

MicroBlade MBI-6118G-T81X



Integrated Board



B1SD1-16C-TF

Key Features

• 196 Xeon D-1581 nodes per 42U Rack

1. Single socket FCBGA 1667 support Intel® Xeon® processor D-1581: 16-Core, 32 Threads, 65W
2. Up to 128GB DDR4 VLP ECC RDIMM 2133/2400MHz in 4 slots
3. Up to 4x 2.5" SATA3 (6Gbps) drives; 2x HDD/SSD + 2x SSD, 1x SATA3 DOM
4. Dual 10GbE ports via Intel X552
5. 28 Xeon D-1581 nodes in 6U or 14 Xeon D-1581 nodes in 3U
6. Hot-plug front loading

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

Specifications

Product SKUs	
MicroBlade	▪ MBI-6118G-T81X
Motherboard	
	▪ B1SD1-16C-TF
Processor/Cache	
CPU	<ul style="list-style-type: none"> ▪ Single Socket FCBGA 1667 ▪ Intel® Xeon® processor D-1581 ▪ CPU TDP support 65W, 16 Cores, 32 Threads
System Memory	
Memory Capacity	<ul style="list-style-type: none"> ▪ 4x DDR4 DIMM sockets ▪ Supports up to 128GB DDR4 ECC VLP RDIMM
Memory Type	▪ 2133/2400MHz ECC DDR4 RDIMM
DIMM Sizes	▪ 32GB
Memory Voltage	▪ 1.2 V
Error	▪ Corrects single-bit errors

Dimensions	
Height	▪ 1.2" (30.48mm)
Width	▪ 4.94" (125.48mm)
Depth	▪ 23.2" (589.28mm)
Weight	▪ Gross Weight: 5.67 lbs (2.57 kg)
Available Colors	▪ Silver Grey
Front Panel	
LEDs	<ul style="list-style-type: none"> ▪ Power LED ▪ UID / KVM LED ▪ Network Activity LED ▪ Fault LED
Drive Bays	
Internal	▪ 4x 2.5" SATA3 (6Gbps) HDD/SSD (2x HDD/SSD + 2x SSD)
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)

Detection	Detects double-bit errors (using ECC memory)
On-Board Devices	
Chipset	▪ Intel® C236 chipset
SATA	▪ SATA3 (6Gbps) via chipset
Network Controllers	<ul style="list-style-type: none"> ▪ Dual 10GbE LAN ports via Intel® X552 controller ▪ Intel® I/OAT 3 support for fast, scalable, and reliable networking ▪ VMDq support for better performance of virtualization
System BIOS	
BIOS Type	▪ 128Mb SPI Flash EEPROM with AMI® BIOS
BIOS Features	<ul style="list-style-type: none"> ▪ Plug and Play (PnP) ▪ APM 1.2 ▪ ACPI 1.0/2.0 ▪ SMBIOS 2.3 ▪ RTC (real time clock) wake up

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	<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

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard	MBD-B1SD1-16C-TF	1	MicroBlade Board
MicroBlade Sled	MCP-680-31404-0N	1	M628 MicroBlade Broadwell-DE UP Sled (complete assembly)
Micro Blade Module Chassis	MCP-620-31401-0N	2	M628 Sled AOM-BPN Bracket
	MCP-620-31402-0N	1	M628 Sled Node Cover
	MCP-640-31404-0N	1	M628 MicroBlade Broadwell-DE UP Sled Base
Air Shroud	MCP-310-31403-0N	1	M628 MicroBlade Broadwell-DE UP Air Shroud
Add-on Card	AOM-BPN-MS28U	1	HDD Daughter card for M628 Broadwell-DE MB B1SD2-TF
HDD bracket	MCP-620-31407-0N	1	M628 Broadwell DE 2.5" HDD bracket for Single node MB

Optional Parts List

	Part Number	Qty	Description
SATA DOM	MEM-IDSAHM3-016G	1	SATA3 DOM SH 3ME3 V2 16GB MLC w/ Pin8 VCC Horizontal
	MEM-IDSAHM3-032G		SATA3 DOM SH 3ME3 V2 32GB MLC w/ Pin8 VCC Horizontal
	MEM-IDSAHM3-064G		SATA3 DOM SH 3ME3 V2 64GB MLC w/ Pin8 VCC Horizontal
	MEM-IDSAHM1-128G		SATA3 DOM SH 3ME3 V2 128GB MLC w/ Pin8 VCC Horizontal
Software	SFT-OOB-LIC	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)