

# Thrives in Extreme Environments

Designed for heavy workloads and mission-critical applications. Load your OS and other time-critical files on lightning fast NVMe drives directly connected to the CPUs and RAM for high throughput and low latency. Configure to spec with lots of PCIe slots, I/O options, and rugged





## **Processing Powerhouse**

2nd Gen Intel® Xeon® SP CPUs with 12x high-frequency RAM slots that deliver higher performance and scalability.

# **Max** System Expansion

7x PCIe 3.0 slots enable configurations to current and future system requirements while reducing overall system latency.

## Configuration Versatility

Lots of storage, I/O options, rugged chassis, and add-ons like our JBOD or PCIe Expansion System to meet your specs &

radiliramanta

#### Section 1 / System Overview

#### PROCESSOR BOARD

SSP8268 | Type: SSI Motherboard

#### 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

#### **MFMORY**

Slots: 12x DDR4 RDIMM sockets

Capacity: Up to 1.5TB DDR4 ECC SODIMM Type: 2400/2666/2933 ECC DDR4 UDIMM DIMM Sizes: 64GB, 32GB, 16GB, 8GB

**Error Detection:** Corrects single-bit errors and detects

double-bit errors using ECC memory

#### **STORAGE**

**Type(s):** 6x 2.5" SSD/HDD SATA3 (6 Gbps) drives up to 15mm height; 2x MiniSAS NVMe x4 PCIe 3.0

Capacity: Up to 1TB per drive (larger capacities

available upon request)

#### PCIE SLOT CONFIGURATION

Type(s): 7x PCle 3.0 x16 mechanical slots

▶ 3x PCle 3.0 x16 electrical

▶ 4x PCle 3.0 x8 electrical

#### **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:**

- ▶ Intel® i350 Gigabit Ethernet
- ▶ 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: 5x USB 3.0 Ports

**Display:** 1x VGA Port 1920x1200@60Hz 32bpp **LAN:** 7x RJ-45 Gigabit Ethernet LAN ports ▶ 6x RJ-45 Gigabit Ethernet LAN ports

▶ 1x RJ-45 Gigabit Ethernet LAN/IPMI shared port

Serial: 1x RS232 DB9 Serial Port

#### MOTHERBOARD DIMENSIONS

Length: 12.0" | 30.48 cm Width: 13" | 33.02 cm

\*System dimensions dependent on rugged chassis selection.

#### FRONT PANEL

- 3x USB Ports
- Power Button
- Audio In/Out
- Fault and Hard Drive Activity LEDs

\*Dependent on rugged chassis selection.

#### SYSTEM COOLING

6x PWM Fan Headers; 2x CPU Blower Fans (1 per CPU)

#### **POWER SUPPLY**

Up to 1200W Fixed, Redundant, or Removable

\*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**

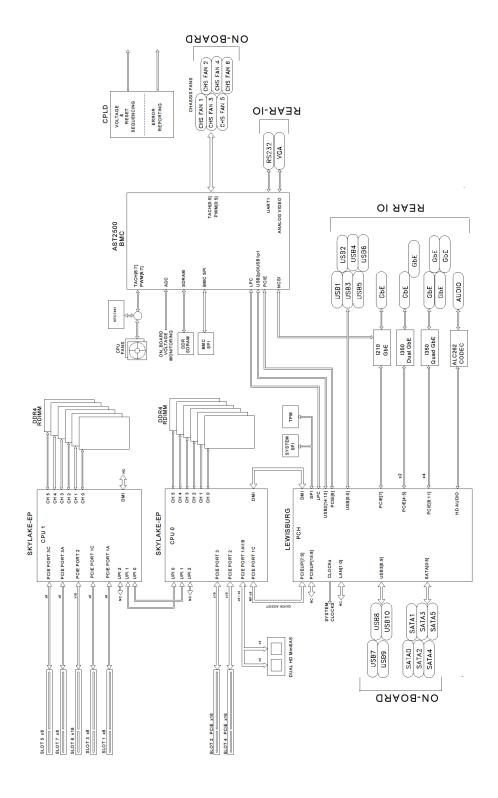
Operating Temperature: 0°C - 50°C Storage Temperature: -40°C - 70°C

Operating Humidity: 8% - 90% Non-Condensing Non-operating Humidity: 5% - 95% Non-Condensing

\*Numbers noted are dependent on CPU selection. Please <u>contact Trenton Systems</u> for specific CPU environmental specs.



### **BLOCK DIAGRAM**





#### Section 2 / Diagrams & Layouts

### LAYOUT DRAWING

