

Apogean Single Socket Intel Xeon Scalable 3rd Gen Rack Mount Server

IS41U-S3-T / IS82U-S3-T /
IS122U-S3-T / IS163U-S3-T /
IS244U-S3-T



Features

- 1S Intel Ice Lake SP CPU
- 8 DIMM slots w/ DDR4-3200 memory support
- 4/8/12/16 x 3.5" SATA 6Gb/s Drive Slots
- 3 PCIe Gen.4 x16 + 2 PCIe Gen.4 x8 slots
- 1 PCIe x8 SlimSAS connector (NVMe)
- 2 NVMe 22110 / 2280 M.2 slots
- 1 1000Base-T + 1 dedicate 1000Base-T IPMI ports
- AST2500 BMC with IPMI 2.0 & Redfish support



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Specifications:

• Processor

Q'ty / Socket Type	(1) LGA4189
Supported CPU Series	3rd Gen Intel Xeon Scalable Processor
Thermal Design Power Wattage	Max up to 270W (TDP)
System Bus	Up to 11.2/10.4 GT/s with Intel UltraPath Interconnect (UPI) support

• Chipset

PCH	Intel C621A
Supported DIMM	(8) DIMM slots
Q'ty	DDR4 ECC RDIMM /LRDIMM
DIMM Type / Speed	3200

• Memory

Capacity	Up to 1,024GB RDIMM/ 2,048GB LRDIMM/ 2,048GB RDIMM 3DS/LRDIMM 3DS
Memory channel	8 Channels per CPU
Memory voltage	1.2V

• Expansion

Slots PCIe	(1) PCIe Gen.4 x8 slot (#4 w/x4 link) / (1) PCe Gen.4 x8 slot (#2 via MUX) / (1) PCIe Gen.4 x16 slot (#3 w/x8 link) / (2) PCIe Gen.4 x16 slots (#5,#6)
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• LAN

Q'ty / Port Controller	(1) GbE port + (1) GbE dedicated for IPMI
PHY	Intel I210 Realtek RTL8211E

• Storage SATA

Drive Slots	3.5" SATA 6Gb/s Drive Slots - 4 Drive Slots - IS41U-S3-T 8 Drive Slots - IS82U-S3-T 12 Drive Slots - IS122U-S3-T 16 Drive Slots - IS163U-S3-T 24 Drive Slots - IS244U-S3-T
Controller	Intel C621A
Speed	6Gb/s
RAID	RAID 0/1/10/5 (Intel RSTe)

• Storage SATA

Connector	(1) Mini-SAS (4-ports) / (2) 7-pin SATA for (2) SATA ports
Controller	Intel C621A
Speed	6Gb/s
RAID	RAID 0/1/10/5 (Intel RSTe)

• Storage NVMe

Connector (M.2)	(2) 22110/2280 (by PCIe Gen.3 interface)
Connector (U.2)	(1) SFF-8654 for (2) NVMe ports

• Storage (Optional)

VROC Support	Yes
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• Operating Environment

Operating Temp.	0° C ~ 40° C (32° F~ 104° F)
Non-operating Temp.	- 40° C ~ 70° C (-40° F ~ 158° F)
In/Non-operating Humidity	90%, non-condensing at 35° C

• Certifications

BIS	BIS Certified
ISO	ISO 9001, 14001, 27001

• Input /Output

USB	(2) USB2.0 ports (@ rear) / (2) USB3.0 ports (@ rear) / (2) USB3.0 ports (via cable)
COM	(1) DB-9 COM Connector
VGA	(1) D-Sub 15-pin VGA port (@ rear)
RJ-45	(1) GbE ports + (1) GbE dedicated for IPMI
Front Panel	(1) 2x12-pin SSI front panel header
Audio	(1) 2x5-pin header / (1) 3 holes Audio Jack connector
SATA	(14) SATA-III ports from AHCI
Power	8-pin power connectors
Others	(1) UID button

• System Monitoring

Chipset	Aspeed AST2500
Fan	Total (5) 4-pin headers
Temperature	Monitors temperature for CPU, memory & system environment
Voltage	Monitors voltage for CPU, memory, chipset & power supply
LED	Over temperature warning indicator / Fan & PSU fail LED indicator
Others	Watchdog timer support

• Audio

Chipset	Realtek ALC888S
Feature	2.1 ch

• Server Management

Onboard Chipset	Onboard Aspeed AST2500
AST2500 iKVM	24-bit high quality video compression / Supports storage over IP and remote platform-flash / USB 2.0 virtual hub
Feature	IPMI 2.0 compliant baseboard management controller (BMC) / 10/100/1000 Mb/s MAC interface

• BIOS

Brand / ROM size	AMI / 32MB
Feature	Hardware Monitor / Boot from USB device/PXE via LAN/Storage / Console Redirection / User Configurable FAN PWM Duty Cycle / SMBIOS 3.3/PnP/Wake on LAN / ACPI 6.2 / ACPI sleeping states S5

• Graphic VGA

Connector type	D-Sub 15-pin
Resolution	Up to 1920x1200
Chipset	Aspeed AST2500

• Physical Dimension

Form Factor	1U Rackmount - IS41U-S3-T 2U Rackmount - IS82U-S3-T 2U Rackmount - IS122U-S3-T 3U Rackmount - IS163U-S3-T 4U Rackmount - IS244U-S3-T
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• Power Supply

Single	500W, 750W, 850W, 1000W, 1200W, 1400W, 1600W, 2000W
Redundant	500W RPS, 800W RPS, 1200W, 1600W RPS

• Operating System

OS supported list	Windows Windows Server 2022 Windows Server 2019 Windows 11 Windows 10	Linux RHEL 8.4 x64 Ubuntu 20.04 CentOS 8.4 x64
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