



ServRAID-MR10 SAS/SATA Controllers — New family of RAID controllers for System x servers and new HDDs

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At a glance

ServeRAID-MR10M SAS/SATA Controller is a high performance PCIe RAID Controller for External Direct Attached Storage, including IBM System Storage™ EXP3000. This RAID adapter provides investment protection by supporting SAS and SATA hard drive configurations, and providing performance enhancements enabled by a standard battery. The battery enables cached data protection during unexpected power outages for ServeRAID-10M, when operating in its higher performance, write back mode.

ServeRAID-MR10k SAS/SATA Controller enables x3850 M2 onboard LSI 1078 controller with battery backed DDR2 cache (iTBB) write back, and the ability to support additional RAID levels 10, 5, 50, 6, and 60 (as with the onboard 1078, 0 and 1 are also supported). This RAID adapter provides investment protection by supporting SAS and SATA hard drive configurations:

- New Express Simple-Swap/SATA HDDs and new Hot-Swap SAS HDDs to support IBM System x servers
- New Business Partner Service offering for one hour of STG Services for System x (LSx) consulting

Overview

ServeRAID™-MR10M SAS/SATA Controller (43W4339)

ServeRAID-MR10M SAS/SATA Controller is a high-performance PCIe RAID Controller for External Direct Attached Storage RAID 0, 1, 10, 5, 50, 6, and 60. This small form factor (M2) adapter with battery backed DDR2 cache (BBU) utilizes an LSI 1078 controller with an x8 PCI Express host interface and eight external SAS/SATA II 3 Gb/s ports. MegaRAID Storage Manager (MSM), included with ServeRAID-MR10M, is a robust RAID management, configuration, and reporting application.

ServeRAID-MR10k SAS/SATA Controller (43W4280)

ServeRAID-MR10k SAS/SATA Controller enables x3850 M2 onboard LSI 1078 controller with battery backed DDR2 cache (iTBBU) and the ability to support additional RAID levels 10, 5, 50, 6, and 60 (as with the onboard 1078, 0 and 1 are also supported). It plugs into a dedicated DIMM socket in x3850 M2. MegaRAID Storage Manager (MSM), included with ServeRAID-MR10k, is a robust RAID management, configuration, and reporting application.

These controllers are ideal for supporting server and workgroup applications where high levels of sustained read and write operations are required.

Features include:

- Simplified Storage Hardware compatibility across server platforms

using high performance LSI 1078 RAID-on-Chip (ROC).

- Entry priced storage solutions using internal HDDs as well as external direct-attached storage. Robust SAS/SATA II technology for organization's storage infrastructure.
- Reliability and fault-tolerance capability for supporting server mission critical applications where high levels of sustained read and write operations are required, such as video streaming, Web content, video-on-demand, security and surveillance, fixed content, and reference data storage.
- Investment protection by supporting SAS and SATA Hard Drive redundant configurations and RAID level migrations for server storage. Complete Management Tools targeted for users of all experience levels. MegaRAID Storage Manager (MSM) provides GUI for configuration and management.

Features and functions / Key advantages:

ADD	ServeRAID-MR10M	ServeRAID-MR10k
Option P/N	43W4339	43W4280
Technology	SAS / SATA II	
RAID Levels	0, 1, 10, 5, 50, 6, 60	
Utilities(1)	Director, DSA, MSM, CLI, Flashdrive	
Cache	Fixed 256MB 72bit BBU DDR2	256MB 72bit iTBBU
Bus	PCIe x8	Memory Key for Planar
Connectors	2 x4 External SFF- 8088	Utilizes System Connectors
Form Factor	MD2, Low Profile (2 U) Half Length	Memory Key on Planar
Battery	Standard	Standard
-- Mounting	On Card	On Chassis
-- Backup	Up to 72 hours cache protection depending on operating environment	
-- Replacement	IBM recommends replacement annually	

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For information on the IBM Statement of Limited Warranty, contact your IBM representative or reseller. Copies are available upon request.

Business Partners Services (41Y8217)

One hour of STG Lab Services for System x™ (LSx) consulting. This unit-based fee covers one-hour of LSx consulting including travel and expenses. Example engagements include the following:

- BladeCenter®
- High-End x3850/x3950
- Systems Management — IBM Director, IBM RDM, and Altiris
- VMware Virtual Infrastructure and P2V
- Clustering with Microsoft™ Datacenter
- Imaging pre-load configuration
- DS4000™ Storage
- Server Consolidation and Server Migration

Users can select the required number of units of consulting needed for each engagement based on LSx supplied sizing per the customer's requirements.

Key prerequisites

ServeRAID-MR10M

A supported System x server with an available PCI Express expansion slot

ServeRAID-MR10k

A supported System x server — limit of one per server.

Planned availability dates

	Announce date	Planned availability date
ServeRAID-MR10k SAS/SATA Controller	10/16/07	11/30/07
RAID 5 Primary Array (SATA) - minimum of 3 HDDs required	10/16/07	11/30/07
RAID 5 Secondary Array (SATA) - minimum of 3 HDDs required	10/16/07	11/30/07
RAID 5 Primary Array (SAS) - minimum of 3 HDDs required	10/16/07	11/30/07
RAID 5 Secondary Array (SAS) - minimum of 3 HDDs required	10/16/07	11/30/07
RAID 6 Primary Array (SATA) - minimum of 3 HDDs required	10/16/07	11/30/07
RAID 6 Secondary Array (SATA) - minimum of 3 HDDs required	10/16/07	11/30/07
RAID 6 Primary Array (SAS) - minimum of 3 HDDs required	10/16/07	11/30/07
RAID 6 Secondary Array (SAS) - minimum of 3 HDDs required	10/16/07	11/30/07

Description

ServeRAID-MR10M SAS/SATA Controller (43W4339)

ServeRAID-MR10M SAS/SATA Controller is a high-performance PCIe RAID Controller for External Direct Attached Storage RAID 0, 1, 10, 5, 50, 6, and 60. This small form factor (MD2) adapter utilizes an LSI 1078 controller with an x8 PCI Express host interface and eight external SAS/SATA II 3 Gb/s ports. MegaRAID Storage Manager (MSM) is included with the option, as well as available via the Web. MSM is a robust RAID management, configuration, and reporting application.

ServeRAID-MR10k SAS/SATA Controller (43W4280)

ServeRAID-MR10k SAS/SATA Controller enables x3850 M2 onboard LSI 1078 controller with battery backed DDR2 cache (ITBBU) and the ability to support additional RAID levels 10, 5, 50, 6, and 60 (as with the onboard 1078, 0 and 1 are also supported). It plugs into a dedicated DIMM socket in x3850 M2. MegaRAID Storage Manager, available on the Web or within ServeRAID-MR10k's shipgroup, provides a robust RAID Management and reporting application for either IR or MR environments.

These controllers are ideal for supporting server and workgroup applications where high levels of sustained read and write operations are required.

Features:

- Investment protection, ease-of-use, and compatibility

Investment protection and ease-of-use

Storage management is provided via MegaRAID Storage Manager (MSM) complimenting ServeRAID-MR10s, and providing high-performance data protection with an easy-to-use

package. With rigorous testing by IBM through the ServerProven® program, you can maintain a high degree of confidence that your System x server storage subsystem is compatible and will function reliably. :h3.Compatibility

- Support for popular network operating systems
- ServerProven testing — Verifies servers, HDDs, and the ServeRAID-MR10k, MR10M SAS/SATA Controllers function properly

Additional information: All offers are subject to availability. IBM reserves the right to alter product offerings and specifications at any time without notice. IBM is not responsible for photographic or typographic errors.

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