

B3ST1-CPU-001



MicroBlade

Key Features

1. Intel® Xeon® E-2300 Rocket Lake Processor
Single Socket LGA-1200 (Socket H5) supported, CPU TDP supports Up to 95W TDP

2. Intel® C256

3. Up to 128GB of ECC and Non-ECC VLP UDIMM DDR4, in 4 DIMM Slots

4. 1 PCI-E 4.0 x8 for Add-On-Module (AOM)
2x U.2 SATA 3.0 PCI-E x4 Gen 4 via AOM-BPNIO-MSH2
M.2 Form Factor: 2280/22110
M.2 Key: M-Key
2x M.2 PCI-E 2280/22110 (1x onboard and 1x via AOM-BPNIO-MSH2)

5. Dual LAN with
Broadcom BCM57414 Dual-Port 10G Base-KR PCIe Gen 3 via AOM-BPNIO-MSH2

6. Intel® C256 controller for 2 SATA3 (6 Gbps) ports; RAID 0,1,5,10

Specifications

Product SKUs

MBD-B3ST1-CPU-001	<ul style="list-style-type: none"> B3ST1-CPU-001
--------------------------	---

Physical Stats

Form Factor	<ul style="list-style-type: none"> Proprietary
Dimension	<ul style="list-style-type: none"> 4.8" x 12.6" (12.19cm x 32cm)

Processor

CPU	<ul style="list-style-type: none"> Intel® Xeon® E-2300 Rocket Lake Processor Single Socket LGA-1200 (Socket H5) supported, CPU TDP supports Up to 95W TDP
------------	---

Core	<ul style="list-style-type: none"> Up to 8 cores
-------------	---

System Memory

Memory Capacity	<ul style="list-style-type: none"> 4 DIMM slots Up to 128GB ECC , DDR4-3200MHz Up to 128GB of ECC and Non-ECC VLP UDIMM DDR4, in 4 DIMM Slots
------------------------	--

Memory Type	<ul style="list-style-type: none"> 3200MHz VLP
--------------------	---

DIMM Sizes	<ul style="list-style-type: none"> N/A
-------------------	---

Memory Voltage	<ul style="list-style-type: none"> 1.2V
-----------------------	--

Error Detection	<ul style="list-style-type: none"> Detects double-bit errors (using ECC memory)
------------------------	--

On-Board Devices

Chipset	<ul style="list-style-type: none"> Intel® C256
----------------	---

IPMI	<ul style="list-style-type: none"> ASPEED AST2500
-------------	--

Network Controllers	<ul style="list-style-type: none"> Dual LAN, Broadcom BCM57414 Dual-Port 10G Base-KR PCIe Gen 3 via AOM-BPNIO-MSH2
----------------------------	---

SATA	<ul style="list-style-type: none"> Intel® C256 controller for 2 SATA3 (6 Gbps) ports; RAID 0,1,5,10
-------------	--

Input / Output

SATA	<ul style="list-style-type: none"> 2 SATA3 (6Gbps) port(s)
-------------	---

USB	<ul style="list-style-type: none"> USB 3.2 Type A 2x USB2.0 KVM (Debug Purpose Only)
------------	---

DOM	<ul style="list-style-type: none"> 1 SATA <u>DOM</u> power connector (Disk on Module) port
------------	---

TPM	<ul style="list-style-type: none"> 1 TPM Header
------------	--

Expansion Slots

PCI-E	<ul style="list-style-type: none"> 1 PCI-E 4.0 x8 for Add-On-Module (AOM) 2x U.2 SATA 3.0 PCI-E x4 Gen 4 via AOM-BPNIO-MSH2
--------------	---

M.2	<ul style="list-style-type: none"> Form Factor: 2280/22110 Key: M-Key 2x M.2 PCIe 2280/22110 (1x onboard and 1x via AOM-BPNIO-MSH2)
------------	--

System BIOS

BIOS Type	<ul style="list-style-type: none"> 256MB SPI Flash with AMI BIOS
------------------	---

BIOS Features	<ul style="list-style-type: none"> RTC (Real Time Clock) Wakeup
----------------------	--

Management

Software	<ul style="list-style-type: none"> SuperDoctor® 5, <u>SUM</u>, <u>SPM</u>, Watchdog, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SuperDoctor® III
-----------------	--

System Management Software	<ul style="list-style-type: none"> SuperDoctor 5, IPMICFG, IPMIView for Linux/Windows, SMCIPMITool, SUM
-----------------------------------	--

Power Configurations	<ul style="list-style-type: none"> Power-on mode for AC power recovery, ACPI Power Management, Power button override mechanism, Wake-on-LAN
-----------------------------	--

PC Health Monitoring

Voltage	<ul style="list-style-type: none"> System temperature, PCH temperature, Memory temperature, CPU temperature, 3.3V standby, +5V standby, +5V, +3.3V, +12V, CPU thermal trip support
----------------	---

LED	<ul style="list-style-type: none"> UID/Remote UID Power LED BMC/IPMI Heartbeat LED CPU / System Overheat LED
------------	--

Temperature	<ul style="list-style-type: none"> PECI
--------------------	--

FAN	<ul style="list-style-type: none"> Low noise fan speed control
------------	---

Other Features	<ul style="list-style-type: none"> Chassis intrusion header Chassis intrusion detection RoHS, Halogen Free
-----------------------	---

Parts List

Parts List (Bulk Package)			
Name	Part Number	Qty	Description
Motherboard	MBD-B3ST1-CPU-001	1	B3ST1-CPU-001 Motherboard

Optional Parts List			
Name	Part Number	Qty	Description
Add-on Module	AOM-BPNIO-MSH2	1	I/O Add-on Module for B3ST1-CPU-001
MicroBlade	MBI-310T-4T2N	--	MicroBlade
	MBI-310T-4C2	--	MicroBlade

Server (Optimized for B3ST1-CPU-001)

Server Name
<u>MBI-310T-4C2</u>
<u>MBI-310T-4T2N</u>
<u>MBS-314E-310T</u>

