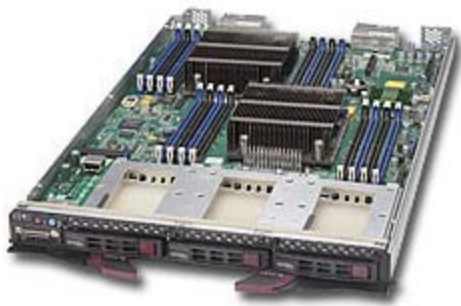


Processor Blade SBI-7428R-T3N



Key Features

1. 168 CPUs per 42U Rack
2. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4†/ v3 family; QPI up to 9.6GT/s
3. Intel® C612 Express chipset
4. Up to 512GB ECC VLP RDIMM; 16 DIMM
5. Intel® i350 Dual port Gigabit Ethernet
6. IPMI 2.0, KVM over IP, Virtual Media
7. 3x 2.5" Hot-swap HDD/SSD Bays; 3x Hybrid ports support Hot-plug NVMe/SAS HDD
8. Graphics: Aspeed AST2400 BMC

- ▶ [Drivers & Utilities](#) ▶ [BIOS / IPMI](#) ▶ [Manuals](#) ▶ [Tested Memory](#) ▶ [Tested HDD](#) ▶ [Tested NVMe](#)
- ▶ [OS Certification Matrix](#) ▶ [Download Driver CD](#)

Specifications

Product SKUs

- SBI-7428R-T3N ■ Processor Blade SBI-7428R-T3N (Black)

Motherboard

Super B10DRi-N

Processor/Cache

- CPU ■ Intel® Xeon® processor E5-2600 v4†/ v3 family
 ■ Dual Socket R3 (LGA 2011)
- Cores / Cache ■ Up to 22 Cores† / Up to 55MB† Cache
- System Bus ■ QPI up to 9.6 GT/s
- Note † BIOS version 2.0 or above is required

System Memory

- Memory Capacity ■ 16x 288-pin DDR4 DIMM slots
 ■ Up to 512GB VLP ECC RDIMM
- Memory Type ■ 2400†/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit

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" Hot-swap SATA HDD/SSD bays
 ■ 3x Hot-plug NVMe and SAS HDD supported via hybrid ports

Input / Output

DIMM Sizes	<ul style="list-style-type: none"> VLP RDIMM: 32GB, 16GB, 8GB
Memory Voltage	<ul style="list-style-type: none"> 1.2 V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors
NOTE: 14-Blade can only use VLP (Very Low Profile) memory module.	
On-Board Devices	
Chipset	<ul style="list-style-type: none"> Intel® C612 Express chipset
SATA	<ul style="list-style-type: none"> Intel C612 PCH SATA Controller RAID 0, 1
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface (IPMI) v.2.0 via Chassis Management Module (CMM)
Network Controllers	<ul style="list-style-type: none"> Intel® I350 Dual port Gigabit Ethernet Intel® I/OAT 3 support for fast, scaleable, and reliable networking VMDq support for better performance of virtualization
Graphics	<ul style="list-style-type: none"> Aspeed AST2400 BMC
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) PCI 2.2 ACPI up to 3.0 USB Keyboard support

DOM	<ul style="list-style-type: none"> 2x SuperDOM (Disk on Module) ports
TPM	<ul style="list-style-type: none"> 1x TPM 1.2 20-pin Header
KVM	<ul style="list-style-type: none"> 1x Front Connector for SMCI KVM Card
Operating Environment / Compliance	
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)
Electromagnetic Compatibility (EMC)	
United States / Canada	<ul style="list-style-type: none"> FCC- Emissions (US) Verification
Europe	<ul style="list-style-type: none"> EN55022 - Emissions EN55024 - Immunity EN61000-3-2 - Harmonics EN61000-3-3 - Voltage Flicker CE - EMC Directive 89/336/EEC
Safety Compliance	
United States / Canada	<ul style="list-style-type: none"> UL60950-1 - CSA/CUL 60950-1
Europe	<ul style="list-style-type: none"> EN60950-1, CE - Low Voltage Directive 73/23/EEE
Germany	<ul style="list-style-type: none"> TUV
Thermal Limitation	
Note	<ul style="list-style-type: none"> 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-B10DRi-N -O-P	1	Super B10DRi-N Motherboard
	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-310-00074-0N	1	Air shroud set for B10DRi / B10DRC on 14-Blade CSE-714M-230B, HF, RoHS/REACH

Optional Parts List

	Part Number	Qty	Description
TPM security module (optional, not included)	AOM-TPM-9655H	-	TPM module (Horizontal) with Infineon 9655, RoHS/REACH,PBF
SuperDOM	-	-	Supermicro SATA DOM Solutions [Details]
Heatsink / Retention	SNK-P1033P	2	Heatsink for Intel CPU
Networking	AOC-IBH-X3QD	1	Dual Port, Low Latency InfiniBand Adapter Cards For SuperBlade
	AOC-IBH-X3QS	1	Single Port, Low Latency InfiniBand Adapter Cards For SuperBlade
	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)
Software	SFT-OOB-LIC	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)