

# GPU/Xeon Phi SuperBlade SBI-7128RG-X



## Key Features

1. 120 CPUs (+120 GPUs/Xeon Phi / Kepler) 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. 1x SSD or 2x SATA-DOM supported
5. Up to 1TB ECC RDIMM or LRDIMM; 8x DIMM slots
6. 2x 10GbE ports onboard
7. IPMI 2.0, KVM over IP, Virtual Media over LAN

[▶ Drivers & Utilities](#) ▶ [BIOS / IPMI](#) ▶ [Manuals](#) ▶ [Tested Memory](#) ▶ [Tested HDD](#) ▶ [OS Certification Matrix](#) ▶ [Compatible GPU/Xeon Phi List](#) ▶ [Download Driver CD](#)

## Specifications

Product SKUs	
	▪ SBI-7128RG-X

Motherboard	
	▪ MBD-B10DRG-TP

Processor/Cache	
CPU	<ul style="list-style-type: none"> <li>▪ Intel® Xeon® processor E5-2600 v4† / v3 family</li> <li>▪ Dual Socket R3 (LGA 2011)</li> </ul>

Cores / Cache	▪ Up to 22 Cores† / Up to 55MB† Cache
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System Bus	▪ QPI up to 9.6 GT/s
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Note † BIOS version 2.0 or above is required

GPU/Xeon Phi Support	
	▪ Two Xeon Phi or Tesla Kepler K10X / K20M / K40M / K20X / K80; GRID K1/K2

System Memory	
Memory Capacity	<ul style="list-style-type: none"> <li>▪ 8x 288-pin DDR4 DIMM slots</li> <li>▪ Up to 1TB ECC RDIMM or LRDIMM</li> </ul>
Memory	▪ 2400†/2133/1866/1600MHz ECC DDR4

Dimensions	
Height	▪ 11.32" (288 mm)
Width	▪ 1.67" (42.4 mm)
Depth	▪ 20.5" (520mm)
Weight	▪ 8.6 lbs (3.9 kg)
Available Colors	▪ Silver

Front Panel	
Buttons	<ul style="list-style-type: none"> <li>▪ Power On/Off button</li> <li>▪ KVM button</li> </ul>
LEDs	<ul style="list-style-type: none"> <li>▪ Power LED</li> <li>▪ UID / KVM LED</li> <li>▪ Network Activity LED</li> <li>▪ Fault LED</li> </ul>
Connector	▪ SUV (Serial/USB/Video) & KVM Connector

Storage	
SSD	▪ 1x SSD or 2x SATA-DOM supported

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

Type	SDRAM 72-bit
DIMM Sizes	<ul style="list-style-type: none"> <li>RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB</li> <li>LRDIMM: 128GB, 64GB, 32GB</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>

#### On-Board Devices

Chipset	<ul style="list-style-type: none"> <li>Intel® C612 chipset</li> </ul>
Network Controllers	<ul style="list-style-type: none"> <li>2x 10GbE ports onboard</li> <li>Intel® i350 Dual port Gigabit Ethernet</li> <li>Intel® I/OAT 3 support for fast, scaleable, and reliable networking</li> <li>VMDq support for better performance of virtualization</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>

#### System BIOS

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>

TPM	<ul style="list-style-type: none"> <li>1x TPM 1.2 20-pin Header</li> </ul>
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#### Operating Environment / Compliance

Environmental Spec.	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C to 35°C (50°F to 95°F)*</li> <li>Non-operating Temperature: -40°C to 70°C (-40°F 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>
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#### Electromagnetic Compatibility (EMC)

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>

#### Safety Compliance

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>

#### Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-B10DRG-TP	1	GPU/Xeon Phi Blade with Intel Xeon processor E5-2600 v3 family support
	CSE-710M-00GB3	1	GPU/Xeon Phi blade front chassis supporting 2x GPU/Xeon Phi
Front Panel Control	MCP-280-KVMG-O-P	1	Power & KVM buttons, LED, KVM connector
Riser Card	RSC-BLG-E16G-O-P	1	1 x16 pcie left riser card
	RSC-BLG-E16GR-O-P	1	1 x16 pcie right riser card

#### 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-P0057PSU	2	Heatsink for Intel CPU
Cages	MCP-640-00079-0N	1	GPU Blade 2x 2.5HDD Bracket w/ 1x 4_2.5HDD Power Cable for CSE-710M-00GB3,HF,RoHS/REACH
SATA cables	CBL-SAST-0556	1	Internal mini SAS HD to 4 SATA, 75/75/90/90cm w/75cm SB, S. 30AWG,HF,RoHS/REACH,PBF
Riser Card	RSC-B-88	1	2 x8 PCIe left riser card
	RSC-BR-88	1	2 x8 PCIe right rise card
Software	SFT-OOB-LIC	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)