

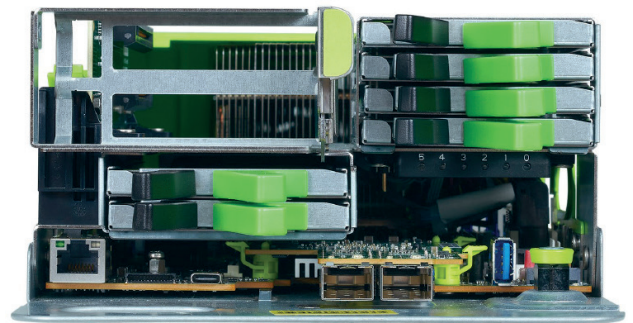
Tioga Pass SP

OCP Multi-node server

Tioga Pass SP is a 20U/ 3N OCP server supporting Intel® Xeon® Scalable Processors. The latest server to provide pervasive performance enhancement including higher performance per-core and higher CPU frequency.

DESIGN PRINCIPLES

- Flexible combination of multiple servers in 20U space for computing-intensive application with enhanced I/O performance.
- Performance optimized for intensive computing applications.
- Supports the 2nd Generation Intel® Xeon® Scalable Processors.



Tioga Pass SP (Type A)

TOP APPLICATIONS



High-performance Computing



Big Data Analytics



Artificial Intelligence

KEY BENEFITS

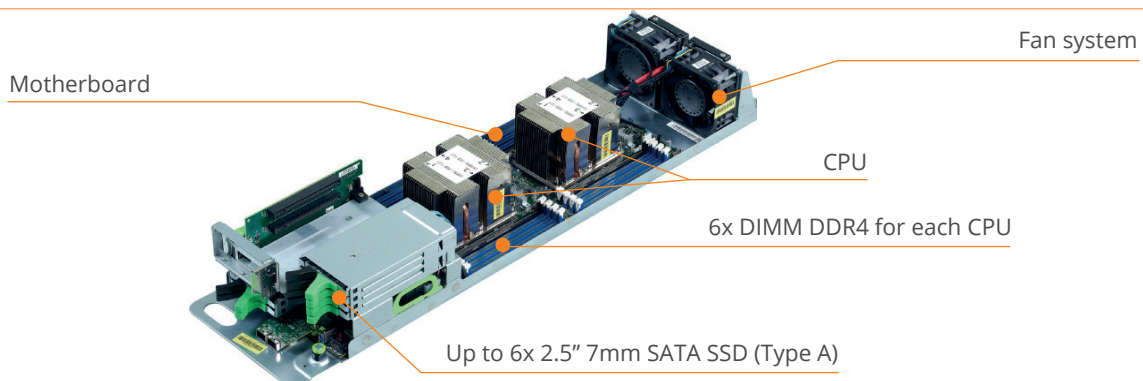
- High power efficiency
- Flexible design
- Easy maintenance

KEY FEATURES

Unique solution which supports :

- Up to 2x Intel® Xeon® Scalable Processors
- High power efficiency
- High memory availability up to 12 DIMM slots
- Compatible with 21" OCPtoRack 42SL, or V2 and above
- DMTF Redfish
- Tool-less design
- VMware ESXi 7.0 / FishOS
- Red Hat® Open Stack® / Virtualization

OVERVIEW



SPECIFICATIONS

System

Model	Tioga Pass SP
Form Factor	20U
Dimension	723 x 174.5 x 89mm 28.46" x 6.87" x 3.5" (D x W x H)
Sled	3 per shelf
Weight	6kg to 8.5kg 13lbs to 18lbs

Storage

Front type	6x 2.5" 7mm SATA SSD (Type A) or 1x 3.5" SATA HDD (Type S) or 4x 2.5" U.2 SSD Hot Plug (Type U)
Rear type	-

Motherboard

CPU	Intel® Xeon® Scalable Processors
Chipset	Intel® C621
Expansions slots	2x PCIe 3.0 x16 slots HHHL 1x OCP NIC 2.0
M.2 connector	80/110mm M.2 (SATA/PCIe Gen3 x4)
Network	1x 1GbE LAN (Intel® i210)

Processor

Socket type	Socket P (LGA3647)
Supported CPU	Intel® Xeon® Scalable Processors
TDP	Max up to 165W

Memory

Quantity	12x DIMM slots
Speed	Up to 768 GB R-DIMM, DDR4 2933MT/s
Channels	6 channels per CPU

Server management

BMC	IPMI 2.0 / DMTF Redfish® 1.7
Chipset	Aspeed® AST2500
TPM	TPM Header for SPI 2.0 for BIOS, I2C 1.2 BMC

Front I/O

Button	Power button Reset button
LED	System status LED Storage status LED Error LED
Port	1x Type A USB 3.0 1x Type C USB 3.0 2x USB 3.0 1x VGA header 1x RJ45 GbE port NCSI for IPMI

Back I/O

Button	-
LED	-
Port	-

Internal connector

Port	-
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System Cooling

Fans	2x fans (80x80mm)
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Power Input

Type	Open Rack centralized 12V bus bar
Input Range	12VDC, 576W max

Operating Environment

RoHS	RoHS compliant
Temperature	Operating temperature: 10°C to 35°C Non-operating temperature: -40°C to 70°C
Humidity	90%, non-condensing at 35°C