

# 3PI Servers

## TRS11-18 | Xeon D®

A rugged, secure, SWaP-C optimized 1U rack server delivering enhanced performance and ease of maintenance/management at the tactical edge.



### MAXIMUM COMPUTE DENSITY & ACCESSABILITY

18" depth and reduced height coupled with front I/O greatly reduces compute footprint while enabling easy cable management and serviceability within the smallest of spaces.



### HIGH-PERFORMANCE & ENERGY-EFFICIENT

SoC-class CPU with built-in accelerators and low TDP enable quick processing and control of critical operations while minimizing thermal complications.



### RUGGEDIZED FOR EXTREMES

Tested to meet the toughest military standards to ensure the quality and reliability of our solutions within the harshest of environments.



## Overview

Compact, rugged, and secure, the TRS11-18 delivers enhanced performance in a short-depth 1U rack server with front I/O for streamlined accessibility and management.

Ideal for subsurface deployments (e.g., submarines) where space is limited, it enables quick modifications and repairs, significantly reducing downtime. Handle mission-critical data and ensure precise execution to effectively engage with enemy threats.

## SOLUTION HIGHLIGHTS



**Intel® Software Guard Extensions** provide chip-based protections and isolation of critical data down to the application level.



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



**TAA-Compliance** is achieved because all components are sourced from approved vendors to ensure complete system integrity when and where it matters most.

Our **3PI Servers** are customizable per your most complex application or program requirements. Designed to support additional customer-specified option cards including high-end NVIDIA GPUs.

# Technical Overview

SPECIFICATION	DETAILS
CPUs	Single Intel® Xeon® D
Memory	2x DDR4 2666/2400 MT/s ECC/non-ECC DDR4 RDIMM slots
Storage	1x M.2 NVMe, 1x SATA SSD (FIPS 140-2/3 available)
Form Factors	1U rack server (19" x 1.75" x 18"   48.26cm x 4.45cm x 45.72cm)
Network Interface	2x 25GbE, 2x 10GbE ports
PCIe Interconnect	1x PCIe 4.0 x8 slot, 1x PCIe 3.0 x4 slot or 4x SATA (via Oculink)
Power	1x 500W, 120/240vAC, internal, non-redundant

## PROCESSORS (UP TO 10 CORES PER CPU)

Single Intel® Xeon® D CPU up to 90W TDP  
Chipset: System on Chip, Intel® Xeon® D-1700 Series  
*\*If an SKU higher than 250W is needed, contact a member of our team.*

## MEMORY (UP TO 128GB)

2x DDR4 2666/2400 MT/s ECC/non-ECC DDR4 RDIMM slots

## SLOTS

1x PCIe 4.0 x8 slot, 1x PCIe 3.0 x4 slot or 4x SATA (via Oculink)

## I/O

- ▶ **USB:** 4x USB ports: 2x USB2 ports via header, 2x USB3 ports via I/O
- ▶ **IPMI:** 1x ASPEED AST2600 BMC port
- ▶ **Graphics:** 1x ASPEED AST2600 BMC port
- ▶ **Video:** 1x VGA port
- ▶ **LAN:** 2x 25GbE SFP28 LAN ports via SoC, 2x 10GbE LAN ports with Intel® X550 10GBase-T Ethernet Controller
- ▶ **Serial:** 1x COM port

## SECURITY

- ▶ **TPM 2.0**

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

## COOLING (BMC Controlled)

3x 4-pin system fan headers

## SYSTEM BIOS

- ▶ AMI 32MB SPI Flash EEPROM
  - ACPI 6.3
  - UEFI 2.7
  - SMBIOS 3.3
  - Plug and Play (PnP)
  - PCI FW 3.0

## SYSTEM MANAGEMENT (BMC)

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

## OS COMPATIBILITY

- ▶ VxWorks
- ▶ Linux

*\*Contact us for the full compatibilities list*

## DIMENSIONS

**Board:** 6.75" x 6.75" (17.15cm x 17.15cm),  
Supermicro X12SDV-10C-SPT4F (Mini-ITX)  
**Chassis:** 19" x 1.75" x 18" (48.26cm x 4.45cm x 45.72cm)  
**Weight:** ~22lbs

## ENVIRONMENTAL SPECIFICATIONS

- ▶ Operating Temperature: 0°C - 50°C
- ▶ Storage Temperature: -40°C - 85°C
- ▶ Operating Humidity: 85% (non-condensing)
- ▶ Shock: 20g, 11ms
- ▶ Vibration: 2.8 Grms

## COMPLIANCE

**Meets the following standards/certifications:**

- ▶ MIL-STD-810H
- ▶ MIL-STD-461G
- ▶ IEC 62368-1:2014

*\*Environmental specifications and compliance are configuration dependent.  
\*\*Test reports and additional certifications available upon request.*

**Contact us for pricing and availability.**

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