

SuperWorkstation 7047AX-TRF



Available Colors:

Black



Key Features

- Cooling Optimized Solution
- Support [Hyper-Speed](#)

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and E5-2600 v2 family†
2. Up to 1TB ECC DDR3, up to 1866MHz; 16x DIMM sockets
3. 2x PCI-E 3.0 x16, 3x PCI-E 3.0 x8, 1x UIO PCI-E 3.0 x8 (for SMC UIO) or 1x PCI-E 2.0 x4 (in x8)
4. I/O ports: 1 VGA, 1 COM, 2 GbE LAN, 2 USB 3.0, 6 USB 2.0, 2 HD/AC97, & 1 IPMI dedicated LAN ports
5. 8x Hot-swap 3.5" SATA HDD Bays
6. 2x Exhaust Fans and 4x Internal Fans
7. 1280W Redundant High-efficiency Digital Power Supplies w/ PMBus Platinum Level (95%)
8. Tower or Rackmount

Note: Image above may show a varied configuration or optional parts. Please refer to parts list for standard parts included.

Specifications

Product SKUs

SuperWorkstation ■ SYS-7047AX-TRF (Black)

Motherboard

[Super X9DAX-iE](#)

Processor/Cache

- CPU
- Intel® Xeon® processor E5-2600 and E5-2600 v2 family† (up to 150W TDP)
 - Dual Socket R (LGA 2011)

Note † BIOS version 3.0 or above is required

Cache ■ Up to 20MB

System Bus ■ QPI up to 8 GT/s

System Memory

- Memory Capacity
- 16x 240-pin DDR3 DIMM sockets
 - Up to 1TB DDR3 ECC LRDIMM
 - Up to 512GB DDR3 ECC Registered memory (RDIMM)

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Chassis

- Form Factor
- 4U Rackmountable / Tower
 - Optional Rackmount Kit

Model ■ CSE-747TG-R1K28B-SQ

Dimensions

Height ■ 18.2" (462mm)

Width ■ 7.0" (178mm)

Depth ■ 26.5" (673mm)

Gross Weight ■ 71 lbs (32.2 kg)

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

Ports ■ 2x front USB 2.0 Ports

Memory Type	<ul style="list-style-type: none"> DDR3 DDR3L DDR4 DDR4L
DIMM Sizes	<ul style="list-style-type: none"> 32GB, 16GB, 8GB, 4GB, 2GB, 1GB
Memory Voltage	<ul style="list-style-type: none"> 1.5 V, 1.35 V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors Detects double-bit errors (using ECC memory)

On-Board Devices

Chipset	<ul style="list-style-type: none"> Intel® C602 Chipset
SATA	<ul style="list-style-type: none"> SATA 2.0 3Gbps with RAID 0, 1, 5, 10 SATA 3.0 6Gbps with RAID 0, 1
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support Nuvoton WPCM450 BMC
Network Controllers	<ul style="list-style-type: none"> Intel® i350 Dual Port Gigabit Ethernet Virtual Machine Device Queues reduce I/O overhead Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output 1x Realtek RTL8201N PHY (dedicated IPMI)
Audio	<ul style="list-style-type: none"> RealTek ALC889 7.1 High Definition Audio with S/PDIF header
Graphics	<ul style="list-style-type: none"> Matrox G200eW

Input / Output

SATA	<ul style="list-style-type: none"> 2x SATA 3.0 ports (6Gbps) 8x SATA 2.0 ports (3Gbps)
LAN	<ul style="list-style-type: none"> 2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 2x USB 3.0 (2 rear) 6x USB 2.0 (2 front + 4 rear)
Audio	<ul style="list-style-type: none"> Line-in / Line-out / Microphone Ports
Video	<ul style="list-style-type: none"> 1x VGA port
Serial Port / Header	<ul style="list-style-type: none"> 2x Fast UART 16550 ports
IEEE 1394a	<ul style="list-style-type: none"> 2x Headers

Expansion Slots

PCI-Express	<ul style="list-style-type: none"> 2 PCI-E 3.0 x16 slots 3 PCI-E 3.0 x8 slots 1 UIO PCI-E 3.0 x8 (for SMC UIO) or 1 PCI-E 2.0 x4 (in x8) slot
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System BIOS

BIOS Type	<ul style="list-style-type: none"> 128Mb SPI Flash EEPROM with AMI® BIOS
BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) APM 1.2 DMI 2.3 ACPI 1.0 / 2.0 USB Keyboard support SMBIOS 2.3 UEFI

Drive Bays

Hot-swap	<ul style="list-style-type: none"> 8x Hot-swap 3.5" SATA Drive Trays
Peripheral Bay(s) [90° Rotatable]	<ul style="list-style-type: none"> 2x 5.25" Peripheral Drive Bay 1x 5.25" Bay for Floppy Drive

SAS / SATA Backplane

SAS / SATA Hard Drive Backplane w/AMI MG9072

System Cooling

Fans	<ul style="list-style-type: none"> 2x Exhaust Fans and 4x Internal Fans
Heatsink	<ul style="list-style-type: none"> 2x Optional Active heatsink with optimal fan speed control (SNK-P2050AP4)

Power Supply

1280W Redundant High-efficiency Digital Power Supplies w/ PMBus 1.2	
AC Input	<ul style="list-style-type: none"> 1000W Output @ 100-140V, 12-8A, 50-60Hz 1280W Output @ 180-240V, 8-6A, 50-60Hz
DC Output	<ul style="list-style-type: none"> 1000W: +12V/83A; +5Vsb/4A 1280W: +12V/106.7A, +5Vsb/4A

Certification	  Platinum Certified [Test Report]
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PC Health Monitoring

CPU	<ul style="list-style-type: none"> Monitors for CPU Cores, +1.8V, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory, Chipset Voltages. 6-Phase-switching voltage regulator
FAN	<ul style="list-style-type: none"> Total of three fan headers supporting up to 8 fans Three 4-pin fan headers 3x fans with tachometer status monitoring Support 3-pin fans (w/o speed control) Low noise fan speed control (4-pin fan only)
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment Thermal Control for 8x fan connectors PECI
Other Features	<ul style="list-style-type: none"> Chassis intrusion detection Chassis intrusion header

Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> 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-X9DAX-iF	1	Super X9DAX-iF Motherboard
	CSE-747TG-R1K28B-SQ	1	4U Chassis
Backplane	BPN-SAS-747TQ-O-P	1	4u, SAS Backplane,x8 3.5
Cable 1	CBL-0157L	2	8 pin to 8 pin ribbon SGPIO cable with tube , 40cm, PBF
Cable 2	CBL-0484L	8	55cm 30AWG SATA S-S cable
Power Distributor	PDB-PT747-4648	1	POWER DISTRIBUTOR FOR SC747 W/ GRAPHIC OUTPUT FEATURE
Cable 3	CBL-0071L	1	ROUND 16 pin TO 16 PIN RIBBON FP CABLE 30
Cable 4	CBL-0160L	2	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
Cable 5	CBL-0216L	4	4 PIN TO 4 PIN MIDDLE FAN POWER EXTENSION, 20cm. 24AWG(PWM)
Cable 6	CBL-0286L	2	4 to 4 pin rear fan pwr ext w/ square header, 30cm (PWM). 24AWG
Drive Tray(s)	MCP-220-00073-0B	3	Black 5.25 drive tray w/o rail (SC747)
Drive Tray(s)	MCP-220-00094-0B	8	Black gen 6.5 hot-swap 3.5 inch HDD Tray
Fan	FAN-0082L4	2	80x38 4 pin PWM fan assembly for SC743, 745
Fan	Fan-0114L4	4	92x38mm 4-PIN PWM FAN W/ HUS for SC747

Optional Parts List

	Part Number	Qty	Description
Heatsink / Retention	SNK-P2050AP4	-	4U Active CPU Heat Sink for X9 Hyper-speed Series Servers
Rails	MCP-290-00059-0B	-	4U ball bearing quick release rail kit (includes side handles), extendable length 26.5"~36.4"
Short Rails	MCP-290-00058-0N	-	Quick release rail (ball bearing) extendable length 19"~26.6"