



Release Definitions for SDMS 4.7 CD-ROM Software

LSI Logic distributes an SDMS Software Device Drivers and Utilities CD-ROM that contains SDMS device drivers for specific operating systems. The SDMS 4.7 CD-ROM contains the first release of Fusion Message Passing Technology (MPT formerly MPI) Fibre Channel software. This document represents the Fibre Channel release definitions.

The release definitions list the new enhancements, which include the newest features and corrections to previously known problems from subsequent releases. Additionally, this document updates you about existing problems and workaround solutions as well as specific release restrictions.

The MPT Boot ROM is documented first, which is followed by the SYMFC909 firmware image information. Then, the Windows, Linux, and Solaris device drivers are listed. Future releases will contain host drivers for additional operating systems.

For ease of reading, this information is presented in tables. One set of tables lists the name, version number, new features, and restrictions being lifted. The other set of tables lists the name, version number, release restrictions, and workaround solutions to certain problems.

Table 1 Release Definitions: New Features/Restrictions Lifted

SDMS Software/ Version Number	New Features	Problems Corrected/ Restrictions Lifted
<i>MPT BootRom</i> 1.00.00	<p>Supports Intel INT13 environments only</p> <p>Allows selection, ordering and configuration of up to four FC909 host adapter boards.</p>	None
<i>SYMFC909 Firmware</i> 1.00.00	<p>High performance SCSI Initiator I/O Engine</p> <p>Improved host utilization through interrupt coalescing, providing less than or equal to one interrupt per I/O.</p> <p>Provides Arbitrated Loop, Fabric Loop, and direct Fabric attachment</p> <p>Supports class 3 FC-AL</p> <p>Supports 1 Gbyte interface</p> <p>Provides 32-bit/33 Mhz, 33-bit/66 MHz, 64-bit/32 MHz, and 64-bit/66 MHz PCI host interface</p> <p>Includes FCP (SCSI-3 over Fibre Channel) Initiator and Target Message Passing Interface</p> <p>Supports LAN message passing interface</p>	None

Table 1 Release Definitions: New Features/Restrictions Lifted (Cont.)

SDMS Software/ Version Number	New Features	Problems Corrected/ Restrictions Lifted
<p><i>Windows NT SYMMPI 1.00.00</i></p>	<p>Supports high performance SCSI Initiator FC909</p> <p>Supports host utilization through interrupt coalescing, providing less than or equal to one interrupt per I/O.</p> <p>Supports Arbitrated Loop, Fabric Loop, and direct Fabric attachment</p> <p>Supports class 3 FC-AL, and 1 Gbyte interface</p> <p>Supports 32-bit/33 Mhz, 33-bit/66 MHz, 64-bit/32 MHz, and 64-bit/66 MHz PCI host interface</p> <p>Supports FCP (SCSI-3 over Fibre Channel) Initiator and Target Message Passing Interface</p>	<p>None</p>
<p><i>Windows 2000 SYMMPI 1.00.00</i></p>	<p>Supports high performance SCSI Initiator FC909</p> <p>Supports host utilization through interrupt coalescing, providing less than or equal to one interrupt per I/O.</p> <p>Supports Arbitrated Loop, Fabric Loop, and direct Fabric attachment</p> <p>Supports class 3 FC-AL, and 1 Gbyte interface</p> <p>Supports 32-bit/33 Mhz, 33-bit/66 MHz, 64-bit/32 MHz, and 64-bit/66 MHz PCI host interface</p> <p>Supports FCP (SCSI-3 over Fibre Channel) Initiator and Target Message Passing Interface</p>	<p>None</p>

Table 1 Release Definitions: New Features/Restrictions Lifted (Cont.)

SDMS Software/ Version Number	New Features	Problems Corrected/ Restrictions Lifted
<i>MPT Linux 1.00.01</i>	<p>Supports improved host utilization through interrupt coalescing, providing less than or equal to one interrupt per I/O.</p> <p>Supports Arbitrated Loop, Fabric Loop, and direct Fabric attachment Supports class 3 FC-AL, and 1 Gbyte interface (FC909 hardware)</p> <p>Supports 32-bit/33 Mhz, 33-bit/66 MHz, 64-bit/32 MHz, and 64-bit/66 MHz PCI host interface</p> <p>Supports FCP (SCSI-3 over Fibre Channel) Initiator and Target Message Passing Interface</p>	None
<i>Solaris 8 SYMCASL 5.02.00</i>	<p>Supports the FC909 Fibre Channel controller</p> <p>Supports up to 128 Fibre Channel drivers per controller port</p> <p>Provides full support for booting and running the Solaris operating system from a Fibre Channel disk drive.</p> <p>SCSI bus resets now use Fibre Channel LIP primitive.</p>	All SCSI devices connected to the FC909 are now visible to the Solaris driver at power up.

Table 2 Release Definitions: Restrictions/Workarounds

SDMS Software/ Version Number	Release Restrictions	Problems and Workarounds in this release
<i>MPI Boot ROM 1.00.00</i>	None	None
<i>SYMFC909 Firmware 1.00.00</i>	<p>Target mode operation is not concurrent with Initiator operation. Target mode must be specifically enabled by setting a flag in the SEEPROM.</p> <p>To achieve compatibility and installability with Microsoft Windows 2000 64-bit follow-on releases (Whistler and Vancouver), change the Subsystem ID (SSID) to 0x1010 from the default of 0x1000. The Subsystem Vendor ID (SSVID) default of 0x1000 is acceptable for future Microsoft releases.</p>	Contact LSI Logic Technical Support at (719) 533-7230 for assistance if required.
<i>Windows NT SYMMP1 1.00.00</i>	<p>The Windows NT registry contains values used by the driver during operation. Refer to the symsetup.doc file in the released media for the defined values.</p> <p>Note that Windows NT sets a size limit on the string it will pass the LSI Logic Fibre Channel driver at any one time. If too many registry values are set at one time, it is possible to exceed the maximum size, and not receive an indication of the size failure from Windows NT. To make sure your machine does not hit this hidden limit, only include the values that need to change from their default settings.</p> <p>When installing Windows NT to an LSI Logic dual active array controller, the first controller (mapped to SCSI ID 0) must own LUN 0. If LUN 0 is a shadow LUN, Windows NT will not install.</p> <p>To verify that LUN 0 is real, the BIOS Verify function can be used. If Verify identifies the LUN as a shadow, the LSI Logic DOS RAID Manager may be used to swap controllers to assign LUN 0 as a real LUN.</p>	None

Table 2 Release Definitions: Restrictions/Workarounds

SDMS Software/ Version Number	Release Restrictions	Problems and Workarounds in this release
<i>Windows 2000 SYMMP1 1.00.00</i>	<p>When installing Windows 2000 to an LSI Logic dual active array controller, the first controller (mapped to SCSI ID 0) must own LUN 0. If LUN 0 is a shadow LUN, Windows 2000 will not install.</p> <p>To verify that LUN 0 is real, the BIOS Verify function can be used. If Verify identifies the LUN as a shadow, the LSI Logic DOS RAID Manager may be used to swap controllers to assign LUN 0 as a real LUN.</p>	None
<i>MPT Linux 1.00.01</i>	None	None
<i>Solaris 8 SYMCASL 5.02.00</i>	This release supports hard disk drives only.	None