A+ Server 2041M-32R+B

Products ▸ Systems ▸ 2U ▸ [2041M-32R+B]

Integrated Board

Super H8QM3-2

Available Colors: Black ■

▸ **Drivers & Utilities** ▸ **BIOS** ▸ **Manuals**
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Key Features

1. Four Six-Core AMD Opteron™ 8000 Series (Socket F) processor support; HT3.0 Link support

2. Up to 256GB 32 DIMMS DDR2 800/667/533/400 SDRAM

3. LSI 1068E SAS Controller (RAID 0, 1, 10 Supported)

4. 6 x 3.5" Hot-swap Drives Trays SAS/SATA Hard Drives Supported

5. 2 (x16) PCI-e slots, 1 (x8), 1(x4)(Using x8 Slot) PCI-e, 1 64-bit 133MHz PCI-X

6. 1200W High-efficiency Redundant Power Supply

Specifications

Product SKUs	
AS-2041M-32R+B	A+ Server 2041M-32R+B (**Black**)
Motherboard	
Super H8QM3-2	

Processor/Chipset	
CPU	■ Quad 1207-pin Socket F ■ Supports up to four **Six-Core AMD Opteron™ 8000 Series** (Socket F) processors ■ HT3.0 Link support
Chipset	■ nVidia MCP55 Pro ■ IO 55 ■ NEC uPD720400

System Memory	
Memory Capacity	■ Thirty-two 240-pin DIMM sockets ■ Supports up to 256 GB DDR2 800/667/533/400 MHz memory ■ Single or Dual (recommended) channel memory support ■ For Quad CPUs: Recommended that memory be populated equally in adjacent memory banks
Memory Type	■ DDR2 800/667/533/400MHz* Reg. ECC SDRAM 72-bit, 240-pin gold-plated DIMMs
DIMM Sizes	■ 256MB, 512MB, 1GB, 2GB, 4GB, 8GB **
Memory Voltage	■ 1.8V only
Error Detection	■ Corrects single-bit errors ■ Detects double-bit errors (using ECC memory)

On-Board Devices	
SAS	■ LSI SAS 1068E ** ■ RAID 0, 1, 10 support ■ (Optional: AOC-IButton68) RAID 5 support
SATA	■ nVidia MCP55 Pro SATA2 3.0Gbps Controller ■ 6 SATA2 Ports ■ nVidia RAID 2.0 ■ SATA RAID 0, 1, 0+1, 5 JBOD Support
IPMI	■ Support for Intelligent Platform Management Interface v.2.0 ■ 200-pin IPMI slot ■ (**Optional: AOC-SIMLC R 3.00**) ■ (**Optional: AOC-SIM1U+ R 3.00**) ■ RMM (Remote Management Module) ■ (Card not included) ■ **Note:** Dedicated LAN connection is required for KVM-over-LAN function.
Network Controllers	■ Intel® 82546GB Dual Port Gigabit Ethernet Controller ■ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output

Chassis	
Form Factor	2U Rackmount
Model	■ SC828TQ-R1200LPB
Dimensions	
Height	3.5" (89mm)
Width	17.2" (437mm)
Depth	27.75" (708mm)
Gross Weight	69 lbs (31.3kg)
Available Colors	Black

Front Panel	
Buttons	• Power On/Off button • System Reset button
LEDs	• Power LED • Hard drive activity LED • 2x Network activity LEDs • System Overheat / Fan Fail LED • Power fail LED
Ports	2x USB Ports + DB9 COM Port

Expansion Slots	
PCI-Express	■ 2 x16 PCI-e Slots ■ 1 x8 PCI-e Slot ■ 1 x4 PCI-e Slot (Using x8 Slot)
PCI-X	■ 1 64-bit 133 MHz PCI-X (3.3V) slot ■ **OR** 1 **SIMLC** Slot

Drive Bays	
Hot-swap	■ 6 x 3.5" SATA Hot-swap drive trays ■ Supports up to 6x SATA hard drives

Peripheral Drives	
DVD-ROM	Slim 8x DVD, 24x CD, DVD-ROM Drive
Floppy	Slim 1.44MB Floppy Drive (Optional)

SAS / SATA Backplane	
1x 2U SAS / SATA backplane with Enclosure Management (SGPIO)	

System Cooling	
Fans	■ 6x 80mm 6500 RPM fans
Shroud	■ 1x Air Shroud

Power Supply	
1200W (1 + 1) Redundant high-efficiency power supply w/ PFC	
1200W	
+5V standby	■ 4 Amp
+12V	■ 100 Amp
900W	
+5V standby	■ 4 Amp
+12V	■ 74 Amp

PC Health Monitoring	
CPU	■ Monitors CPU Core Voltages, +3.3V, +5V, +12V, +5V Standby, VBAT.

VGA	ATI ES1000 Graphics Controller

Input / Output

SATA	6 SATA2 ports
IDE	• Single EIDE channel support up to two UDMA IDE devices • Supports UDMA Mode 5 • Supports PIO Mode 4 • Supports ATA 100 / 133
Floppy	• 1 Floppy port; 1.44 MB support
LAN	• 2 RJ45 LAN ports
USB	• Up to B Ports 2.0/1.1 Compliant • 2 Rear Ports • 2 Internal Headers
Keyboard / Mouse	• PS/2 keyboard and mouse ports
Serial Ports	• 1 Fast UART 16550 serial port • 1 Header
VGA	• 1 VGA port

System BIOS

BIOS Type	• 8Mb Flash EEPROM with AMI® BIOS • SST 49LF080A BIOS Chip
BIOS Features	• Plug and Play (PnP) • DMI 2.3 • PCI 2.2 • ACPI 2.0/1.0 • USB Keyboard Support • SMBIOS 2.3

	• CPU 5-Phase-switching voltage reulator
FAN	• Total up to 9-fan status tachometer monitoring • Up to nine 3-pin fan headers • Status monitor for speed control • Support 3-pin fans with fan-speed control • Low noise fan speed control
Temperature	• Monitoring for CPU and chassis environment • CPU Thermal Trip Support • PC Temperature Sensing Logic
LED	• CPU / System Overheat LED • +5V Standby Alert LED
Other Features	• Chassis Intrusion Detection • Chassis Intrusion Header

Operating Environment / Compliance

RoHS	• RoHS Compliant
Environmental Spec.	• Operating Temperature: 10°C to 35°C (50°F to 95°F) • Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) • Operating Relative Humidity: 8% to 90% (non-condensing) • Non-operating Relative Humidity: 5% to 95% (non-condensing)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-H8QM3-2-O-P	1	Super H8QM3-2 Motherboard
	CSE-828TQ-R1200LPB	1	2U Black Chassis
Air Shroud	MCP-310-82801-0N	1	2U Air Shroud
Backplane	BPN-SAS-828TQ	1	SAS / SATA Backplane
Cable(s)	CBL-0157L-01	2	8-pin to 8-pin Ribbon Cable for SGPIO
	CBL-0222L	1	65cm 16-pin to 16-pin Front Flat Cable
	CBL-0226L	3	43cm Round SATA Cable
	CBL-0228L	3	55cm Round SATA Cable
CD	CDR-A+NVDA2	1	Driver CD
Drive Tray(s)	MCP-220-00001-01	6	Black Hot-swappable Hard Drive Tray
	MCP-220-00007-01	1	Black USB Assembly Tray
Fan(s)	FAN-0099L	6	80mm x 38mm 6500RPM Cooling Fan
Front Panel	MCP-280-82801-0N	1	Front Control Panel Board
Heatsink / Retention	SNK-P0023P+	4	Please refer to our Thermal Components Matrix
I/O	CS-PT55L	1	Dual LAN I/O Shield
Mounting Rails	MCP-290-00053-0N	1	26.5" to 36.4" rail set, quick/quick, default for 2U, 3U 17.2" W chassis
Peripheral Drives	DVM-PNSC-824B	1	Black Panasonic 8x DVD, 24x CD, DVD-ROM Drive
Power Supply	PWS-1K22-1R	2	1200W Redundant Power Supply
	PDB-PT828-8824	1	Power Distributor

Optional Parts List

	Part Number	Qty	Description
IPMI	AOC-SIMLC(+)	-	IPMI 2.0 w/ Virtual Media Over LAN
	AOC-SIM1U(+)	-	IPMI 2.0 w/ Virtual Media + KVM Over LAN & Dedicated LAN
Peripheral Drives	FPD-TEAC-SB	-	Black 1.44MB Slim Floppy Drive

* Fully populated DDR2 667or 800 will be downgraded to DDR2 533.
** The onboard LSI 1068E supports SR and IT mode but not IR mode.