

Manufacturer	Adaptec	Areca
Product	RAID 6805	ARC-1880i
Form Factor	MD2/Low-Profile	MD2/Low-Profile
Number of SAS Ports	Eight	Eight
SAS Bandwidth	6 Gb/s (SAS 2.0)	6 Gb/s (SAS 2.0)
Internal SAS Ports	2 x SFF-8087	2 x SFF-8087
External SAS Ports	No	No
Cache	512 MB DDR2-667	512 MB DDR2-800
Host Interface	PCIe 2.0 (x8)	PCIe 2.0 (x8)
XOR Engine And Clock	PMC-Sierra PM8013 / Not Published	Not Published / 800 MHz
Supported RAID Levels	0, 1, 1E, 5, 5EE, 6, 10, 50, 60	0, 1, 1E, 3, 5, 6, 10, 30, 50, 60
Supported Operating Systems	Windows 7, Windows Server 2008/2008 R2, Windows Server 2003/2003 R2, Windows Vista, VMware ESX Classic 4.x (vSphere), Red Hat Enterprise Linux (RHEL), SUSE Linux Enterprise Server (SLES), Sun Solaris 10 x86, FreeBSD, Debian Linux, Ubuntu Linux	Windows 7/2008/Vista/XP/2003, Linux, FreeBSD, Solaris 10/11 x86/x86_64, Mac OS X 10.4.x/10.5.x/10.6.x, VMware 4.x
Battery Module	No	Optional
Fan	No	Yes

Manufacturer	HighPoint	LSI
Product	RocketRAID 2720SGL	MegaRAID 9265-8i
Form factor	MD2/Low-Profile	MD2/Low-Profile

Number of SAS Ports	Eight	Eight
SAS Bandwidth	6 Gb/s (SAS 2.0)	6 Gb/s (SAS 2.0)
Internal SAS Ports	2 x SFF-8087	2 x SFF-8087
External SAS Ports	No	No
Cache	N/A	1 GB DDR3-1333
Host Interface	PCIe 2.0 (x8)	PCIe 2.0 (x8)
XOR Engine And Clock	Marvell 9485 / Not Published	LSI SAS2208 / 800 MHz
Supported RAID Levels	0, 1, 5, 6, 10, 50	0, 1, 5, 6, 10, 60
Supported Operating Systems	Windows 2000, XP, 2003, 2008, Vista, 7, RHEL/CentOS, SLES, OpenSuSE, Fedora Core, Debian, Ubuntu, FreeBSD bis 7.2	Microsoft Windows Vista/2008/Server 2003/2000/XP, Linux, Solaris (x86), Netware, FreeBSD, Vmware
Battery Module	No	Optional
Fan	No	No

Test Configuration

Advertisement

We connected eight Fujitsu MBA3147RC SAS hard disks (147 GB each) to the RAID controllers, while conducting the RAID level 0, 5, 6, and 10 benchmarks. The SSD tests were conducted with five Samsung SS1605.

Hardware	ails /are
CPU	Intel Core i7-920 (Bloomfield) 45 nm, 2.66 GHz, 8 MB Shared L3 Cache
Motherboard (LGA 1366)	Supermicro X8SAX , Revision: 1.0, Chipset Intel X58 + ICH10R, BIOS: 1.0B
Controller	LSI MegaRAID 9280-24i4e , Firmware: v12.12.0-0037, Driver: v4.32.0.64
RAM	3 x 1 GB DDR3-1333 Corsair CM3X1024-1333C9DHX
Hard Drive	Seagate NL35 400 GB, ST3400832NS , 7200 RPM, SATA 1.5Gb/s 8 MB Cache
Power Supply	OCZ EliteXstream 800 W, OCZ800EXS-EU
Performance measurement	CrystalDiskMark 3
I/O Performance	Iometer 2006.07.27 File server Benchmark Web server Benchmark Database Benchmark Workstation Benchmark Streaming Reads Streaming Writes 4k Random Reads 4k Random Writes
Operating System	are & Drivers imate