
acoshf(GLIBC_2.3) [SUSv4]	ctanl(GLIBC_2.4) [SUSv4]	logbf(GLIBC_2.3) [SUSv4]
acoshl(GLIBC_2.3) [SUSv4]	drem(GLIBC_2.3)[LSB]	logbl(GLIBC_2.3) [SUSv4]

acoshl(GLIBC_2.4) [SUSv4]	dremf(GLIBC_2.3)[LSB]	logbl(GLIBC_2.4) [SUSv4]
acosl(GLIBC_2.3) [SUSv4]	dreml(GLIBC_2.3)[LSB]	logf(GLIBC_2.3)[SUSv4]
acosl(GLIBC_2.4) [SUSv4]	dreml(GLIBC_2.4)[LSB]	logl(GLIBC_2.3)[SUSv4]
asin(GLIBC_2.3)[SUSv4]	erf(GLIBC_2.3)[SUSv4]	logl(GLIBC_2.4)[SUSv4]
asinf(GLIBC_2.3) [SUSv4]	erfc(GLIBC_2.3)[SUSv4]	lrint(GLIBC_2.3) [SUSv4]
asinh(GLIBC_2.3) [SUSv4]	erfcf(GLIBC_2.3) [SUSv4]	lrintf(GLIBC_2.3) [SUSv4]
asinhf(GLIBC_2.3) [SUSv4]	erfcl(GLIBC_2.3) [SUSv4]	lrintl(GLIBC_2.3) [SUSv4]
asinhl(GLIBC_2.3) [SUSv4]	erfcl(GLIBC_2.4) [SUSv4]	lrintl(GLIBC_2.4) [SUSv4]
asinhl(GLIBC_2.4) [SUSv4]	erff(GLIBC_2.3)[SUSv4]	lround(GLIBC_2.3) [SUSv4]
asinl(GLIBC_2.3) [SUSv4]	erfl(GLIBC_2.3)[SUSv4]	lroundf(GLIBC_2.3) [SUSv4]
asinl(GLIBC_2.4) [SUSv4]	erfl(GLIBC_2.4)[SUSv4]	lroundl(GLIBC_2.3) [SUSv4]
atan(GLIBC_2.3) [SUSv4]	exp(GLIBC_2.3)[SUSv4]	lroundl(GLIBC_2.4) [SUSv4]
atan2(GLIBC_2.3) [SUSv4]	exp10(GLIBC_2.3)[LSB]	matherr(GLIBC_2.3) [LSB]
atan2f(GLIBC_2.3) [SUSv4]	exp10f(GLIBC_2.3) [LSB]	modf(GLIBC_2.3) [SUSv4]
atan2l(GLIBC_2.3) [SUSv4]	exp10l(GLIBC_2.3) [LSB]	modff(GLIBC_2.3) [SUSv4]
atan2l(GLIBC_2.4) [SUSv4]	exp10l(GLIBC_2.4) [LSB]	modfl(GLIBC_2.3) [SUSv4]
atanf(GLIBC_2.3) [SUSv4]	exp2(GLIBC_2.3) [SUSv4]	modfl(GLIBC_2.4) [SUSv4]
atanh(GLIBC_2.3) [SUSv4]	exp2f(GLIBC_2.3) [SUSv4]	nan(GLIBC_2.3)[SUSv4]
atanhf(GLIBC_2.3) [SUSv4]	exp2l(GLIBC_2.4) [SUSv4]	nanf(GLIBC_2.3) [SUSv4]
atanhl(GLIBC_2.3) [SUSv4]	expf(GLIBC_2.3) [SUSv4]	nanl(GLIBC_2.3) [SUSv4]
atanhl(GLIBC_2.4) [SUSv4]	expl(GLIBC_2.3) [SUSv4]	nanl(GLIBC_2.4) [SUSv4]
atanl(GLIBC_2.3) [SUSv4]	expl(GLIBC_2.4) [SUSv4]	nearbyint(GLIBC_2.3) [SUSv4]
atanl(GLIBC_2.4) [SUSv4]	expm1(GLIBC_2.3) [SUSv4]	nearbyintf(GLIBC_2.3) [SUSv4]
cabs(GLIBC_2.3) [SUSv4]	expm1f(GLIBC_2.3) [SUSv4]	nearbyintl(GLIBC_2.3) [SUSv4]
cabsf(GLIBC_2.3) [SUSv4]	expm1l(GLIBC_2.3) [SUSv4]	nearbyintl(GLIBC_2.4) [SUSv4]

cabsl(GLIBC_2.3) [SUSv4]	expm1l(GLIBC_2.4) [SUSv4]	nextafter(GLIBC_2.3) [SUSv4]
cabsl(GLIBC_2.4) [SUSv4]	fabs(GLIBC_2.3) [SUSv4]	nextafterf(GLIBC_2.3) [SUSv4]
cacos(GLIBC_2.3) [SUSv4]	fabsf(GLIBC_2.3) [SUSv4]	nextafterl(GLIBC_2.3) [SUSv4]
cacosf(GLIBC_2.3) [SUSv4]	fabsl(GLIBC_2.3) [SUSv4]	nextafterl(GLIBC_2.4) [SUSv4]
cacosh(GLIBC_2.3) [SUSv4]	fabsl(GLIBC_2.4) [SUSv4]	nexttoward(GLIBC_2.3) [SUSv4]
cacoshf(GLIBC_2.3) [SUSv4]	fdim(GLIBC_2.3) [SUSv4]	nexttoward(GLIBC_2.4) [SUSv4]
cacoshl(GLIBC_2.3) [SUSv4]	fdimf(GLIBC_2.3) [SUSv4]	nexttowardf(GLIBC_2.3) [SUSv4]
cacoshl(GLIBC_2.4) [SUSv4]	fdiml(GLIBC_2.3) [SUSv4]	nexttowardf(GLIBC_2.4) [SUSv4]
cacosl(GLIBC_2.3) [SUSv4]	fdiml(GLIBC_2.4) [SUSv4]	nexttowardl(GLIBC_2.3) [SUSv4]
cacosl(GLIBC_2.4) [SUSv4]	feclearexcept(GLIBC_2.3)[SUSv4]	nexttowardl(GLIBC_2.4) [SUSv4]
carg(GLIBC_2.3) [SUSv4]	fedisableexcept(GLIBC_2 .3)[LSB]	pow(GLIBC_2.3) [SUSv4]
cargf(GLIBC_2.3) [SUSv4]	feenableexcept(GLIBC_2 .3)[LSB]	pow10(GLIBC_2.3) [LSB]
cargl(GLIBC_2.3) [SUSv4]	fegetenv(GLIBC_2.3) [SUSv4]	pow10f(GLIBC_2.3) [LSB]
cargl(GLIBC_2.4) [SUSv4]	fegetexcept(GLIBC_2.3) [LSB]	pow10l(GLIBC_2.3) [LSB]
casin(GLIBC_2.3) [SUSv4]	fegetexceptflag(GLIBC_2 .3)[SUSv4]	pow10l(GLIBC_2.4) [LSB]
casinf(GLIBC_2.3) [SUSv4]	fegetround(GLIBC_2.3) [SUSv4]	powf(GLIBC_2.3) [SUSv4]
casinh(GLIBC_2.3) [SUSv4]	feholdexcept(GLIBC_2.3)[SUSv4]	powl(GLIBC_2.3) [SUSv4]
casinhf(GLIBC_2.3) [SUSv4]	feraiseexcept(GLIBC_2.3)[SUSv4]	powl(GLIBC_2.4) [SUSv4]
casinhl(GLIBC_2.3) [SUSv4]	fesetenv(GLIBC_2.3) [SUSv4]	remainder(GLIBC_2.3) [SUSv4]
casinhl(GLIBC_2.4) [SUSv4]	fesetexceptflag(GLIBC_2 .3)[SUSv4]	remainderf(GLIBC_2.3) [SUSv4]
casinl(GLIBC_2.3) [SUSv4]	fesetround(GLIBC_2.3) [SUSv4]	remainderl(GLIBC_2.3) [SUSv4]
casinl(GLIBC_2.4) [SUSv4]	fetestexcept(GLIBC_2.3) [SUSv4]	remainderl(GLIBC_2.4) [SUSv4]
catan(GLIBC_2.3) [SUSv4]	feupdateenv(GLIBC_2.3) [SUSv4]	remquo(GLIBC_2.3) [SUSv4]
catanf(GLIBC_2.3) [SUSv4]	finite(GLIBC_2.3)[LSB]	remquof(GLIBC_2.3) [SUSv4]
catanh(GLIBC_2.3) [SUSv4]	finitef(GLIBC_2.3)[LSB]	remquol(GLIBC_2.3) [SUSv4]

catanhf(GLIBC_2.3) [SUSv4]	finitel(GLIBC_2.3)[LSB]	remquol(GLIBC_2.4) [SUSv4]
catanhl(GLIBC_2.3) [SUSv4]	finitel(GLIBC_2.4)[LSB]	rint(GLIBC_2.3)[SUSv4]
catanhl(GLIBC_2.4) [SUSv4]	floor(GLIBC_2.3) [SUSv4]	rintf(GLIBC_2.3) [SUSv4]
catanl(GLIBC_2.3) [SUSv4]	floorf(GLIBC_2.3) [SUSv4]	rintl(GLIBC_2.3) [SUSv4]
catanl(GLIBC_2.4) [SUSv4]	floorl(GLIBC_2.3) [SUSv4]	rintl(GLIBC_2.4) [SUSv4]
cbrt(GLIBC_2.3)[SUSv4]	floorl(GLIBC_2.4) [SUSv4]	round(GLIBC_2.3) [SUSv4]
cbrtf(GLIBC_2.3) [SUSv4]	fma(GLIBC_2.3)[SUSv4]	roundf(GLIBC_2.3) [SUSv4]
cbrtl(GLIBC_2.3) [SUSv4]	fmaf(GLIBC_2.3) [SUSv4]	roundl(GLIBC_2.3) [SUSv4]
cbrtl(GLIBC_2.4) [SUSv4]	fmal(GLIBC_2.3) [SUSv4]	roundl(GLIBC_2.4) [SUSv4]
ccos(GLIBC_2.3) [SUSv4]	fmal(GLIBC_2.4) [SUSv4]	scalb(GLIBC_2.3) [SUSv3]
ccosf(GLIBC_2.3) [SUSv4]	fmax(GLIBC_2.3) [SUSv4]	scalbf(GLIBC_2.3)[LSB]
ccosh(GLIBC_2.3) [SUSv4]	fmaxf(GLIBC_2.3) [SUSv4]	scalbl(GLIBC_2.3)[LSB]
ccoshf(GLIBC_2.3) [SUSv4]	fmaxl(GLIBC_2.3) [SUSv4]	scalbl(GLIBC_2.4)[LSB]
ccoshl(GLIBC_2.3) [SUSv4]	fmaxl(GLIBC_2.4) [SUSv4]	scalbln(GLIBC_2.3) [SUSv4]
ccoshl(GLIBC_2.4) [SUSv4]	fmin(GLIBC_2.3) [SUSv4]	scalblnf(GLIBC_2.3) [SUSv4]
ccosl(GLIBC_2.3) [SUSv4]	fminf(GLIBC_2.3) [SUSv4]	scalblnl(GLIBC_2.3) [SUSv4]
ccosl(GLIBC_2.4) [SUSv4]	fminl(GLIBC_2.3) [SUSv4]	scalblnl(GLIBC_2.4) [SUSv4]
ceil(GLIBC_2.3)[SUSv4]	fminl(GLIBC_2.4) [SUSv4]	scalbn(GLIBC_2.3) [SUSv4]
ceilf(GLIBC_2.3) [SUSv4]	fmod(GLIBC_2.3) [SUSv4]	scalbnf(GLIBC_2.3) [SUSv4]
ceill(GLIBC_2.3) [SUSv4]	fmodf(GLIBC_2.3) [SUSv4]	scalbnl(GLIBC_2.3) [SUSv4]
ceill(GLIBC_2.4) [SUSv4]	fmodl(GLIBC_2.3) [SUSv4]	scalbnl(GLIBC_2.4) [SUSv4]
cexp(GLIBC_2.3) [SUSv4]	fmodl(GLIBC_2.4) [SUSv4]	significand(GLIBC_2.3) [LSB]
cexpf(GLIBC_2.3) [SUSv4]	frexp(GLIBC_2.3) [SUSv4]	significandf(GLIBC_2.3) [LSB]
cexpl(GLIBC_2.3) [SUSv4]	frexpf(GLIBC_2.3) [SUSv4]	significandl(GLIBC_2.3) [LSB]
cexpl(GLIBC_2.4) [SUSv4]	frexpl(GLIBC_2.3) [SUSv4]	significandl(GLIBC_2.4) [LSB]

cimag(GLIBC_2.3) [SUSv4]	frexpl(GLIBC_2.4) [SUSv4]	sin(GLIBC_2.3)[SUSv4]
cimagf(GLIBC_2.3) [SUSv4]	gamma(GLIBC_2.3) [LSB]	sincos(GLIBC_2.3)[LSB]
cimagl(GLIBC_2.3) [SUSv4]	gammaf(GLIBC_2.3) [LSB]	sincosf(GLIBC_2.3) [LSB]
cimagl(GLIBC_2.4) [SUSv4]	gammal(GLIBC_2.3) [LSB]	sincosl(GLIBC_2.3) [LSB]
clog(GLIBC_2.3) [SUSv4]	gammal(GLIBC_2.4) [LSB]	sincosl(GLIBC_2.4) [LSB]
clog10(GLIBC_2.3) [LSB]	hypot(GLIBC_2.3) [SUSv4]	sinf(GLIBC_2.3)[SUSv4]
clog10f(GLIBC_2.3) [LSB]	hypotf(GLIBC_2.3) [SUSv4]	sinh(GLIBC_2.3) [SUSv4]
clog10l(GLIBC_2.3) [LSB]	hypotl(GLIBC_2.3) [SUSv4]	sinhf(GLIBC_2.3) [SUSv4]
clog10l(GLIBC_2.4) [LSB]	hypotl(GLIBC_2.4) [SUSv4]	sinhl(GLIBC_2.3) [SUSv4]
clogf(GLIBC_2.3) [SUSv4]	ilogb(GLIBC_2.3) [SUSv4]	sinhl(GLIBC_2.4) [SUSv4]
clogl(GLIBC_2.3) [SUSv4]	ilogbf(GLIBC_2.3) [SUSv4]	sinl(GLIBC_2.3)[SUSv4]
clogl(GLIBC_2.4) [SUSv4]	ilogbl(GLIBC_2.3) [SUSv4]	sinl(GLIBC_2.4)[SUSv4]
conj(GLIBC_2.3) [SUSv4]	ilogbl(GLIBC_2.4) [SUSv4]	sqrt(GLIBC_2.3)[SUSv4]
conjf(GLIBC_2.3) [SUSv4]	j0(GLIBC_2.3)[SUSv4]	sqrtf(GLIBC_2.3) [SUSv4]
conjl(GLIBC_2.3) [SUSv4]	j0f(GLIBC_2.3)[LSB]	sqrtl(GLIBC_2.3) [SUSv4]
conjl(GLIBC_2.4) [SUSv4]	j0l(GLIBC_2.3)[LSB]	sqrtl(GLIBC_2.4) [SUSv4]
copysign(GLIBC_2.3) [SUSv4]	j0l(GLIBC_2.4)[LSB]	tan(GLIBC_2.3)[SUSv4]
copysignf(GLIBC_2.3) [SUSv4]	j1(GLIBC_2.3)[SUSv4]	tanf(GLIBC_2.3)[SUSv4]
copysignl(GLIBC_2.3) [SUSv4]	j1f(GLIBC_2.3)[LSB]	tanh(GLIBC_2.3) [SUSv4]
copysignl(GLIBC_2.4) [SUSv4]	j1l(GLIBC_2.3)[LSB]	tanhf(GLIBC_2.3) [SUSv4]
cos(GLIBC_2.3)[SUSv4]	j1l(GLIBC_2.4)[LSB]	tanhl(GLIBC_2.3) [SUSv4]
cosf(GLIBC_2.3) [SUSv4]	jn(GLIBC_2.3)[SUSv4]	tanhl(GLIBC_2.4) [SUSv4]
cosh(GLIBC_2.3) [SUSv4]	jnf(GLIBC_2.3)[LSB]	tanl(GLIBC_2.3)[SUSv4]
coshf(GLIBC_2.3) [SUSv4]	jnl(GLIBC_2.3)[LSB]	tanl(GLIBC_2.4)[SUSv4]
coshl(GLIBC_2.3) [SUSv4]	jnl(GLIBC_2.4)[LSB]	tgamma(GLIBC_2.3) [SUSv4]

coshl(GLIBC_2.4) [SUSv4]	ldexp(GLIBC_2.3) [SUSv4]	tgammaf(GLIBC_2.3) [SUSv4]
cosl(GLIBC_2.3)[SUSv4]	ldexpf(GLIBC_2.3) [SUSv4]	tgammal(GLIBC_2.3) [SUSv4]
cosl(GLIBC_2.4)[SUSv4]	ldexpl(GLIBC_2.3) [SUSv4]	tgammal(GLIBC_2.4) [SUSv4]
cpow(GLIBC_2.3) [SUSv4]	ldexpl(GLIBC_2.4) [SUSv4]	trunc(GLIBC_2.3) [SUSv4]
cpowf(GLIBC_2.3) [SUSv4]	lgamma(GLIBC_2.3) [SUSv4]	truncf(GLIBC_2.3) [SUSv4]
cpowl(GLIBC_2.3) [SUSv4]	lgamma_r(GLIBC_2.3) [LSB]	truncl(GLIBC_2.3) [SUSv4]
cpowl(GLIBC_2.4) [SUSv4]	lgammaf(GLIBC_2.3) [SUSv4]	truncl(GLIBC_2.4) [SUSv4]
cproj(GLIBC_2.3) [SUSv4]	lgammaf_r(GLIBC_2.3) [LSB]	y0(GLIBC_2.3)[SUSv4]
cprojf(GLIBC_2.3) [SUSv4]	lgammal(GLIBC_2.3) [SUSv4]	y0f(GLIBC_2.3)[LSB]
cprojl(GLIBC_2.3) [SUSv4]	lgammal(GLIBC_2.4) [SUSv4]	y0l(GLIBC_2.3)[LSB]
cprojl(GLIBC_2.4) [SUSv4]	lgammal_r(GLIBC_2.3) [LSB]	y0l(GLIBC_2.4)[LSB]
creal(GLIBC_2.3) [SUSv4]	lgammal_r(GLIBC_2.4) [LSB]	y1(GLIBC_2.3)[SUSv4]
crealf(GLIBC_2.3) [SUSv4]	llrint(GLIBC_2.3) [SUSv4]	y1f(GLIBC_2.3)[LSB]
creall(GLIBC_2.3) [SUSv4]	llrintf(GLIBC_2.3) [SUSv4]	y1l(GLIBC_2.3)[LSB]
creall(GLIBC_2.4) [SUSv4]	llrintl(GLIBC_2.3) [SUSv4]	y1l(GLIBC_2.4)[LSB]
csin(GLIBC_2.3)[SUSv4]	llrintl(GLIBC_2.4) [SUSv4]	yn(GLIBC_2.3)[SUSv4]
csinf(GLIBC_2.3) [SUSv4]	llround(GLIBC_2.3) [SUSv4]	ynf(GLIBC_2.3)[LSB]
csinh(GLIBC_2.3) [SUSv4]	llroundf(GLIBC_2.3) [SUSv4]	ynl(GLIBC_2.3)[LSB]
csinhf(GLIBC_2.3) [SUSv4]	llroundl(GLIBC_2.3) [SUSv4]	ynl(GLIBC_2.4)[LSB]
csinhl(GLIBC_2.3) [SUSv4]	llroundl(GLIBC_2.4) [SUSv4]	
csinhl(GLIBC_2.4) [SUSv4]	log(GLIBC_2.3)[SUSv4]	

Table A-7 libm Data Interfaces

signgam[SUSv4]		

A.6 libpthread

The behavior of the interfaces in this library is specified by the following Standards.

Large File Support [LFS]
LSB Core - Generic [LSB]

POSIX 1003.1-2001 (ISO/IEC 9945-2003) [SUSv3]
POSIX 1003.1-2008 (ISO/IEC 9945-2009) [SUSv4]

Table A-8 libpthread Function Interfaces

__errno_location(GLIBC_2.3)[LSB]	pthread_barrierattr_destroy(GLIBC_2.3)[SUSv4]	pthread_rwlock_unlock(GLIBC_2.3)[SUSv4]
__h_errno_location(GLIBC_2.3)[LSB]	pthread_barrierattr_init(GLIBC_2.3)[SUSv4]	pthread_rwlock_wrlock(GLIBC_2.3)[SUSv4]
__libc_current_sigrtmax(GLIBC_2.3)[LSB]	pthread_barrierattr_setpshared(GLIBC_2.3)[SUSv4]	pthread_rwlockattr_destroy(GLIBC_2.3)[SUSv4]
__libc_current_sigrtmin(GLIBC_2.3)[LSB]	pthread_cancel(GLIBC_2.3)[SUSv4]	pthread_rwlockattr_getkind_np(GLIBC_2.3)[LSB]
_pthread_cleanup_pop(GLIBC_2.3)[LSB]	pthread_cond_broadcast(GLIBC_2.3.2)[SUSv4]	pthread_rwlockattr_getpshared(GLIBC_2.3)[SUSv4]
_pthread_cleanup_push(GLIBC_2.3)[LSB]	pthread_cond_destroy(GLIBC_2.3.2)[SUSv4]	pthread_rwlockattr_init(GLIBC_2.3)[SUSv4]
accept(GLIBC_2.3)[SUSv4]	pthread_cond_init(GLIBC_2.3.2)[SUSv4]	pthread_rwlockattr_setkind_np(GLIBC_2.3)[LSB]
close(GLIBC_2.3)[SUSv4]	pthread_cond_signal(GLIBC_2.3.2)[SUSv4]	pthread_rwlockattr_setpshared(GLIBC_2.3)[SUSv4]
connect(GLIBC_2.3)[SUSv4]	pthread_cond_timedwait(GLIBC_2.3.2)[SUSv4]	pthread_self(GLIBC_2.3)[SUSv4]
fcntl(GLIBC_2.3)[LSB]	pthread_cond_wait(GLIBC_2.3.2)[SUSv4]	pthread_setcancelstate(GLIBC_2.3)[SUSv4]
flockfile(GLIBC_2.3)[SUSv4]	pthread_condattr_destroy(GLIBC_2.3)[SUSv4]	pthread_setcanceltype(GLIBC_2.3)[SUSv4]
fork(GLIBC_2.3)[SUSv4]	pthread_condattr_getpshared(GLIBC_2.3)[SUSv4]	pthread_setconcurrency(GLIBC_2.3)[SUSv4]
fsync(GLIBC_2.3)[SUSv4]	pthread_condattr_init(GLIBC_2.3)[SUSv4]	pthread_setschedparam(GLIBC_2.3)[SUSv4]
ftrylockfile(GLIBC_2.3)[SUSv4]	pthread_condattr_setpshared(GLIBC_2.3)[SUSv4]	pthread_setspecific(GLIBC_2.3)[SUSv4]
funlockfile(GLIBC_2.3)[SUSv4]	pthread_create(GLIBC_2.3)[SUSv4]	pthread_sigmask(GLIBC_2.3)[SUSv4]
longjmp(GLIBC_2.3.4)[SUSv4]	pthread_detach(GLIBC_2.3)[SUSv4]	pthread_spin_destroy(GLIBC_2.3)[SUSv4]
lseek(GLIBC_2.3)[SUSv4]	pthread_equal(GLIBC_2.3)[SUSv4]	pthread_spin_init(GLIBC_2.3)[SUSv4]
lseek64(GLIBC_2.3)[LFS]	pthread_exit(GLIBC_2.3)[SUSv4]	pthread_spin_lock(GLIBC_2.3)[SUSv4]
msync(GLIBC_2.3)[SUSv4]	pthread_getattr_np(GLIBC_2.3)[LSB]	pthread_spin_trylock(GLIBC_2.3)[SUSv4]
nanosleep(GLIBC_2.3)[SUSv4]	pthread_getconcurrency(GLIBC_2.3)[SUSv4]	pthread_spin_unlock(GLIBC_2.3)[SUSv4]
open(GLIBC_2.3)[SUSv4]	pthread_getcpuclockid(GLIBC_2.3)[SUSv4]	pthread_testcancel(GLIBC_2.3)[SUSv4]
open64(GLIBC_2.3)[LFS]	pthread_getschedparam(GLIBC_2.3)[SUSv4]	pwrite(GLIBC_2.3)[SUSv4]

pause(GLIBC_2.3) [SUSv4]	pthread_getspecific(GLIBC_2.3)[SUSv4]	pwrite64(GLIBC_2.3) [LSB]
pread(GLIBC_2.3) [SUSv4]	pthread_join(GLIBC_2.3) [SUSv4]	raise(GLIBC_2.3) [SUSv4]
pread64(GLIBC_2.3) [LSB]	pthread_key_create(GLIBC_2.3)[SUSv4]	read(GLIBC_2.3) [SUSv4]
pthread_attr_destroy(GLIBC_2.3)[SUSv4]	pthread_key_delete(GLIBC_2.3)[SUSv4]	recv(GLIBC_2.3) [SUSv4]
pthread_attr_getdetachstate(GLIBC_2.3)[SUSv4]	pthread_kill(GLIBC_2.3) [SUSv4]	recvfrom(GLIBC_2.3) [SUSv4]
pthread_attr_getguardsize(GLIBC_2.3)[SUSv4]	pthread_mutex_consistent_np(GLIBC_2.4)[LSB]	recvmsg(GLIBC_2.3) [SUSv4]
pthread_attr_getinheritsched(GLIBC_2.3)[SUSv4]	pthread_mutex_destroy(GLIBC_2.3)[SUSv4]	sem_close(GLIBC_2.3) [SUSv4]
pthread_attr_getschedparam(GLIBC_2.3)[SUSv4]	pthread_mutex_init(GLIBC_2.3)[SUSv4]	sem_destroy(GLIBC_2.3) [SUSv4]
pthread_attr_getschedpolicy(GLIBC_2.3)[SUSv4]	pthread_mutex_lock(GLIBC_2.3)[SUSv4]	sem_getvalue(GLIBC_2.3)[SUSv4]
pthread_attr_getscope(GLIBC_2.3)[SUSv4]	pthread_mutex_timedlock(GLIBC_2.3)[SUSv4]	sem_init(GLIBC_2.3) [SUSv4]
pthread_attr_getstack(GLIBC_2.3)[SUSv4]	pthread_mutex_trylock(GLIBC_2.3)[SUSv4]	sem_open(GLIBC_2.3) [SUSv4]
pthread_attr_getstackaddr(GLIBC_2.3)[SUSv3]	pthread_mutex_unlock(GLIBC_2.3)[SUSv4]	sem_post(GLIBC_2.3) [SUSv4]
pthread_attr_getstacksize(GLIBC_2.3)[SUSv4]	pthread_mutexattr_destroy(GLIBC_2.3)[SUSv4]	sem_timedwait(GLIBC_2.3)[SUSv4]
pthread_attr_init(GLIBC_2.3)[SUSv4]	pthread_mutexattr_getpshared(GLIBC_2.3) [SUSv4]	sem_trywait(GLIBC_2.3) [SUSv4]
pthread_attr_setdetachstate(GLIBC_2.3)[SUSv4]	pthread_mutexattr_getrobust_np(GLIBC_2.4) [LSB]	sem_unlink(GLIBC_2.3) [SUSv4]
pthread_attr_setguardsize(GLIBC_2.3)[SUSv4]	pthread_mutexattr_gettype(GLIBC_2.3)[SUSv4]	sem_wait(GLIBC_2.3) [SUSv4]
pthread_attr_setinheritsched(GLIBC_2.3)[SUSv4]	pthread_mutexattr_init(GLIBC_2.3)[SUSv4]	send(GLIBC_2.3) [SUSv4]
pthread_attr_setschedparam(GLIBC_2.3)[SUSv4]	pthread_mutexattr_setpshared(GLIBC_2.3) [SUSv4]	sendmsg(GLIBC_2.3) [SUSv4]
pthread_attr_setschedpolicy(GLIBC_2.3)[SUSv4]	pthread_mutexattr_setrobust_np(GLIBC_2.4) [LSB]	sendto(GLIBC_2.3) [SUSv4]
pthread_attr_setscope(GLIBC_2.3)[SUSv4]	pthread_mutexattr_settype(GLIBC_2.3)[SUSv4]	sigaction(GLIBC_2.3) [SUSv4]
pthread_attr_setstack(GLIBC_2.3)[SUSv4]	pthread_once(GLIBC_2.3)[SUSv4]	siglongjmp(GLIBC_2.3.4)[SUSv4]
pthread_attr_setstack(GLIBC_2.6)[SUSv4]	pthread_rwlock_destroy(GLIBC_2.3)[SUSv4]	sigwait(GLIBC_2.3) [SUSv4]
pthread_attr_setstackaddr(GLIBC_2.3)[SUSv3]	pthread_rwlock_init(GLIBC_2.3)[SUSv4]	system(GLIBC_2.3) [LSB]

pthread_attr_setstacksize(GLIBC_2.3)[SUSv4]	pthread_rwlock_rdlock(GLIBC_2.3)[SUSv4]	tcdrain(GLIBC_2.3)[SUSv4]
pthread_attr_setstacksize(GLIBC_2.6)[SUSv4]	pthread_rwlock_timedrdlock(GLIBC_2.3)[SUSv4]	vfork(GLIBC_2.3)[SUSv3]
pthread_barrier_destroy(GLIBC_2.3)[SUSv4]	pthread_rwlock_timedwrlock(GLIBC_2.3)[SUSv4]	wait(GLIBC_2.3)[SUSv4]
pthread_barrier_init(GLIBC_2.3)[SUSv4]	pthread_rwlock_tryrdlock(GLIBC_2.3)[SUSv4]	waitpid(GLIBC_2.3)[LSB]
pthread_barrier_wait(GLIBC_2.3)[SUSv4]	pthread_rwlock_trywrlock(GLIBC_2.3)[SUSv4]	write(GLIBC_2.3)[SUSv4]

A.7 librt

The behavior of the interfaces in this library is specified by the following Standards.
Large File Support [LFS]
POSIX 1003.1-2008 (ISO/IEC 9945-2009) [SUSv4]

Table A-9 librt Function Interfaces

aio_cancel(GLIBC_2.3)[SUSv4]	aio_return64(GLIBC_2.3)[LFS]	clock_settime(GLIBC_2.3)[SUSv4]
aio_cancel64(GLIBC_2.3)[LFS]	aio_suspend(GLIBC_2.3)[SUSv4]	shm_open(GLIBC_2.3)[SUSv4]
aio_error(GLIBC_2.3)[SUSv4]	aio_suspend64(GLIBC_2.3)[LFS]	shm_unlink(GLIBC_2.3)[SUSv4]
aio_error64(GLIBC_2.3)[LFS]	aio_write(GLIBC_2.3)[SUSv4]	timer_create(GLIBC_2.3.3)[SUSv4]
aio_fsync(GLIBC_2.3)[SUSv4]	aio_write64(GLIBC_2.3)[LFS]	timer_delete(GLIBC_2.3.3)[SUSv4]
aio_fsync64(GLIBC_2.3)[LFS]	clock_getcpuclockid(GLIBC_2.3)[SUSv4]	timer_getoverrun(GLIBC_2.3.3)[SUSv4]
aio_read(GLIBC_2.3)[SUSv4]	clock_getres(GLIBC_2.3)[SUSv4]	timer_gettime(GLIBC_2.3.3)[SUSv4]
aio_read64(GLIBC_2.3)[LFS]	clock_gettime(GLIBC_2.3)[SUSv4]	timer_settime(GLIBC_2.3.3)[SUSv4]
aio_return(GLIBC_2.3)[SUSv4]	clock_nanosleep(GLIBC_2.3)[SUSv4]	

A.8 libutil

The behavior of the interfaces in this library is specified by the following Standards.
LSB Core - Generic [LSB]

Table A-10 libutil Function Interfaces

forkpty(GLIBC_2.3)[LSB]	login_tty(GLIBC_2.3)[LSB]	logwtmp(GLIBC_2.3)[LSB]
login(GLIBC_2.3)[LSB]	logout(GLIBC_2.3)[LSB]	openpty(GLIBC_2.3)[LSB]

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