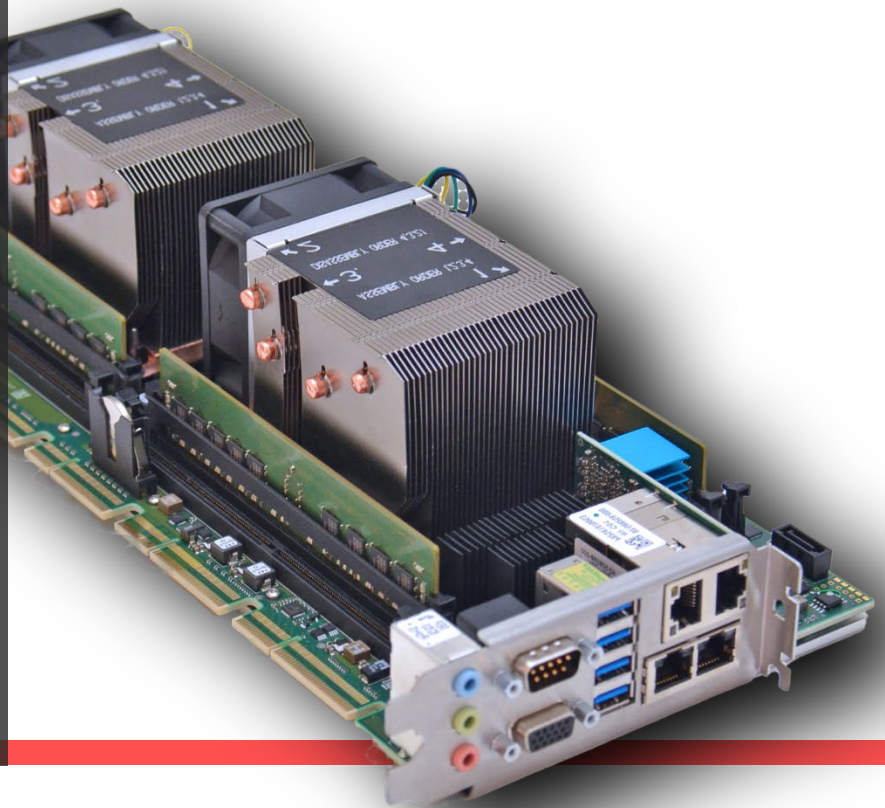




SEP8253

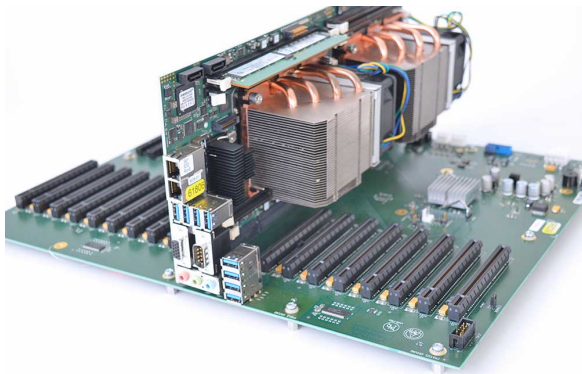
Processor Board

RUGGEDIZED | MADE IN USA



Perform with Ease in Harsh Conditions

Achieve peak mission-critical performance with Xeon® Scalable Performance Silver & Gold processors. HDEC Series architecture delivers 88 lanes of PCIe to compatible backplane. Up to 44 cores / 88 threads and 8 ECC RDIMMS with up to 3TB of DDR4.



Dual Xeon® SP CPUs

2nd Gen Intel® Xeon® SP CPUs deliver high performance and ECC RAM to ensure consistency and prevent data corruption.



Room for Expansion

With 88 lanes of PCIe Gen 3, worrying about whether you have enough expansion opportunities becomes a thing of the past.

Highly Configurable

Choose your rugged chassis, a compatible PCIe backplane, some rugged storage, and customize your own I/O interface.

Section 5 / System Overview

PROCESSOR BOARD

SEP8253 | Type: HDEC Series

COMPATIBLE CHASSIS MODEL NUMBER(S)

TRC2010, THS2085, TRC2019, THS4086, THS4095,
TRS4019, TRC3010 [Contact us for custom options](#)

PROCESSORS

- ▶ 2nd Gen Intel® Xeon® SP CPUs, LGA3647, Socket P
- ▶ 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 RDIMM

Capacity: Up to 1.5TB DDR4 ECC RDIMM

Type: 2400/2666/2933 ECC DDR4 RDIMM

DIMM Sizes: 64GB, 32GB, 16GB, 8GB

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

STORAGE

Type(s): 1x SATA3 (6 Gbps) port

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
- ▶ ASPEED AST2500 BMC

Network Controllers:

- ▶ Supports 1000BASE-T, RJ-45 output

Graphics: Intel® Integrated Graphics & ASPEED AST2500 BMC

TPM 2.0: Secure cryptoprocessor that helps you with actions such as generating, storing, and limiting the use of cryptographic keys

INPUT / OUTPUT

USB: 4x USB 3.0 Ports

Display: 1x VGA Port 1920x1200@60Hz 32bpp

LAN: 4x RJ-45 GbE LAN ports

- ▶ 2x RJ-45 10GbE LAN ports
- ▶ 2x RJ-45 1GbE LAN ports

Serial: 1x RS232 DB9 Serial Port

PROCESSOR BOARD DIMENSIONS

Length: 13.345" | 33.896 cm

Width: 5.75" | 14.6 cm

**System dimensions dependent on rugged chassis selection.*

SYSTEM BIOS

BIOS Type: 128 Mb SPI NOR Flash with Insyde BIOS

BIOS Features:

- ▶ Plug and Play (PnP)
- ▶ APM 1.2
- ▶ PCI 2.2
- ▶ ACPI 1.0 / 2.0
- ▶ USB Keyboard Support
- ▶ SMBIOS 2.3
- ▶ UEFI

SYSTEM MANAGEMENT

AST2500 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

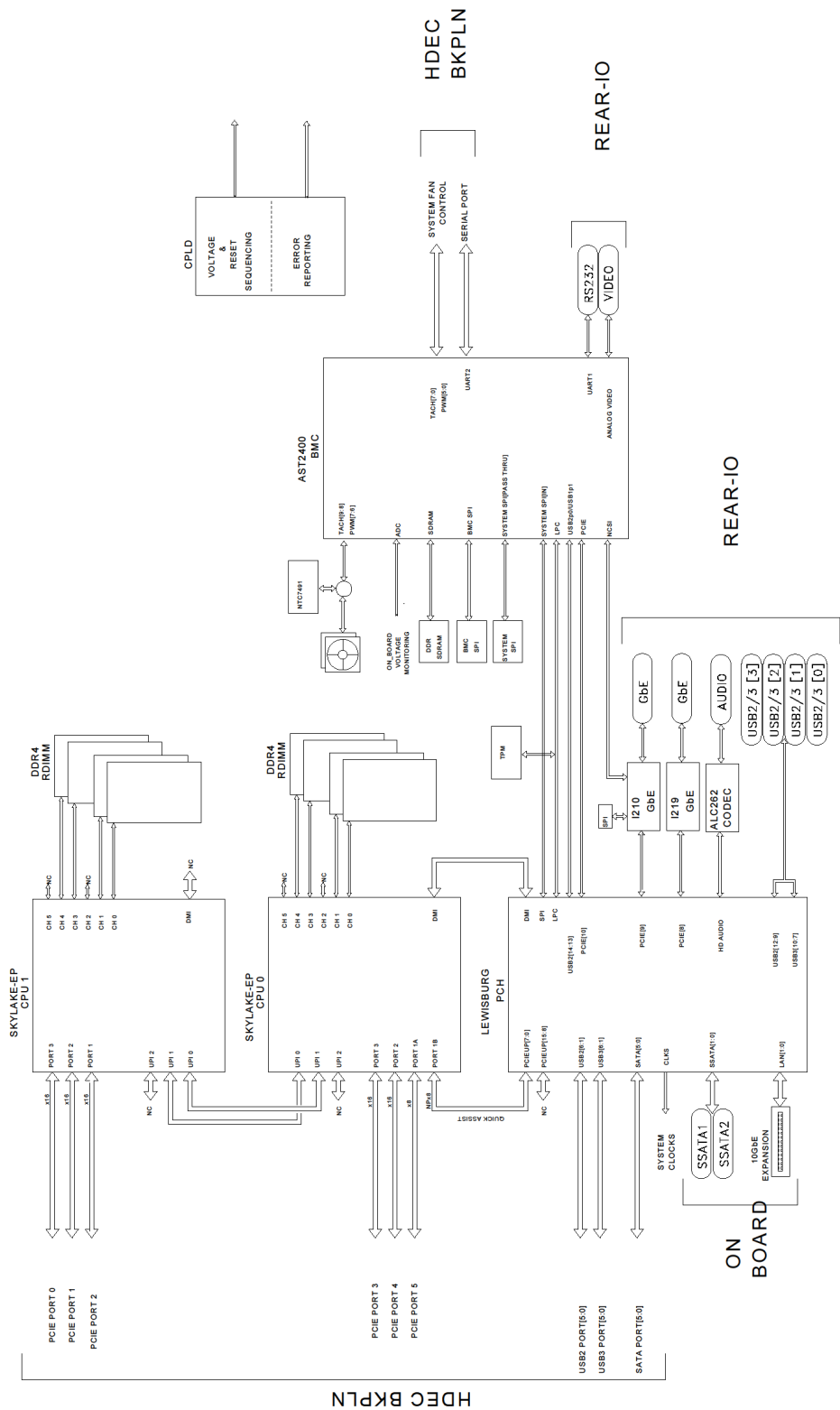
FCC

CE

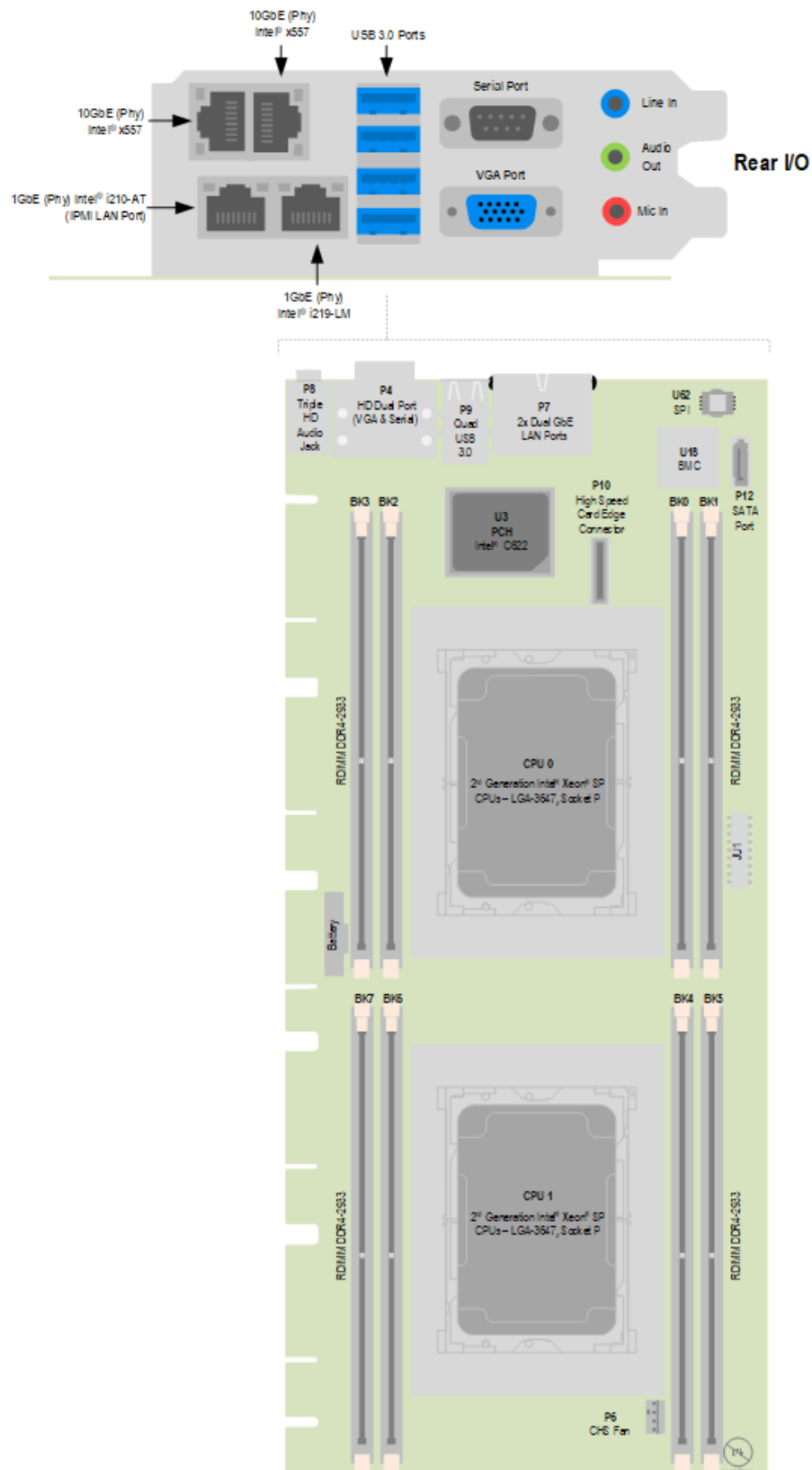
**Numbers noted are dependent on CPU selection. Please [contact Trenton Systems](#) for specific CPU environmental specs.*



BLOCK DIAGRAM



LAYOUT DRAWING





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