

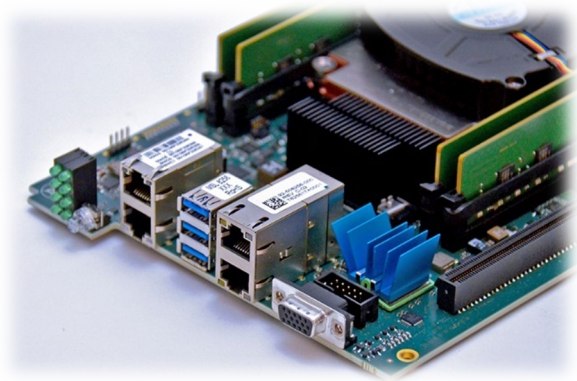
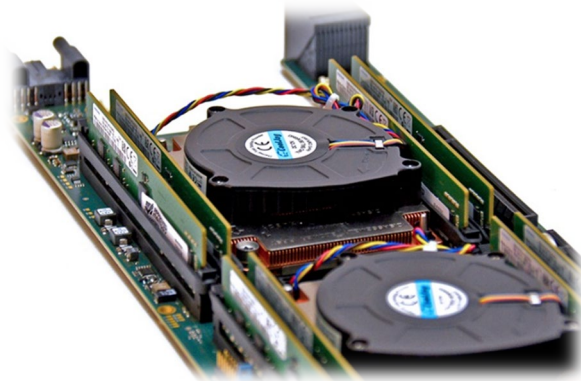
MSL8256

Server Blade

RUGGEDIZED | MADE IN USA

The Baddest Blade Board in the Industry

The MSL8256 server blade is designed to operate in harsh conditions and provide your rugged server, blade server or workstation with the extra grit it needs. Achieve maximum performance with up to 1 TB of RAM and dual Gold/Silver Xeon® CPUs.



Eight **DDR4 Slots**

Achieve peak performance with the MSL8256's eight, six-channel DDR4 slots, or a maximum 1 TB of RAM.

Silver/Gold Xeon CPUs

The MSL8256's Intel® Xeon® Gold/Silver Scalable processors provide up to 22 cores and 3.4 GHz of base processor frequency.

ECC Memory Support

Prevent data corruption with error-correcting code memory, perfect for mission-critical applications.

Section 5 / System Overview

PROCESSOR BOARD

MSL8256

COMPATIBLE CHASSIS MODEL NUMBER(S)

TRC1001, TRC1002, MBS1001, MBS1002, MBS2000, MBS2001

[Contact us for custom options](#)

PROCESSORS

- ▶ Intel® Xeon® Scalable Processors
- ▶ CPU TDP support up to 125W

| CPU | Cores/Threads | Frequency | Cache | TDP |
|--------------|---------------|--------------|--------|------|
| Gold 6230 | 20/40 | 2.10-3.90GHz | 27.5MB | 125W |
| Gold 5218 | 16/32 | 2.30-3.90GHz | 22MB | 125W |
| Silver 4209T | 8/16 | 2.20-3.20GHz | 11MB | 70W |

MEMORY

Slots: 8x DDR4 with ECC support

Memory Support: Six channels

Capacity: Up to 1TB DDR4 ECC RDIMM

Type: ECC DDR4-2933 RDIMM

DIMM Sizes: 128GB, 64GB, 32GB, 16GB

Error Detection: Corrects single-bit errors and detects double-bit errors using ECC memory

STORAGE

Type(s):

- ▶ 2x SSD/HDD SATA3 (6 Gbps) drives of any size with Riser
- ▶ 4x M.2 NVMe PCIe 3.0 x4 with Riser

Capacity: No current limit on drive capacity

SATA Modes: AHCI or RAID

RAID: Intel® RSTe SATA RAID support 0/1/5/10 Modes

PCIe SLOT CONFIGURATION

Type(s): x2 PCIe Gen 3 x16 with riser

ON-BOARD DEVICES

Chipset: Intel® C622

IPMI: Support for Intelligent Platform Management Interface v2

- ▶ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

Network Controllers:

- ▶ Dual Intel® i350AM2 Gigabit Ethernet
- ▶ Intel® x556 10 Gigabit Ethernet
- ▶ Dual Intel® i210 Gigabit Ethernet

Graphics: ASPEED AST2400 BMC; VGA

1920X1200@60Hz 32bpp

TPM 2.0: Secure cryptoprocessor that helps you with actions such as generating, storing, and limiting the use of cryptographic keys. A requirement for Microsoft's bitlocker drive volume encryption features.

INPUT / OUTPUT

USB: 7x USB 3.0 Ports

- ▶ 3x USB 3.0 Ports on Board
- ▶ 4x USB 3.0 Ports via Midplane and/or Riser

Display: 1x VGA Port

LAN: 6x RJ-45 Ethernet LAN ports

- ▶ 2x RJ-45 10 Gigabit Ethernet LAN Ports
- ▶ 4x RJ-45 Gigabit Ethernet LAN Ports (rear, midplane)
 - 1x i210 Gigabit Ethernet LAN Port
 - 1x i210/IPMI Gigabit Ethernet LAN Port
 - 1x MPI350 Gigabit Ethernet LAN Port
 - 1x MPI350 Gigabit Ethernet LAN Port

Serial: 1x RS232 Serial Port via Header

PROCESSOR BOARD WEIGHT

Average Weight: 6.3 lbs.

**System weight and dimensions dependent on rugged chassis and component selection*

SYSTEM BIOS

BIOS Type: 128Mb Macronix MX25L12835FM2I-10G SPI Serial EEPROM (SPI Flash)

BIOS Features:

- ▶ Plug and Play (PnP)
- ▶ TPM 2.0
- ▶ PCI 2.2
- ▶ ACPI 1.0 / 2.0
- ▶ USB Keyboard Support
- ▶ SMBIOS 2.3
- ▶ UEFI

SYSTEM MANAGEMENT

ASPEED AST2400 Baseband Management Controller: rKVM, System Monitoring, Out of Band Management

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: 0°C - 50°C

Storage Temperature: -40°C - 70°C

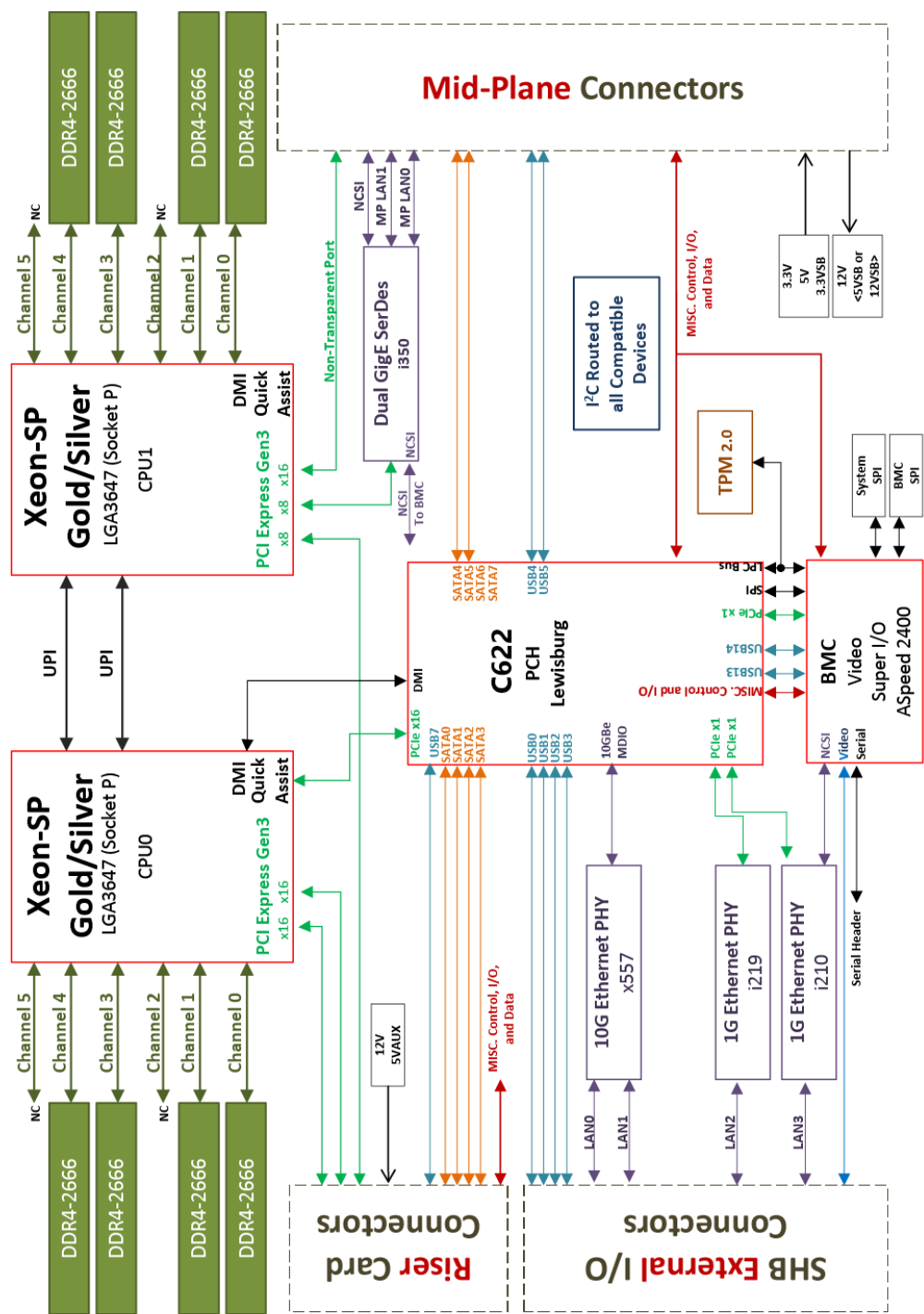
Operating Humidity: 8% - 90% Non-Condensing

Non-operating Humidity: 5% - 95% Non-Condensing

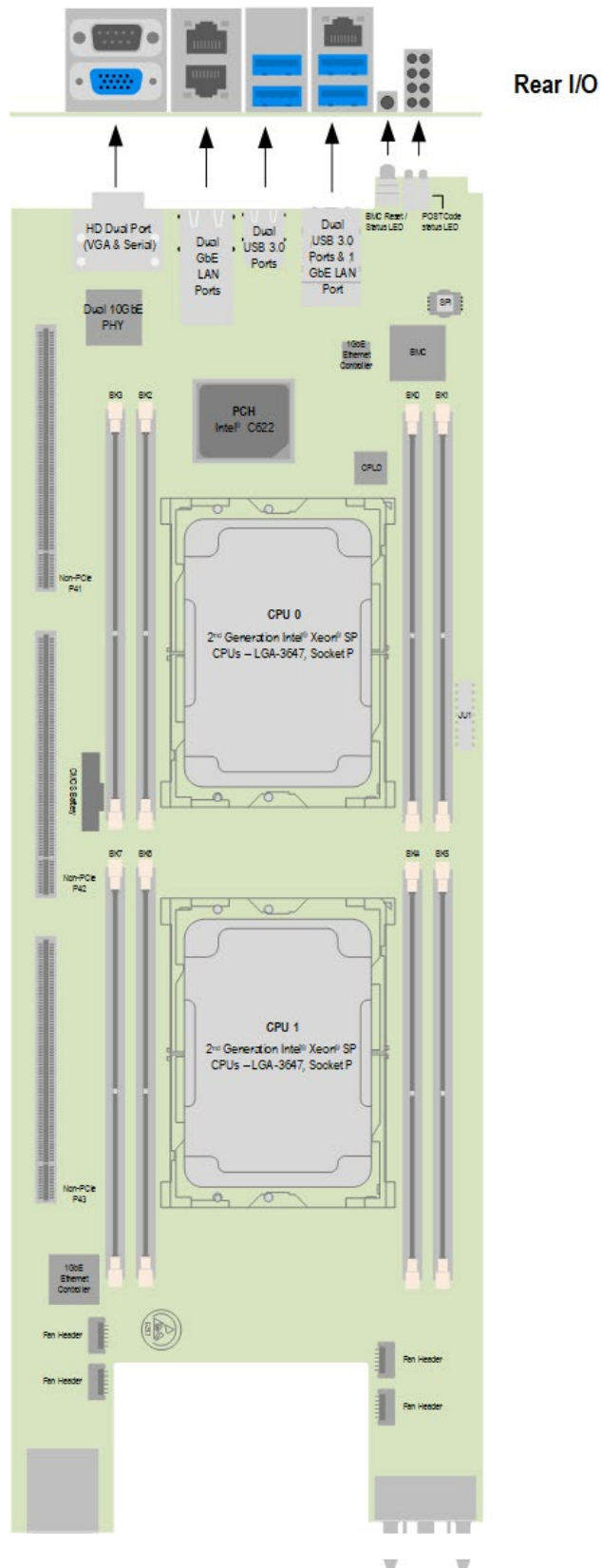
**Numbers noted are dependent on CPU selection. Please [contact Trenton Systems](#) for specific CPU environmental specs.*



BLOCK DIAGRAM



LAYOUT DRAWING





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