

3PI SERVERS

TRS13-20 | 4th Gen Xeon® SP

A compact, scalable, and secure 1U rugged rack server with the latest technologies to optimize performance and scalability for evolving workloads.



MAXIMUM CONFIGURABILITY AND FLEXIBILITY

Adjust your system's configuration to meet the constantly fluctuating demands of diverse data environments and ensure operational efficiency.



ENHANCED COMPUTE POWER AT THE EDGE

Process, analyze, store, and retrieve large amounts of actionable intelligence in seconds to improve decision-making and reduce response times.



RUGGEDIZED FOR EXTREMES

Tested to meet the toughest military and industrial standards to ensure the quality and reliability of our solutions within harsh and austere conditions.

Overview

A configurable, SWaP-C optimized 1U rugged server supporting various option cards that delivers maximum processing, security, and storage alongside evolving workloads.

Designed in consultation with our team, the TRS13-20 meets and exceeds the most complex technical, performance, and environmental requirements for on-premise and edge deployments.

SOLUTION HIGHLIGHTS



Intel® PFR, SGX, TME, and TDX provide chip-based protections of firmware, data, applications, hypervisors, and virtual machines.



Next-gen PCIe slot enables you to easily expand your board's capabilities to meet the demands of your application or program.



Reduce time to market to take advantage of the latest technologies as they become available and maximize operational efficiency.

POWERED BY **intel**®

AI ACCELERATED BY **nvidia**®

Technical Overview

SPECIFICATION	DETAILS
CPUs	Single Intel® 4 th Gen Xeon® SP (Sapphire Rapids)
Memory	8x DDR5-4400/4800 ECC RDIMM slots
Storage	Up to 9x SATA SSDs, NVMe w/RAID controller (FIPS 140-2/3 available)
Form Factors	1U rack server (19" x 1.75" x 20" 48.26cm x 4.44cm x 50.8cm)
Network Interface	3x 1GbE, 2x 10GbE ports supporting IPMI
PCIe Interconnect	1x PCIe 5.0 x16 slot for FHFL option cards
Power	2x 500W, redundant, 461-filtered, removable

PROCESSORS (UP TO 16 CORES PER CPU)

Single Intel® 4th Gen Xeon® SP CPU (Sapphire Rapids) up to 225W TDP
Chipset: Intel® C741 Emmitsburg

MEMORY (UP TO 2 TB)

8x DDR5-4400/4800 ECC RDIMM slots

PCIe GEN 5.0 SLOT (CAN SUPPORT FHFL GPU)

1x PCIe Gen 5.0 x16 slot

I/O

- ▶ **SATA:** 8x SATA3 ports
- ▶ **USB:** 4x USB2 headers, 2x USB3 ports
- ▶ **IPMI:** IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
- ▶ **Graphics:** Intel® Integrated Graphics & ASPEED AST2600 BMC
- ▶ **Video:** 1x VGA port
- ▶ **LAN:** 3x 1GbE RJ-45 ports via dual Intel® i350 controller (1x Shared IPMI), 2x 10GbE ports
- ▶ **Serial:** 1x RS232 port

SECURITY

- ▶ **TPM 2.0**

*For a comprehensive list of cybersecurity features, please contact one of our team members.

COOLING (BMC Controlled)

5x 4 pin system fan headers, 1x 4 pin CPU fan headers

SYSTEM BIOS

- ▶ AMI SPI 256 Mbit BIOS
 - Plug and Play (PnP)
 - PCI 2.2
 - ACPI 1.0 / 2.0
 - USB Keyboard Support
 - SMBIOS 2.3
 - UEFI

SYSTEM MANAGEMENT (BMC)

ASPEED AST2600 baseboard management controller: rKVM, system monitoring, out-of-band management

OS COMPATIBILITY

- ▶ Windows Enterprise, Server
- ▶ Linux
 - RHEL
 - Ubuntu
 - SUSE

*Contact us for the full compatibilities list

DIMENSIONS

Board: 12" x 9.6" (30.48cm x 24.40cm), Advantech ASMB-817 (ATX)

Chassis: 19" x 1.75" x 20" (48.26cm x 4.44cm x 50.8cm)

ENVIRONMENTAL SPECIFICATIONS

- ▶ Operating Temperature: 0°C - 43°C
- ▶ Storage Temperature: -40°C - 85°C
- ▶ Operating Humidity: Up to 95% non-condensing
- ▶ Shock: 3 axis, 20g, 11ms
- ▶ Vibration: 2.87Grms, 10Hz to 2000 Hz (SSD)

COMPLIANCE

Meets the following standards/certifications:

- ▶ MIL-STD-810H
- ▶ MIL-STD-461G

*Environmental specifications and compliance are configuration dependent.

**Test reports and additional certifications available upon request.

The TRS13-20 can support an NVIDIA GPU and other FHFL option cards. To configure a system per your requirements, reach out to a member of our team. Workstation variation also available.

Contact us for pricing and availability.

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