

GPU/Xeon Phi SuperBlade SBI-7128RG-F2



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. Intel® i350 Dual port Gigabit Ethernet
7. Dual FDR InfiniBand onboard
8. 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-F2

Motherboard	
	▪ MBD-B10DRG-IBF2

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

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"> ▪ 8x 288-pin DDR4 DIMM slots ▪ Up to 1TB ECC RDIMM or LRDIMM

Memory **Highly Configurable** (00†/2133/1866/1600MHz ECC DDR4) **Cache**

Dimensions	
Height	▪ 11.32" (288 mm)

Width	▪ 1.67" (42.4 mm)
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Depth	▪ 20.5" (520mm)
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Weight	▪ 8.6 lbs (3.9 kg)
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Available Colors	▪ Silver
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Front Panel

Buttons	<ul style="list-style-type: none"> ▪ Power On/Off button ▪ KVM button
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LEDs	<ul style="list-style-type: none"> ▪ Power LED ▪ UID / KVM LED ▪ Network Activity LED ▪ Fault LED
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Connector	▪ SUV (Serial/USB/Video) & KVM Connector
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Storage	
SSD	▪ 1x SSD or 2x SATA-DOM supported

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

DIMM Sizes	<ul style="list-style-type: none"> RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB LRDIMM: 128GB, 64GB, 32GB
Memory Voltage	<ul style="list-style-type: none"> 1.2 V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors

On-Board Devices

Chipset	<ul style="list-style-type: none"> Intel® C612 chipset
InfiniBand Support	<ul style="list-style-type: none"> Dual FDR (56Gbps) InfiniBand onboard
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
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface (IPMI) v.2.0 via Chassis Management Module (CMM)

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

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

Environmental Spec.	<ul style="list-style-type: none"> Operating Temperature: 10°C to 35°C (50°F to 95°F)* Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
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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

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-B10DRG-IBF2	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 left riser card

Optional Parts List

	Part Number	Qty	Description
TPM security module (optional, not included)	AQM-TPM-9665V	-	TPM module with Infineon 9665, RoHS/REACH,PBF
SuperDOM	-	-	Supermicro SATA DOM Solutions [Details]
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)