

# X9DBU-3F

Products ▶ Motherboards ▶ Xeon® Boards ▶ [ X9DBU-3F ]



## Key Features

1. Dual socket B2 (LGA 1356) supports Intel® Xeon® processor E5-2400 v2
2. Intel® C606 chipset
3. Up to 768GB DDR3 1600MHz LRDIMM / 384GB RDIMM; 12x DIMM slots
4. Riser card support:  
Left side - 1x PCI-E 3.0 x24  
Right side - 1x PCI-E 3.0 x8
5. Intel® i350 Dual port GbE LAN
6. 4x SATA2 and 2x SATA3 ports
7. 8x SAS/SATA2 ports from C606
8. Integrated IPMI 2.0 and KVM with Dedicated LAN
9. 8x USB 2.0 ports  
(2 rear + 4 via header + 2 Type A)

## Links & Resources

- ▶ [Tested Memory List](#)
- ▶ [Tested HDD / SSD List](#)
- ▶ [Motherboard Manual](#)
- ▶ [Quick Reference Guide](#)
- ▶ [Update Your BIOS](#)
- ▶ [BMC/IPMI Firmware](#)
- ▶ [Download the Latest Drivers and Utilities](#)
- ▶ [Download Driver CD](#)
- ▶ [Heat Sink Compatibility](#)
- ▶ [OS Compatibility](#)

## Specifications

**Product SKUs - Discontinued SKU (EOL). Please contact sales-rep for alternative options.**

**MBD-X9DBU-3F -O** ■ X9DBU-3F (Standard Retail Pack)

**MBD-X9DBU-3F -B** ■ X9DBU-3F (Bulk Pack)

### Physical Stats

**Form Factor** ■ Proprietary UIO

**Dimensions** ■ 12" x 13" (30.5cm x 33.0cm)

### Processor/Cache

**CPU** ■ Intel® Xeon® processor E5-2400 and E5-2400 v2 (up to 95W TDP \*\*)  
■ Dual Socket B2 (LGA 1356)

**Cache** ■ Up to 25MB

**System Bus** ■ QPI up to 8 GT/s

\*\* Motherboard supports this maximum TDP. Please verify your system can thermally support

### System Memory

**Memory Capacity** ■ 12x 240-pin DDR3 DIMM slots  
■ Up to 768GB DDR3 ECC LRDIMM  
■ Up to 384GB DDR3 ECC Registered memory (RDIMM)  
■ Up to 96GB DDR3 ECC/non-ECC Un-Buffered memory (UDIMM)

**Memory Type** ■ 1600/1333/1066/800MHz\* ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs  
■ Support ECC and non-ECC UDIMMs  
\* Maximum memory speed may be capped by CPU. Please verify that the chosen CPU can support desired memory speed.

**DIMM Sizes** ■ 32GB, 16GB, 8GB, 4GB, 2GB, 1GB, 64GB LRDIMM

**Memory Voltage** ■ 1.5 V, 1.35 V

**Error Detection** ■ Corrects single-bit errors  
■ Detects double-bit errors (using ECC memory)

### On-Board Devices

**Chipset** ■ Intel® C606 chipset

**SATA** ■ SATA 2.0 3Gb/s with RAID 0, 1, 5, 10  
■ SATA 3.0 6Gb/s with RAID 0, 1, 5, 10

### Chassis (Optimized for X9DBU-3F )

**1U Chassis** ■ CSE-113TQ-R500UB  
■ CSE-813T-600UB  
■ CSE-815TQ-R500UB

**2U Chassis** ■ CSE-825TQ-R740UB

**Tower / 4U Rackmount** ■ CSE-417E16-R1K28UB  
■ CSE-417E26-R1K28UB  
■ CSE-847A-R1K28UB  
■ CSE-847E16-R1K28UB  
■ CSE-847E26-R1K28UB

**Important Chassis Notes** ■ To support the new generation Intel® Xeon® processor-based motherboards, **Revision M** chassis is recommended. Please talk to your sales representative for details.

### Expansion Slots

■ 1x PCI-E 3.0 x24 (left hand side riser card support)  
■ 1x PCI-E 3.0 x8 (right hand side riser card support)

**PCI-Express** (Both CPUs need to be installed for full access to PCI-E slots and onboard controllers. See manual block diagram for details.)

### System BIOS

**BIOS Type** ■ 64Mb SPI Flash EEPROM with AMI BIOS

**BIOS Features** ■ Plug and Play (PnP)  
■ APM 1.2  
■ PCI 2.3  
■ ACPI 1.0 / 2.0 / 3.0 / 4.0  
■ BIOS rescue hot keys  
■ USB Keyboard support  
■ SMBIOS 2.7.1  
■ UEFI 2.3.1

### Management

**Software** ■ SuperDoctor® III  
■ Watch Dog  
■ NMI  
■ IPMI 1.5 / 2.0

**Power Configurations** ■ ACPI / APM Power Management  
■ Power-on mode for AC power recovery

### PC Health Monitoring

|                             |   |
|-----------------------------|---|
| <b>SAS</b>                  | <ul style="list-style-type: none"> <li>SAS from C606</li> <li>RAID 0, 1, 10 support</li> </ul>  |
| <b>IPMI</b>                 | <ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> <li>Nuvoton WPCM450 BMC</li> </ul>   |
| <b>Network Controllers</b>  | <ul style="list-style-type: none"> <li>Intel® i350 Dual Port Gigabit Ethernet</li> <li>Virtual Machine Device Queues reduce I/O overhead</li> <li>Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> <li>1x Realtek RTL8201F PHY (dedicated IPMI)</li> </ul> |
| <b>Video</b>                | <ul style="list-style-type: none"> <li>Matrox G200eW</li> </ul>   |
| <b>Input / Output</b>       |   |
| <b>SATA</b>                 | <ul style="list-style-type: none"> <li>2x SATA 3.0 ports (6Gb/s)</li> <li>4x SATA 2.0 ports (3Gb/s)</li> </ul>  |
| <b>SAS</b>                  | <ul style="list-style-type: none"> <li>8x SAS/SATA2 ports</li> </ul>  |
| <b>LAN</b>                  | <ul style="list-style-type: none"> <li>2x RJ45 Gigabit Ethernet LAN ports</li> <li>1x RJ45 Dedicated IPMI LAN port</li> </ul>   |
| <b>USB</b>                  | <ul style="list-style-type: none"> <li>8x USB 2.0 ports total (2 rear + 4 via header + 2 Type A)</li> </ul>   |
| <b>Video</b>                | <ul style="list-style-type: none"> <li>1x VGA port</li> </ul>   |
| <b>Keyboard/Mouse</b>       | <ul style="list-style-type: none"> <li>PS/2 Keyboard/Mouse ports</li> </ul>   |
| <b>Serial Port / Header</b> | <ul style="list-style-type: none"> <li>2x Fast UART 16550 ports / 1 rear and 1 header</li> </ul>  |
| <b>DOM</b>                  | <ul style="list-style-type: none"> <li>1 DOM (Disk on Module) power connector</li> </ul>  |
| <b>TPM</b>                  | <ul style="list-style-type: none"> <li>1 TPM Header</li> </ul>  |
|                             |   |

|  |  |
|--|--|
| <b>Voltage</b>                               | <ul style="list-style-type: none"> <li>Monitors for CPU Cores, +1.1V, +1.5V, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, 4 Memory Voltages.</li> <li>5+1 Phase-switching voltage regulator</li> </ul>  |
| <b>FAN</b>                                   | <ul style="list-style-type: none"> <li>Six 4-pin fan headers with tachometer monitoring</li> <li>Status monitor for speed control</li> <li>Status monitor for on/off control</li> <li>Low noise fan speed control</li> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul> |
| <b>Temperature</b>                           | <ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> <li>CPU thermal trip support</li> <li>Thermal Control for 6x Fan Connectors</li> <li>Thermal Monitor 2 (TM2) support</li> <li>PECI</li> </ul>   |
| <b>LED</b>                                   | <ul style="list-style-type: none"> <li>CPU / System Overheat LED indicator</li> <li>Suspend static indicator LED</li> <li>UID/Remote UID</li> </ul>  |
| <b>Other Features</b>                        | <ul style="list-style-type: none"> <li>Chassis intrusion detection</li> <li>Chassis intrusion header</li> <li>SDDC Support</li> <li>RoHS</li> <li>Dual cooling zones</li> </ul>  |
|  |  |
| <b>Operating Environment</b>                 |  |
| <b>Operating Temperature Range</b>           | <ul style="list-style-type: none"> <li>10°C - 35°C (50°F - 95°F)</li> </ul>  |
| <b>Non-Operating Temperature Range</b>       | <ul style="list-style-type: none"> <li>-40°C - 70°C (-40°F - 158°F)</li> </ul>   |
| <b>Operating Relative Humidity Range</b>     | <ul style="list-style-type: none"> <li>8% - 90% (non-condensing)</li> </ul>  |
| <b>Non-Operating Relative Humidity Range</b> | <ul style="list-style-type: none"> <li>5% - 95% (non-condensing)</li> </ul>  |

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

Parts List

| Parts List (retail) |                  |     |   |
|---------------------|------------------|-----|---|
|                     | Part Number      | Qty | Description                                       |
| X9DBU-3F            | MBD-X9DBU-3F     | 1   | X9DBU-3F Motherboard                              |
| I/O Cables          | CBL-0044L        | 2   | SATA CABLE 61CM FLAT S-S PBF                      |
| I/O Cables          | CBL-0097L-03     | 2   | 30AWG 50CM Ipass to 4 SATA, W/50cm SB, S          |
| I/O Shield          | MCP-260-00027-0N | 1   | Std I/O shield for server MB with 3rd LAN + 4xLAN |

| Optional Parts List                |             |     |   |
|------------------------------------|-------------|-----|---|
|                                    | Part Number | Qty | Description                             |
| Heat Sink (optional, not included) | -           | -   | <a href="#">CPU Heat Sink reference</a> |