



Available Colors: Black ☐ Silver ☐

- ☐ [Drivers & Utilities](#) ☐ [BIOS](#) ☐ [Manuals](#)
☐ [Tested Memory List](#) ☐ [Tested HDD List](#)

Key Features

1. Two Six-Core AMD Opteron™ 2000 Series (Socket F) processor support; HT3.0 Link support
2. Up to 64GB DDR2 800/667/533 SDRAM
3. Left Universal Slot:
1 64-bit PCI-X 133MHz OR (x8) PCI-E
4. Right Universal Slot:
1 64-bit PCI-X 133MHz OR (x8) PCI-E
5. MCP55 Pro Chipset Dual-Port Gigabit LAN/ Ethernet Controller
6. 4 x 3.5" Hot-swap SATA Drive Bays
7. 650W Redundant High-efficiency Power Supply

Product SKUs	
AS-1021M-T2RV	● A+ Server 1021M-T2RV (Silver)
AS-1021M-T2RB	● A+ Server 1021M-T2RB (Black)
Motherboard	
Super H8DMR-i2	
Processor/Chipset	
CPU	<ul style="list-style-type: none">● Dual 1207-pin Socket F● Supports up to two Six-Core AMD Opteron™ 2000 Series (Socket F) processors● Single CPU configurations are not recommended● HT3.0 Link support
Chipset	<ul style="list-style-type: none">● nVidia nForce MCP55 Pro● NEC uPD720400
System Memory	
Memory Capacity	<ul style="list-style-type: none">● 8x 240-pin DIMM sockets support up to 64GB DDR2 800/667/533/400 MHz SDRAM● Single or Dual (recommended) channel memory support● For Single CPU: Memory must be populated in CPU1 DIMMs only● For Dual 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	● 256 MB, 512 MB, 1GB, 2GB, 4GB, 8GB
Memory Voltage	● 1.8V only
Error Detection	<ul style="list-style-type: none">● Corrects single-bit errors● Detects double-bit errors (using ECC memory)
On-Board Devices	
SATA	<ul style="list-style-type: none">● nVidia MCP55 Pro SATA2 3.0Gbps Controller● 6 SATA Ports● nVidia RAID 2.0● SATA RAID 0, 1, 0+1, 5, JBOD Support
IPMI	<ul style="list-style-type: none">● 1U support: Intelligent Platform Management Interface v.2.0+ (Optional: AOC-SIM1U-3B(+), R3.00)● For Dedicated 3rd DATA LAN, use both AOC-SIM1U-3B(+) + AOC-SIM1U-3D● Remote Management Module● (Add-on Cards not included)
Network Controllers	<ul style="list-style-type: none">● nVidia MCP55 Pro Chipset Dual-port LAN / Ethernet Controller● Supports 10Base-T, 100Base-TX, and 1000Base-T, RJ45 output
Graphics	● ATI ES1000 graphics controller
Super I/O	● Winbond 83627HF
Input / Output	
Serial ATA	<ul style="list-style-type: none">● Six SATA2 Ports● Four SATA2 hard drives supported
IDE	<ul style="list-style-type: none">● Single IDE 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
LAN	● 2 RJ45 LAN ports
USB	<ul style="list-style-type: none">● FUL● Up to 4 USB Ports 2.0 Compliant, 1.1 Compatible● 2 Rear Ports● 2 Internal Headers
VGA	● 1 VGA port
Keyboard / Mouse	● PS/2 keyboard and mouse ports
Serial Ports	<ul style="list-style-type: none">● 1 Fast UART 16550 serial port● 1 header
System BIOS	
BIOS Type	<ul style="list-style-type: none">● 8Mb Flash EEPROM w/with AMI® BIOS● SST49LF080A BIOS Chip● Plug and Play (PnP)

Chassis	
Form Factor	• 1U Rackmount
Model	• SC815TQ-R650
Dimensions	
Height	• 1.7" (43mm)
Width	• 17.2" (437mm)
Depth	• 25.6" (650mm)
Gross Weight	• 44 lbs (19.9kg)
Available Colors	• Silver, Black
Front Panel	
Buttons	• Power On/Off button • System Reset button
LEDs	• Power LED • Hard drive activity LED • 2x Network activity LEDs • System Overheat LED
Expansion Slots	
Left Universal Slot	• 1 PCI-express x8 Slot OR • 1 64-bit 133MHz PCI-X slot
Right Universal Slot	• 1 PCI-express x8 Slot OR • 1 64-bit 133MHz PCI-X slot
Drive Bays	
Hot-swap	• 4 x 3.5" Hot-swap SATA drive bays
SATA Backplane	
1U SATA / SAS Backplane w/ AM 9071 chip	
Peripheral Drives	
DVD-ROM	• Slim 8x DVD, 24x CD, DVD-ROM drive
System Cooling	
Fans	• 4x Cooling Fans
Power Supply	
650W AC power supply w/ PFC	
AC Voltage	• 100 - 240V, 60-50Hz, 8-4 Amp
+5V	• 25 Amp
+5V standby	• 3 Amp
+12V	• 54 Amp
-12V	• 0.5 Amp
+3.3V	• 12 Amp
PC Health Monitoring	
CPU	• Monitors CPU Core Voltages, +1.5V, +3.3V, +5V, ±12V, 5V Standby, HyperTransport Link voltage 1.2V, memory voltage 1.8V, VBAT, Chipset • CPU 4-Phase-switching voltage regulator
FAN	• Total up to 5-fan status tachometer monitoring • Up to five 3-pin fan headers • Status monitor for speed control • Status monitor for on/off control • Support 3-pin fans with fan-speed control • Low noise fan speed control • Overheat backup fan connector
Temperature	• Monitoring for CPU and chassis environment • CPU Thermal Trip Support • PC Temperature Sensing Logic
LED	• CPU / System Overheat LED • Suspend-State Indicator LED • +5V Standby Alert LED
Other Features	• Chassis Intrusion Header • Chassis Intrusion Detection
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:

BIOS Features	<ul style="list-style-type: none">• DM 2.3• PCI 2.2• ACPI 2.0• USB Keyboard Support	• Non-Operating Relative Humidity: 5% to 95% (non-condensing)

Parts List - (Items Included)			
	Part Number	Qty	Descriptin
Motherboard / Chassis	MBD-HBDMR-i2-O-P	1	Super HBDMR-i2 Motherboard
	CSE-815TQ-R650V(B)	1	1U Silver SC815TQ-R650 Chassis (B = Black)
Backplane	BFN-SAS-815TQ	1	1U SATA / SAS Backplane
Cable(s)	CBL-0044L	1	2Ft. SATA Cable
	CBL-0060L	1	12V 4-Pin to 4-Pin Power Connector Extension Cable
	CBL-0087	1	16-pin to 16-pin Round Cable
	CBL-0157L	1	8-pin to 8-pin Ribbon Cable for SGPIO
	CBL-0160L	1	Power Cord
	CBL-0178L	2	48cm SATA Cable
	CBL-0179L	1	70cm SATA Cable
CD	CDR-A+NVDA2	1	Driver CD
Fan(s)	FAN-0086L	4	3-pin Cooling Fan
	CSE-PT0135	1	Fan Holder for 6x Fans
	CSE-PT0100	2	Dummy Fan
Hard Drive Trays	MCP-220-00001-03(01)	4	Silver Hot-swappable Hard Drive Trays (01 = Black)
Heatsink / Retention	SNK-P0022+	2	1U Passive Heatsink for AMD Socket F CPUs Please refer to our Thermal Components Matrix
Mounting Rails	CSE-PT51L	1	1U Mounting Rail Kit
Peripheral Drives	DVMPNSC-824(B)	1	Silver Panasonic 8x DVD, 24x CD, DVD-ROM Drive (B = Black)
	CSE-PT94L-V(-B0)	1	Silver Dummy Floppy Drive Cover (B0 = Black)
Power Supply	PWS-651-1R	2	650W High-efficiency Power Supply Module
	PDB-PT815-CN20	1	Power Distributor
Riser Card	CSE-RR1U-X	1	1U 1-Slot 64-bit 3.3V PCI-X - Left Side
	CSE-RR1U-XLP	1	1U 1-Slot 64-bit 3.3V PCI-X - (Low-profile) Right Side
	CSE-RR1U-EL	1	1U PCI-E to PCI-E Riser Card (x8) - Left Side
	CSE-RR1U-ELP	1	1U PCI-X to PCI-E Riser (Low-profile) - Right Side

Optional Parts List			
	Part Number	Qty	Description
IPMI	AOC-SIM1U-3B(+)	-	IPM 2.0 w/ Virtual Media Over LAN
	AOC- SIM1U-3B(+), AOC-SIM1U-3D	-	IPM 2.0 with dedicated LAN & 3rd Data LAN ports
Peripheral Drives	FFD-QTZN-SV	-	Silver Slim Floppy Drive
	FFD-QTZN-SB	-	Black Slim Floppy Drive