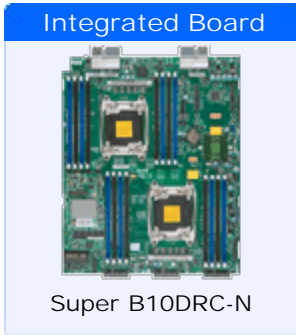
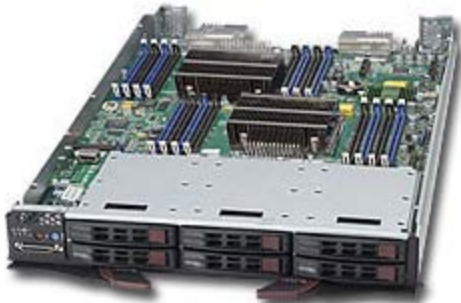


# Processor Blade SBI-7128R-C6N



## Key Features

1. 120 CPUs per 42U Rack
2. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4<sup>†</sup> / v3 family; QPI up to 9.6GT/s
3. Intel® C612 Express chipset
4. Up to 1TB LRDIMM, 512GB RDIMM; 16 DIMM slots
5. Intel® i350 Dual port Gigabit Ethernet
6. IPMI 2.0, KVM over IP, Virtual Media
7. FDR-10/QDR InfiniBand or 10GbE mezzanine HCA
8. 6x 2.5" Hot-swap HDD/SSD Bays; 3x Hybrid ports support Hot-plug NVMe/SAS HDD
9. Broadcom 3108, HW RAID 0,1,5,50,6 support
10. Graphics: Aspeed AST2400 BMC

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

## Specifications

Product SKUs	
SBI-7128R-C6N	■ Processor Blade SBI-7128R-C6N (Black)
Motherboard	
Super B10DRC-N	
Processor/Cache	
CPU	■ Intel® Xeon® processor E5-2600 v4 <sup>†</sup> / v3 family ■ Dual Socket R3 (LGA 2011)
Cores / Cache	■ Up to 22 Cores <sup>†</sup> / Up to 55MB <sup>†</sup> Cache
System Bus	■ QPI up to 9.6 GT/s
Note	<sup>†</sup> BIOS version 2.0 or above is required
System Memory	
Memory Capacity	■ 16x 288-pin DDR4 DIMM slots ■ Up to 1TB ECC LRDIMM, 512GB ECC RDIMM
Memory Type	■ 2400 <sup>†</sup> /2133/1866/1600MHz ECC DDR4 SDRAM 72-bit

Dimensions	
Height	■ 11.32" (288 mm)
Width	■ 1.67" (42.4 mm)
Depth	■ 20.5"
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	■ 6x 2.5" Hot-swap HDD/SSD bays support SAS/SATA ■ 3x Hot-plug NVMe and SAS HDD supported via hybrid ports
Input / Output	

DIMM Sizes	<ul style="list-style-type: none"> <li>RDIMM: 32GB, 16GB, 8GB, 4GB</li> <li>LRDIMM: 64GB, 32GB</li> <li>3DS LRDIMM: 128GB</li> </ul>
Memory Voltage	<ul style="list-style-type: none"> <li>1.2 V</li> </ul>
Error Detection	<ul style="list-style-type: none"> <li>Corrects single-bit errors</li> </ul>
<b>On-Board Devices</b>	
Chipset	<ul style="list-style-type: none"> <li>Intel® C612 Express chipset</li> </ul>
InfiniBand Support	<ul style="list-style-type: none"> <li>4x FDR-10/QDR (40Gbps) InfiniBand or 10GbE mezzanine HCA (Optional)</li> </ul>
SAS	<ul style="list-style-type: none"> <li>Broadcom 3108 SAS3 (12Gbps) controller</li> <li>HW RAID 0, 1, 5, 50, 6 support</li> </ul>
IPMI	<ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface (IPMI) v.2.0 via Chassis Management Module (CMM)</li> </ul>
Network Controllers	<ul style="list-style-type: none"> <li>Intel® i350 Dual port Gigabit Ethernet</li> <li>Intel® I/OAT 3 support for fast, scalable, and reliable networking</li> <li>VMDq support for better performance of virtualization</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>Aspeed AST2400 BMC</li> </ul>
<b>System BIOS</b>	
BIOS Type	<ul style="list-style-type: none"> <li>128Mb SPI Flash EEPROM with AMI® BIOS</li> </ul>
BIOS Features	<ul style="list-style-type: none"> <li>Plug and Play (PnP)</li> <li>PCI 2.2</li> <li>ACPI up to 3.0</li> <li>USB Keyboard support</li> </ul>

DOM	<ul style="list-style-type: none"> <li>2x SuperDOM (Disk on Module) ports</li> </ul>
TPM	<ul style="list-style-type: none"> <li>1x TPM 1.2 20-pin Header</li> </ul>
KVM	<ul style="list-style-type: none"> <li>1x Front Connector for SMCi KVM Card</li> </ul>
<b>Operating Environment / Compliance</b>	
Environmental Spec.	<ul style="list-style-type: none"> <li>Operating Temperature: 10°to 35°C (50°to 95°F)</li> <li>Non-operating Temperature: -40°to 70°C (-40°to 158°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5 to 95% (non-condensing)</li> </ul>
<b>Electromagnetic Compatibility (EMC)</b>	
United States / Canada	<ul style="list-style-type: none"> <li>FCC- Emissions (US) Verification</li> </ul>
Europe	<ul style="list-style-type: none"> <li>EN55022 - Emissions</li> <li>EN55024 - Immunity</li> <li>EN61000-3-2 - Harmonics</li> <li>EN61000-3-3 - Voltage Flicker</li> <li>CE - EMC Directive 89/336/EEC</li> </ul>
<b>Safety Compliance</b>	
United States / Canada	<ul style="list-style-type: none"> <li>UL60950-1 - CSA/CUL 60950-1</li> </ul>
Europe	<ul style="list-style-type: none"> <li>EN60950-1, CE - Low Voltage Directive 73/23/EEE</li> </ul>
Germany	<ul style="list-style-type: none"> <li>TUV</li> </ul>
<b>Thermal Limitation</b>	
Note	<ul style="list-style-type: none"> <li>SuperBlade full enclosure with four 1620W power supplies will have thermal limitation of 30°C ambient temperature.</li> </ul>

### Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-B10DRC-N -O-P	1	Super B10DRC-N Motherboard
	CSE-710M-260B	1	10-Black Blade with six 2.5" HDD
Hard Drive Tray	MCP-220-00047-0B	6	Black 2.5" Hard Drive Tray
Front Panel Control	MCP-280-KVM1	1	Power & KVM buttons, LED, KVM connector
Air Shroud	MCP-310-00075-0N	1	Air shroud set for B10DRC on 10-Blade CSE-710M-260B,HF,RoHS/REACH
Add-on Module	AOM-B3108-H8-O-P	1	AOM with Broadcom 3108
	AOM-SBL-SAS3-O-P	1	AOM-SBL-SAS3

### Optional Parts List

	Part Number	Qty	Description
TPM security module (optional, not included)	<a href="#">AOM-TPM-9665V</a>	-	TPM module with Infineon 9665, RoHS/REACH,PBF
SuperDOM	-	-	Supermicro SATA DOM Solutions [ <a href="#">Details</a> ]
Heatsink / Retention	SNK-P0047PS	2	Heatsink for Intel CPU
Heatsink / Retention	SNK-P0057PSU	2	Heatsink for Intel CPU (160W TDP)
Networking	<a href="#">AOC-IBH-X3QD</a>	1	Dual Port, Low Latency InfiniBand Adapter Cards For SuperBlade
	<a href="#">AOC-IBH-X3QS</a>	1	Single Port, Low Latency InfiniBand Adapter Cards For SuperBlade
	<a href="#">AOC-XEH-iN2</a>	1	Dual Port 10G Ethernet AOC for Blade
	<a href="#">AOC-IBH-XDD</a>	1	InfiniBand Dual-Port 4x DDR 20Gbps Mezzanine HCA (Mellanox ConnectX chip)
	<a href="#">AOC-IBH-XQD</a>	1	InfiniBand Dual-Port 4x QDR 40Gbps Mezzanine HCA

	<u>AOC-IBH-XQS</u>	1	(Mellanox ConnectX-2 chip) InfiniBand Single port 4x QDR 40Gbps Mezzanine HCA (Mellanox ConnectX chip)
	<u>AOC-IBH-XDS</u>	1	InfiniBand Single port 4x DDR 20Gbps Mezzanine HCA (Mellanox ConnectX chip)
Battery Backup Kit	<u>BTR-TFM8G-LSICVM02</u>	1	Broadcom Supercap w/ 8GB CV + 24" cable (whole kit)
	<u>MCP-240-00127-0N</u>	1	Broadcom SuperCap Bracket, Include Screw, Same Size as 2.5" HDD
Software	SFT-OOB-LIC	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)