


X7DWA-N

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• UIO, 1600FSB Quad -Core Xeon 5400 (Seaburg) Workstation

Key Features

- Dual Intel® 64-bit Xeon® Quad-Core or Dual-Core, with 1600 / 1333 / 1066 MHz FSB
- Intel® 5400 (Seaburg) Chipset
- Up to 64GB DDR2 800* / 667 / 533 SDRAM Fully Buffered DIMM (FBDIMM)
- Intel® 82575EB Dualport Gigabit Ethernet Controller
- 6x SATA 3.0Gbps Ports via ESB2 Controller
- 2 (x16) PCIExpress 2.0, 2x 64-bit 133MHz PGK, 2x 32-bit (3.3V) PCI, 1x UIO slots ([Support Supermicro UIO Card](#))
- HD 7.1 Channel Audio
- Low Profile IPMI 2.0 (SIMLP) Slot
- Dual IEEE 1394 Ports

Links & Resources

- [Tested Memory List](#)
- [Motherboard Manual](#)
- [Update Your BIOS](#)
- [Download the Latest Drivers and Utilities](#)

Specifications

Product SKUs	
MBD-X7DWA-N-O	▪ X7DWA-N (Standard Retail Pack)
MBD-X7DWA-N-B	▪ X7DWA-N (Bulk Pack)
Physical Stats	
Form Factor	▪ Extended ATX
Dimensions	▪ 13" x 12" (33.0cm x 31.0cm)
Processor/Cache	
CPU	<ul style="list-style-type: none"> Dual 771-pin LGA Sockets Supports up to Dual Intel® 64-bit Xeon® processor(s) of the same type below: <ul style="list-style-type: none"> Quad-Core Intel® Xeon® Processor 5400/5300LV sequence (Harpertown /Clovertown processor) up to 3.20 GHz Dual-Core Intel® Xeon® Processor 5200/5100LV sequence (Wolfdale/Woodcrest processor) up to 3.40 GHz
System Bus	▪ 1600 / 1333 / 1066 MHz system bus
System Memory	
Memory Capacity	<ul style="list-style-type: none"> Eight 240-pin DIMM sockets Supports up to 64 GB 800* / 667 / 533MHz DDR2 ECC FBDIMM memory Dual branch memory bus Memory must be populated in pairs Memory Sparring supported
Memory Type	▪ 800* / 667 / 533MHz FBDIMM (Fully Buffered DIMM) ECC DDR2 SDRAM 72 bit, 240-pin gold-plated DIMMs
DIMM Sizes	▪ 512 MB, 1GB, 2GB, 4GB , 8GB**
Memory Voltage	▪ 1.8 V or 1.5 V
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® 5400 (Seaburg) chipset ESB2
SATA	<ul style="list-style-type: none"> Intel ESB2 SATA 3.0Gbps Controller RAID 0, 1, 5, 10 support (Windows only) RAID 0, 1, 10 support (Linux)
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 / 1.5 200-pin IPMI slot (SIMLP) (Optional: AOC-SIMLP-B) (Optional: AOC-SIMLP-3) with 3rd LAN support NOTE:KVM-over-LAN not supported - there is no DVO signal to the IPMI slot
Network Controllers	<ul style="list-style-type: none"> Intel® 82575EB DualPort Gigabit Ethernet Controller Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output Intel® I/OAT support for fast, scaleable, and reliable networking
Super I/O	▪ Winbond 83627HG chip
Audio	▪ ALC 883 High Definition 7.1 Channel Audio
Input / Output	
Serial ATA	<ul style="list-style-type: none"> Six Serial ATA ports Six SATA hard drives supported
IDE	<ul style="list-style-type: none"> Single EIDE channel supports up to two UDMA IDE devices (IDE, IDES) including CF(Compact Flash) Card Compact Flash (40pin connector, IDE 1, single channel) slot Supports UDMA Mode 5, PIO Mode 4, and ATA/100
Floppy	▪ 1 Floppy controller; 1.44 MB
LAN	▪ 2x RJ45 LAN ports
USB	<ul style="list-style-type: none"> 4x USB rear ports 1x USB internal header Total 5 USB 2.0 Compliant / 1.1 Compliant
Audio	<ul style="list-style-type: none"> High Definition 7.1 Channel Audio Line-in / Line-out / Microphone Ports
Keyboard / Mouse	▪ PS/2 keyboard and mouse ports
Serial Port / Header	<ul style="list-style-type: none"> 1 Fast UART 16550 serial port 1 Serial header
Parallel Port	▪ 1 ECP / EEP parallel port
Firewire	▪ 2x IEEE 1394 ports (headers)

Chassis (Optimized for X7DWA -N)	
Tower / 4U Rackmount	<ul style="list-style-type: none"> CSE743TQ-865 CSE743T-645
Important Chassis Notes	▪ To ensure system stability, a 550W (minimum) ATX power supply [4-pin (+12V), 8-pin (+12V) and 24-pin are required]
Expansion Slots	
PCI-Express	▪ 2 (x16) PCIe (Gen 2.0) slots
PCI-X	▪ 2x 64-bit 133MHz PGK (3.3V) slots
PCI	▪ 2x 32-bit PCI (3.3V) slots
UIO	▪ 1x UIOSlot
System BIOS	
BIOS Type	▪ 8Mb Flash EEPROM with Phoenix BIOS
BIOS Features	<ul style="list-style-type: none"> Plug and Play (PnP) DMI 2.3 PCI 2.2 ACPI 1.0 / 2.0 USB Keyboard support
Management	
Software	<ul style="list-style-type: none"> Optional IPMI (Intelligent Platform Management Interface) 2.0 SuperDoctor® III Watch Dog NMI
Power Configurations	<ul style="list-style-type: none"> ACPI Power Management Wake-On-Ring (WOR) header Wake-On-LAN (WOL) header Keyboard Wakeup from Soft-Off CPU Fan autooff in sleep model Power-on mode for AC power recovery Suspend to RAM (STR)

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. 5-Phase-switching voltage regulator with auto-sense from 0.8375V-1.60V
FAN	<ul style="list-style-type: none"> Total of eight 4-pin fan headers supporting up to 8 fans 8x fans with tachometer status monitoring Status monitor for speed control Support 3-pin fans (w/ speed control) Low noise fan speed control Pulse Width Modulated (PWM) fan connectors
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment CPU thermal trip support Thermal Control for 8x fan connectors PC temperature sensing logic PECI Thermal Monitor 2 (TM2) support
LED	<ul style="list-style-type: none"> CPU / System Overheat LED Suspend-state indicator LED
Other Features	<ul style="list-style-type: none"> Chassis intrusion detection Chassis intrusion header SDDC Support

Operating Environment / Compliance	
RoHS	<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)

OS Compatibility	
• Please see our OS Compatibility Chart .	

Note: For optimized or compatible chassis, additional parts may be required, please check with Supermicro sales rep

Parts List

Parts List	Part Number	Qty	Description
X7DWA-N	MBDX7DWA-N-O	1	X7DWA-N Motherboard
Manual(s)	MNI-0945	1	Motherboard Manual for X7DWA-N
I/O Cables	CBL-022L	1	ATX Floppy Cable
	CBL-036L-03	1	ATA 66/100 IDE LP Cable
	CBL-0044L	6	2ft. Amphenol, SATA Cable
Driver Disk	CDR-X7 1.23	1	Version 1.23 CD or later
I/O Shield	MCP260-74301-ON	1	Motherboard I/O Shield

Optional Parts List			
	Part Number	Qty	Description
I/O Tray	MCP290-00034-0B	-	Black 4?tray, 2 USB + audio + 1394 port
	MCP290-00034-0W	-	Beige 4?tray, 2 USB + audio + 1394 port
I/O Cable	CBL-0173L	-	IEEE 1394 Internal to External Cable

Note: Items in a Standard Retail Package may differ from items in a Standard Bulk Package.

* For 1600MHz FSB CPUs only
 **This memory modules are not tested yet