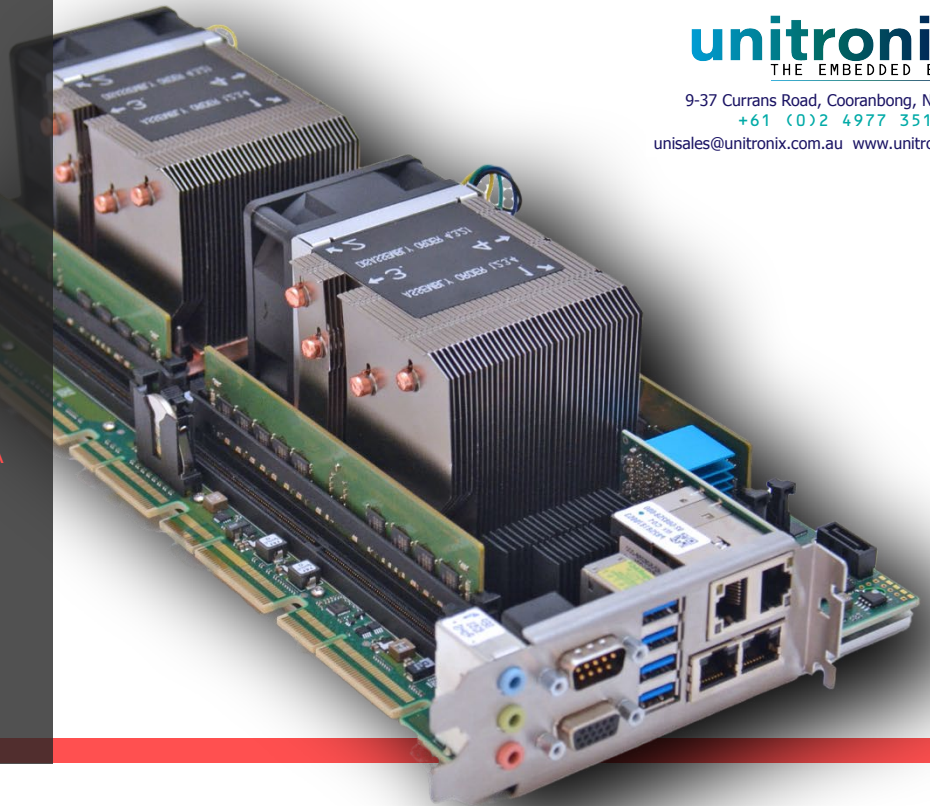




# SEP8253

## Processor Board

RUGGEDIZED | MADE IN USA

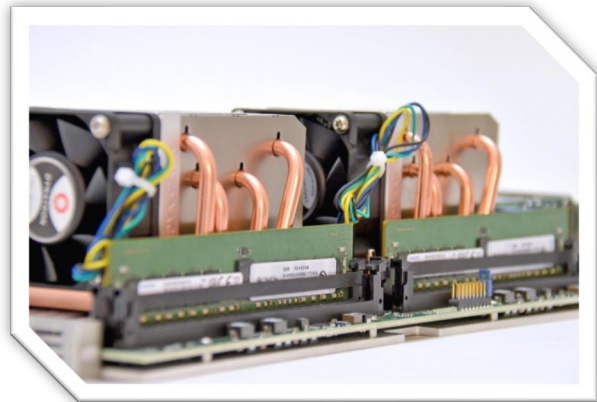
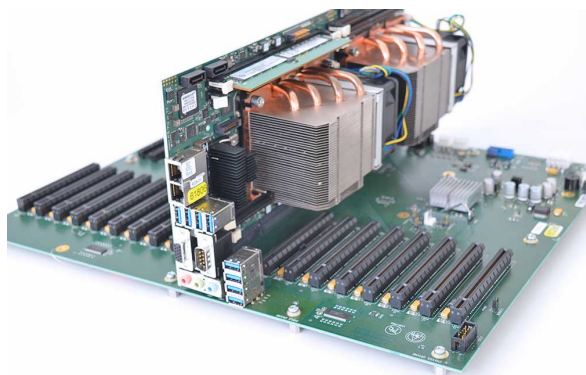


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## Perform with Ease in **Harsh** Conditions

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

- ▶ 2<sup>nd</sup> 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

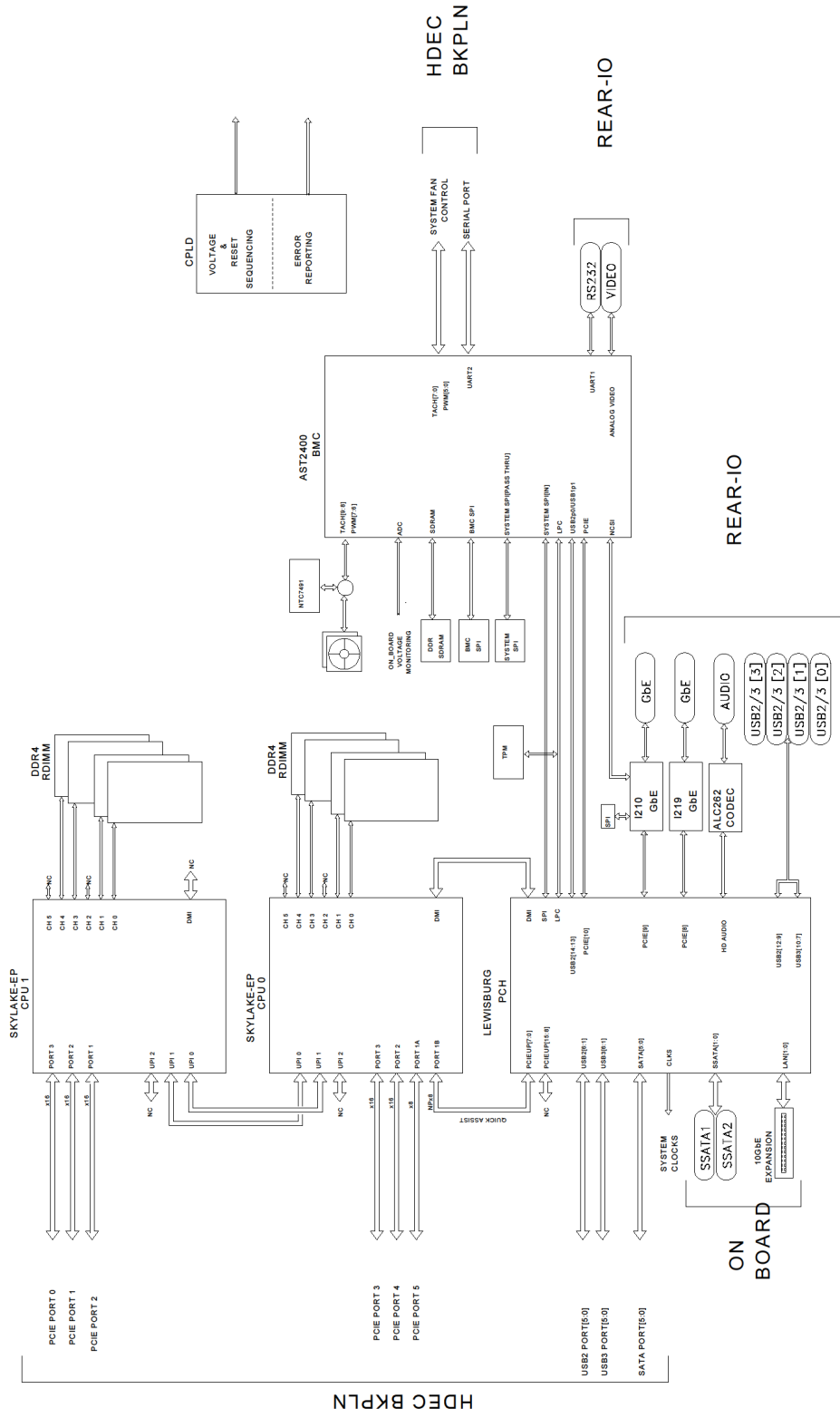
FCC

CE

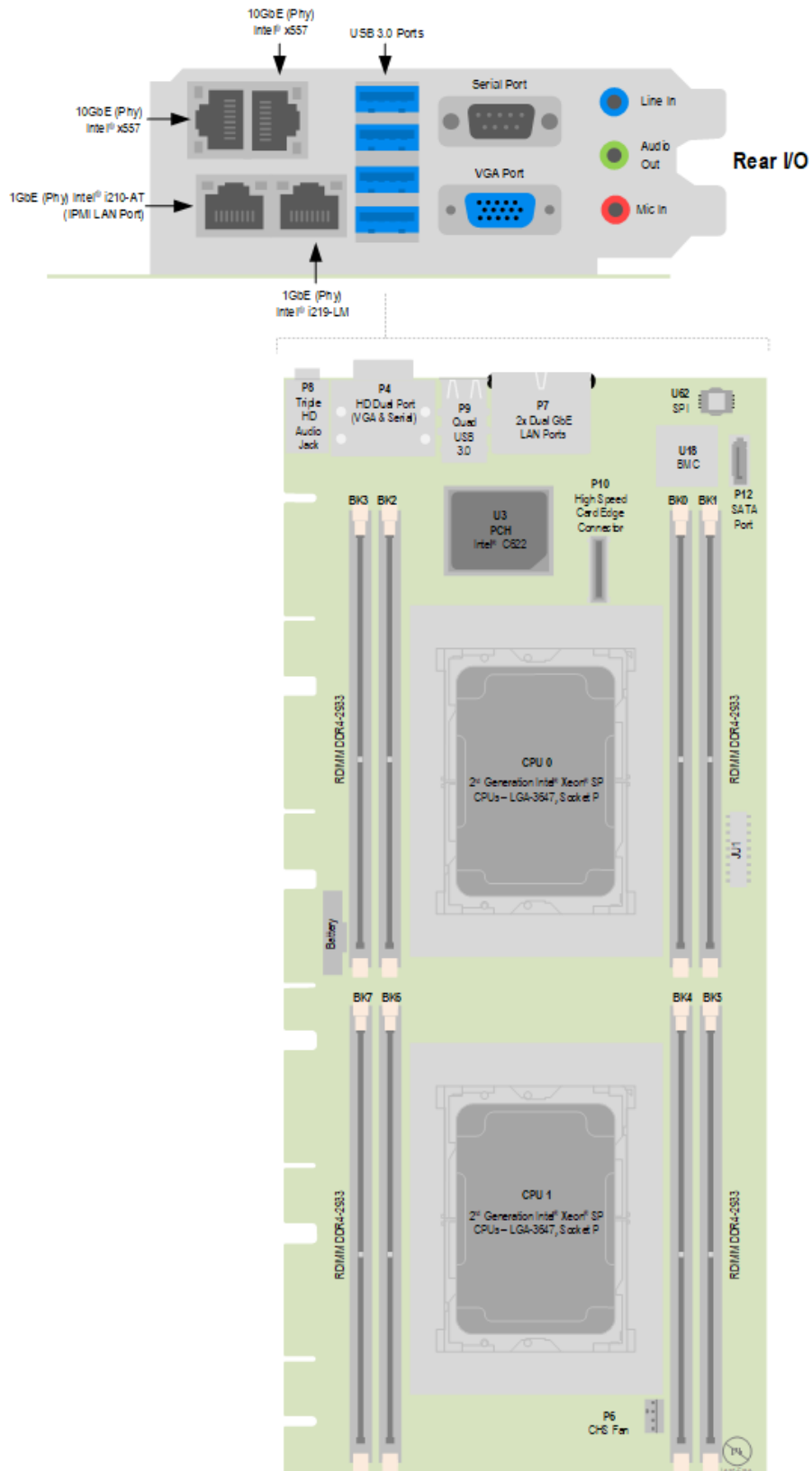
*\*Numbers noted are dependent on CPU selection. Please [contact Trenton Systems](#) for specific CPU environmental specs.*



# BLOCK DIAGRAM



## LAYOUT DRAWING





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