



Technical Specifications

In the box

- Xserve
- Rack mounting hardware
- 6' and 10" power cords
- Mini-DVI to VGA adapter
- Mac OS X Server v10.5 Install DVD
- Administration Tools CD
- Printed and electronic documentation



Processor

- One 2.8GHz or two 2.8GHz or 3.0GHz Quad-Core Intel Xeon 5400 series processors
- Enhanced Intel Core microarchitecture
- 12MB (2x6MB) on-die L2 cache per processor
- Independent 1600MHz frontside bus per processor
- 128-bit SSE4 SIMD engine
- Energy efficiency optimization



Memory

- 800MHz DDR2 ECC fully buffered DIMM (FB-DIMM) memory
- Eight FB-DIMM slots support up to 32GB of memory
- 256-bit-wide memory architecture

Storage

- Three independent hot-plug drive bays with support for SATA or SAS drives; support for up to 3TB of hot-plug internal storage^{1,2} using the following Apple Drive Modules:
 - 80GB 7200-rpm SATA with 8MB disk cache
 - 1TB 7200-rpm SATA with 32MB disk cache
 - 73GB 15,000-rpm SAS with 16MB disk cache
 - 300GB 15,000-rpm SAS with 16MB disk cache
- Support for reading SMART data from Apple Drive Modules for prefailure notification
- Software RAID 0 and 1 built into Mac OS X Server
- Optional Xserve RAID Card with 256MB cache and 72-hour cache battery backup; support for RAID 0, 1, and 5
- 8x double-layer SuperDrive (DVD+R DL/DVD±RW/CD-RW)



I/O connections

- Two open PCI Express 2.0 expansion slots: one half-length (6.6-inch) configurable slot (x8 PCI Express 2.0 or 133MHz PCI-X) and one 9.25-inch x16 PCI Express 2.0 slot
- Two independent 10/100/1000BASE-T (Gigabit) RJ-45 Ethernet interfaces with support for jumbo frames
- Built-in ATI Radeon X1300 PCI Express graphics board with 64MB of GDDR3 memory and single-link mini-DVI port; mini-DVI to VGA adapter included
- Two FireWire 800 ports on back panel; 15W total power
- Two USB 2.0 ports (480Mb/s each) on back panel; and one USB 2.0 port on front panel
- One DB-9 serial port (RS-232)

Rack support

- Fits EIA-310-D-compliant, industry-standard four-post racks and cabinets: 19 inches wide, 24 to 36 inches deep
- Front-to-back cooling for rack enclosure
- Support for square-hole racks or threaded racks based on mounting kit selection

Electrical requirements

- Output power: 750W
- Optional second load-sharing 750W power supply for redundancy
- Line voltage: universal input (100V to 240V AC), power factor corrected
- Maximum input current: 8.0A (100V to 120V) or 4.0A (200V to 240V); current is shared when system is configured with two power supplies
- Frequency: 50Hz to 60Hz, single phase



Environmental requirements

- Operating temperature: 50° to 95° F (10° to 35° C)
- Storage temperature: -40° to 116° F (-40° to 47° C)
- Relative humidity: 5% to 95% noncondensing
- Maximum altitude: 10,000 feet
- FCC Class A approved

Size and weight

- Height: 1.73 inches (4.4 cm)
- Width: 17.6 inches (44.7 cm) for mounting in standard 19-inch rack
- Depth: 30 inches (76.2 cm)
- Weight: 31.7 pounds (14.4 kg) base configuration; 38.3 pounds (17.4 kg) for 8-core system with eight FB-DIMMs, three 300GB SAS Apple Drive Modules, and two power supplies³

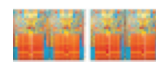
Software

- Mac OS X Server v10.5 Leopard Unlimited-client edition
- Included services
 - File and printer sharing: Mac (AFP, AppleTalk PAP, IPP), Windows (SMB/CIFS, IPP), UNIX and Linux (NFS, LPR/LPD), Internet (FTP, WebDAV)
 - Directory services: Open Directory (OpenLDAP, Kerberos, SASL), NT Domain Controller (Samba 3), Backup Domain Controller (BDC), LDAP directory connector, Active Directory connector, BSD configuration files (/etc), RADIUS
 - Mail services: SMTP (Postfix), POP and IMAP (Cyrus), SSL/TLS encryption (OpenSSL), mailing lists (Mailman), WebMail (SquirrelMail), junk mail filtering (SpamAssassin), virus detection and quarantine (ClamAV)
 - Calendaring: iCal Server (CalDAV, iTIP, iMIP)
 - Distributed computing: Xgrid 2
 - File systems: HFS+ (journaled, case sensitive), read-only UFS and ZFS
 - Web hosting: Apache web server (2.2 and 1.3), SSL/TLS (OpenSSL), WebDAV, PHP (5.2), Perl (5.8.8), Ruby (1.8.6), Rails (1.2.3), MySQL 5, Capistrano, Mongrel
 - Collaboration services: Wiki Server (RSS), iChat Server 2 (Jabber/XMPP)
 - Application services: Apache Tomcat (6), Java Virtual Machine (J2SE), Apache Axis (SOAP), WebObjects 5.4 Deployment
 - Client management: Managed Preferences, NetBoot, NetInstall, Software Update Server, Portable home directories
 - Networking and VPN: DNS server (BIND 9), DHCP server, NTP server, Firewall (IPFW), WINS, VPN server (L2TP, PPTP)
 - Management features: Server Assistant, Server Admin, Server Preferences, Server Status widget, Workgroup Manager, System Image Utility, Secure Shell (SSH2), Server Monitor, RAID Utility, SNMPv3 (Net-SNMP)
 - High-availability features: automatic recovery, file system journaling, IP failover, Software RAID, disk space monitor
 - Media streaming: QuickTime Streaming Server 6, QuickTime Broadcaster 1.5



Configuration Options

	Standard Configuration (MA882LL/A)	Build-to-Order Options
Processor	One 2.8GHz Quad-Core Intel Xeon 5400 series processor	Two 2.8GHz Quad-Core Intel Xeon 5400 series processors Two 3.0GHz Quad-Core Intel Xeon 5400 series processors
Memory	2GB (2x1GB) 800MHz DDR2 ECC fully buffered DIMMs	4GB (4x1GB) 800MHz DDR2 ECC fully buffered DIMMs 8GB (4x2GB) 800MHz DDR2 ECC fully buffered DIMMs 16GB (8x2GB) 800MHz DDR2 ECC fully buffered DIMMs 16GB (4x4GB) 800MHz DDR2 ECC fully buffered DIMMs 32GB (8x4GB) 800MHz DDR2 ECC fully buffered DIMMs
Storage	80GB 7200-rpm SATA Apple Drive Module with 8MB cache	80GB 7200-rpm SATA Apple Drive Module with 8MB cache 1TB 7200-rpm SATA Apple Drive Module with 32MB cache 73GB 15,000-rpm SAS Apple Drive Module with 16MB cache 300GB 15,000-rpm SAS Apple Drive Module with 16MB cache
Internal RAID	Optional	Xserve RAID Card with 256MB cache and 72-hour cache battery backup
Expansion	Optional	Dual-Channel Gigabit Ethernet PCI Express Card Dual-Channel 4Gb Fibre Channel PCI Express Card Quad-Channel 4Gb Fibre Channel PCI Express Card Dual-Channel U320 SCSI PCI-X Card
Power supply	Single 750W high-efficiency power supply	Dual redundant 750W high-efficiency power supplies
Rack support	Supports most industry-standard (EIA-310-D) four-post racks and cabinets with a rack depth of 24 inches to 36 inches deep; quick-deployment rails for square-hole racks eliminates need for cage nuts	Quick-deployment rails for threaded (10/32") racks
Service and support	90 days of telephone support and one-year limited warranty	Optional AppleCare extended service and support products available



Xserve Accessories

- Xserve RAID Card (MA689Z/B)
- 2GB 800MHz DDR2 FB-DIMM ECC 2x1GB (MB094G/A)
- 4GB 800MHz DDR2 FB-DIMM ECC 2x2GB (MB093G/A)
- 8GB 800MHz DDR2 FB-DIMM ECC 2x4GB (MB092G/A)
- Apple Drive Module 80GB SATA for Xserve (MB095G/A)
- Apple Drive Module 1TB SATA for Xserve (MB096G/A)
- Apple Drive Module 73GB SAS for Xserve (MB098G/A)
- Apple Drive Module 300GB SAS for Xserve (MB097G/A)
- Apple Dual-Channel 4Gb Fibre Channel PCI Express Card (MB355G/A)
- Apple Quad-Channel 4Gb Fibre Channel PCI Express Card (MB356G/A)
- Dual Channel Ultra320 SCSI PCI-X Card (MB099)
- Apple 750W Xserve Power Supply Kit (MB090LL/A)
- Xserve Rack Mounting Kit for Square Hole Racks (MA846G/A)
- Xserve Rack Mounting Kit for Threaded Hole Racks (MA847G/A)
- AppleCare Service Parts Kit for Xserve (MB086G/A)
- AppleCare Premium Service and Support for Xserve (M8830LL/C)

1. For hard drive capacity measurements, 1GB = 1 billion bytes and 1TB = 1 trillion bytes; actual formatted capacity less.
2. Maximum capacity of 3TB achieved through the use of three 1TB Apple Drive Modules.
3. Weight varies by configuration and manufacturing process.

Product specifications are subject to change without notice.

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