Processor Blade SBI-7427R-T3

Integrated Board

Super B9DRI

▸ Drivers & Utilities ▸ BIOS / IPMI ▸ Manuals ▸ Tested Memory ▸ Tested HDD ▸ OS Certification Matrix ▸ Download Driver CD

Key Features

1. 168 CPUs per 42U Rack
2. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and **E5-2600 v2** family†
3. Intel® C602 Chipset
4. Up to 256GB RDIMM or 64GB UDIMM (VLP only); 16 DIMM slots
5. Intel® i350 Dual port Gigabit Ethernet
6. Mezzanine slot supports QDR (40G) or 10G Ethernet
7. IPMI 2.0, KVM over IP, Virtual Media
8. 3x 2.5" Hot-swap SATA HDD Bays
9. Integrated Matrox G200 Graphics

Specifications

Product SKUs	
SBI-7427R-T3	▪ Processor Blade SBI-7427R-T3 (Black)

Motherboard	
Super B9DRI	

Processor/Cache	
CPU	▪ Dual Socket R (LGA 2011) ▪ Intel® Xeon® processor E5-2600 and E5-2600 v2 family†
Note	† BIOS version 3.0 or above is required
Cache	▪ Up to 30MB
System Bus	▪ QPI up to 8 GT/s

System Memory	
Memory Capacity	▪ 16x 240-pin DDR3 DIMM sockets ▪ Supports up to 256GB VLP DDR3 ECC Registered memory (RDIMM) ▪ Supports up to 64GB VLP DDR3 ECC Unbuffered memory (UDIMM)
Memory Type	▪ 1866/1600/1333/1066/800MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs
DIMM Sizes	▪ 16GB, 8GB, 4GB, 2GB, 1GB
Memory Voltage	▪ 1.5 V and 1.35 V
Error Detection	▪ 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	▪ Intel® C602 chipset
InfiniBand Support	▪ 4x QDR (40Gbps) InfiniBand or 10GbE mezzanine HCA (Optional)
SATA	▪ Intel C602 SATA 3.0Gbps Controller ▪ RAID 0, 1, 5, 10 support (Windows) ▪ RAID 0, 1, 10 support (Linux)
IPMI	▪ Support for Intelligent Platform Management Interface (IPMI) v.2.0 via Chassis Management Module (CMM)
Network Controllers	▪ Intel® I350 Dual port Gigabit Ethernet ▪ Intel® I/OAT 3 support for fast, scaleable, and reliable networking ▪ VMDq support for better performance of virtualization
Super I/O	▪ Nuvoton W83527

System BIOS	
BIOS Type	▪ 64Mb SPI Flash EEPROM with AMI® BIOS
BIOS Features	▪ Plug and Play (PnP) ▪ PCI 2.2 ▪ ACPI up to 3.0 ▪ USB Keyboard support

Dimensions	
Height	▪ 11.32" (288 mm)
Width	▪ 1.19" (30.2 mm)
Depth	▪ 18.9" (480mm)
Weight	▪ 8.6 lbs (3.9 kg)
Available Colors	▪ Black

Front Panel	
Buttons	▪ Power On/Off button ▪ KVM button
LEDs	▪ Power LED ▪ UID / KVM LED ▪ Network Activity LED ▪ Fault LED
Connector	▪ SUV (Serial/USB/Video) & KVM Connector

Drive Bays	
Hot-swap	▪ 3x 2.5" SATA Hot-swap drive bays

Input / Output	
KVM	▪ 1 Front Connector for Supermicro KVM Card

Operating Environment / Compliance	
Environmental Spec.	▪ 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)

Electromagnetic Compatibility (EMC)	
United States / Canada	▪ FCC- Emissions (US) Verification
Europe	▪ EN55022 - Emissions ▪ EN55024 - Immunity ▪ EN61000-3-2 - Harmonics ▪ EN61000-3-3 - Voltage Flicker ▪ CE - EMC Directive 89/336/EEC

Safety Compliance	
United States / Canada	▪ UL60950-1 - CSA/CUL 60950-1
Europe	▪ EN60950-1, CE - Low Voltage Directive 73/23/EEE
Germany	▪ TUV

Thermal Limitation	
Note	▪ SuperBlade full enclosure with four 1620W power supplies will have thermal limitation of 30°C ambient temperature.

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-B9DRI-O-P	1	Blade with default SATA and option for SAS
	CSE-714M-230B	1	14-Black Front Blade With Three 2.5" HDD
Hard Drive Tray	MCP-220-00047-0B	3	Black 2.5" Hard Drive Tray
Front Panel Control	MCP-280-KVM1	1	Power & KVM buttons, LED, KVM connector
Air Shroud	MCP-310-00060-0N	1	Air shroud for B9DR7 14-blade_R
Air Shroud	MCP-310-00061-0N	1	Air shroud for B9DR7 14-blade_L

Optional Parts List

	Part Number	Qty	Description
Heatsink / Retention	SNK-P1033P	2	Heatsink for Intel CPU
Networking	AOC-XEH-iN2	1	Dual Port 10G Ethernet AOC for Blade
	AOC-IBH-XDD	1	InfiniBand Dual-Port 4x DDR 20Gbps Mezzanine HCA (Mellanox ConnectX chip)
	AOC-IBH-XQD	1	InfiniBand Dual-Port 4x QDR 40Gbps Mezzanine HCA (Mellanox ConnectX-2 chip)
	AOC-IBH-XQS	1	InfiniBand Single port 4x QDR 40Gbps Mezzanine HCA (Mellanox ConnectX chip)
	AOC-IBH-XDS	1	InfiniBand Single port 4x DDR 20Gbps Mezzanine HCA (Mellanox ConnectX chip)

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