

SuperWorkstation 7046A-3



Available Colors:

Black



Key Features

- **Whisper Quiet Workstation (28dB) with High-end Graphics Support**

1. Intel® Xeon® processor 5600/5500 series, with QPI up to 6.4 GT/s
2. Up to 192GB DDR3 1333/ 1066/ 800MHz ECC Registered DIMM / 48GB Unbuffered DIMM
3. 2 (x16) PCI-E 2.0, 1 (x4) PCI-E (in x 8 slot), 3x PCI 33MHz slots
4. Intel® Dual 82573V/L Gigabit Ethernet Controller
5. LSI 1068E 8-Port SAS Controller; RAID 0, 1, 10; RAID 5 optional
6. 8 x 3.5" hot-swap SAS/ SATA Drive Bays
7. 865W Low-Noise High Efficiency Power Supply
8. Tower or Rackmount
9. PWM Fan Speed Control

Specifications

Product SKUs

- SYS-7046A-3 ■ SuperServer 7046A-3 (Black)

Motherboard

[Super X8DA3](#)

Processor/Cache

- Dual 1366-pin LGA Sockets
 - Supports up to two Intel® 64-bit Xeon® processor(s) of the same type below:
 - Intel® Xeon® Processor 5600 Series (Westmere)
 - Intel® Xeon® Processor 5500 Series
- CPU

Chassis

- Form Factor ■ 4U Rackmountable / Tower
- Optional Rackmount Kit (CSE-PT26)
- Model ■ [SC743TQ-865B-SQ](#)



Dimensions

- Height ■ 7.0" (178mm)
- Width ■ 17.2" (437mm)
- Depth ■ 25.5" (648mm)
- Gross Weight ■ 63 lbs (28.6kg)
- Available Colors ■ Black

Front Panel

- Buttons ■ Power On/Off button

(Nehalem-EP)	
QPI	<ul style="list-style-type: none"> up to 6.4 GT/s
System Memory	
Memory Capacity	<ul style="list-style-type: none"> 12x 240-pin DIMM sockets Supports up to 192 GB 1333 / 1066 / 800MHz DDR3 ECC Registered memory Supports up to 48 GB 1333 / 1066 / 800MHz DDR3 ECC / Non ECC Unbuffered memory Memory Mirroring supported
Memory Type	<ul style="list-style-type: none"> 1333 / 1066 / 800MHz ECC Registered / ECC or Non ECC Unbuffered DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs
DIMM Sizes	<ul style="list-style-type: none"> 1GB, 2GB, 4GB , 8GB , 16GB
Memory Voltage	<ul style="list-style-type: none"> 1.5 V / 1.35V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors Detects double-bit errors (using ECC memory) Supports Intel® x4 and x8 Single Device Data Correction (SDDC)
On-Board Devices	
Chipset	<ul style="list-style-type: none"> Intel® 5520 (Tylersburg) chipset ICH10R + IOH-36D
SAS	<ul style="list-style-type: none"> LSI SAS1068E RAID 0, 1, 10 support (Optional: AOC-IButton68) RAID 5 support
SATA	<ul style="list-style-type: none"> Intel ICH10R SATA 3.0Gbps Controller RAID 0, 1, 5, 10 support
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 / 1.5 200-pin IPMI slot (SIMLC) (Optional: AOC-SIMLC)
Network Controllers	<ul style="list-style-type: none"> Intel® 82573V & 82573L Gigabit Ethernet Controller Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
Audio	<ul style="list-style-type: none"> Realtek ALC883 7.1 HD audio
Super I/O	<ul style="list-style-type: none"> Winbond 83827HF chip
Expansion Slots	
PCI-Express	<ul style="list-style-type: none"> 2 (x16) PCI-E 2.0 slots 1 (x4) PCI-E (in x8 slot)
PCI	<ul style="list-style-type: none"> 3x 33MHz PCI slots
Input / Output	
SAS	<ul style="list-style-type: none"> 8 SAS / SATA ports
Serial ATA	<ul style="list-style-type: none"> Six Serial ATA ports Six SATA hard drives supported
Floppy	<ul style="list-style-type: none"> 1 Floppy controller; 1.44 MB
LAN	<ul style="list-style-type: none"> 2x RJ45 LAN ports
USB	<ul style="list-style-type: none"> 4x USB rear ports 2x USB on-board 4x USB internal headers Total 10 USB 2.0 Compliant
Audio	<ul style="list-style-type: none"> Realtek ALC883 7.1 HD audio

System Reset button	
LEDs	<ul style="list-style-type: none"> Power LED Hard drive activity LED 2x Network activity LEDs System Overheat / Fan Fail LED
Ports	<ul style="list-style-type: none"> 2x USB Ports
Drive Bays	
Hot-swap	<ul style="list-style-type: none"> 8x SAS Hot-swap Drives
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	
SC743 SAS / SATA Backplane w/ Enclosure Management	
System Cooling	
Fans	<ul style="list-style-type: none"> 2x 8cm Hot-swappable PWM Cooling Fans 1x 9cm Rear Exhaust PWM Fan 2x Active heatsink w/ heatpipe
Power Supply	
865W AC power supply (cooling-redundant) w/ PFC	
AC Voltage	<ul style="list-style-type: none"> 100 - 240V, 50-60Hz, 12-6 Amp
+5V standby	<ul style="list-style-type: none"> 6.5 Amp
+12V	<ul style="list-style-type: none"> 70 Amp
+5V	<ul style="list-style-type: none"> 30 Amp
+3.3V	<ul style="list-style-type: none"> 30 Amp
-12V	<ul style="list-style-type: none"> 1 Amp
Certification	 80 PLUS Certified
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 eight fan headers supporting up to 8 fans Eight 4-pin fan headers 8x fans with tachometer status monitoring Support 3-pin fans (w/o speed control) Low noise fan speed control
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"> 1x S/PDIF digital output
Keyboard / Mouse	<ul style="list-style-type: none"> PS/2 keyboard and mouse ports
Serial Port	<ul style="list-style-type: none"> 2 Fast UART 16550 serial ports
System BIOS	
BIOS Type	<ul style="list-style-type: none"> 32Mb SPI Flash EEPROM with AMI® BIOS
BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) PCI 2.2 ACPI up to 3.0 USB Keyboard support

	<ul style="list-style-type: none"> RoHS Compliant 6/6, Pb Free
Environmental Spec.	<ul style="list-style-type: none"> Operating Temperature: 10° to 35°C (50° to 95°F) Non-operating Temperature: -40° to 70°C (-40° 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-X8DA3-O-P	1	Super X8DA3 Motherboard
	CSE-743TQ-865B-SQ	1	4U SC743TQ-865B-SQ Chassis
Backplane	CSE-SAS-743TQ	1	SC743 SAS / SATA Backplane [Manual]
Bezel Filter	-	1	Front Bezel Filter
Cable(s)	CBL-0112L	1	Round Floppy Cable
	CBL-0118L-02	2	23CM IPASS TO 4 SATA,PB FREE
	CBL-0087	1	Front Panel Ribbon Cable
	CBL-0216L	4	4 TO 4 PIN FAN POWER CABLE, 210MM
	CBL-0160L	1	US POWER CORD 16AWG, PB FREE
CD	CDR-X8	1	Driver CD
Drive Tray(s)	CSE-PT17B	8	Hard Drive Tray
Fan(s)	FAN-0103L4	1	92x25 4Pin PWM Fan
	FAN-0104L4	2	80x25,4 Pin PWM Fan
Heatsink / Retention	SNK-P0040AP4	2	Please refer to our Thermal Components Matrix
I/O Shield	MCP-260-74301-ON	1	Color Mylar I/O Shield
Manual(s)	MNL-1010	1	SW7046A-3/T User's Manual
Power Supply	PWS-865-PQ	1	865W Low-Noise Power Supply

Optional Parts List

	Part Number	Qty	Description
IPMI	AOC-SIMLC	-	IPMI 2.0 w/ Virtual Media Over LAN
	AOC-SIMLC+	-	IPMI 2.0 w/ Virtual Media Over LAN & KVM OverLAN
Mounting Rails	CSE-PT26-B	-	Chassis Mounting Rails (Black)

**This memory modules are not tested yet