

SKY-9232D3

2U 4Node Rackmount Server for Hyper-converged Infrastructure and Storage

Preliminary



Features

- Up to 4 Hot-Swappable CPU Node boards with single/dual Intel® Xeon® Scalable Processors
- Up to 16 DIMM slots DDR4 3200MHz RDIMM/LRDIMM 3DS (per Node)
- Flexible I/O configurations with up to 2x PCIe Gen4 x16 slots (half length, low profile) or 1xNVMe/SATA SSD + 1x PCIe x16 slot (per Node)(SKU depends)
- Support one PCIe Gen3 x8 OCP2.0 mezzanine (per Node)
- Optional 2xM.2 storage devices (per Node)
- Up to 12x 3.5" SATA storage on the system
- Optional hot swappable and redundant AC PSU
- Redundant FW images (Advantech BIOS and BMC)
- Onboard BMC (IPMIv2.0 compliant) with Web Interface, KVM and Redfish



Introduction

Advantech SKY-9232D3 is a 2U 4Node rackmount server, designed for hyper-converged infrastructure (HCI) and storage applications. Its design creates the flexibility to set up different workloads independently but with shared infrastructure, such as cooling and power supply for a lower the total cost of ownership (TCO).

The SKY-9232D3 is designed with single/dual 3rd Gen Intel® Xeon® scalable processors (formerly Ice Lake) and the latest DDR4 memory technology. It leverages a modularized design concept with one OCP mezzanine slot and up to two PCIe slots per node, providing rich I/O options to maximize the system flexibility. In an addition, the optional on node 2.5" NVMe/SATA SSD can be used for cache/tiring/meta-data functions to improve the storage system performance. Optional redundant and hot-swappable fans also enhance product stability and serviceability comparing to single fan designs.

Specifications

System (Model name: SKY-9232D3)

Physical Characteristics	Form Factor	2U Rackmount
	Dimension (W x H x D)	Dimension: 438 x 87.5 x 810 mm
	Motherboard	4 x Hot-Swappable MIC-8320 CPU Nodes
	Net weight	50kg
Front Panel	Buttons	Power On/Off button UID button
	LED	Power status LED (integrated in Power button)
		HDD activity/status LED
		Network activity LEDs UID LED (integrated in UID button) Information LED
Front External Drive Bay	Type/Quantity	D3 : 12 x Hot-Swappable 3.5" HDD trays (3x HDD trays per Node)
	Interface	D3 : SATA 6Gb/s
System Cooling	Fan	4 x 8cm (8076) hot-swappable dual-rotor PWM fans with fan speed control
Power Supply*	Type/Quantity	2 x Redundant (1+1) PSU with PMBus D3 : 2000-2200W
	Input Range	AC capability (90 - 264V _{AC})
	Efficiency	80 Plus Titanium
	Output Watts	D3 : Up to 2200W (SKU dependent)
Operating Environment	Operating Temperature /Humanity	0 ~ 35 °C (32 ~ 95 °F) / 5% to 95% @ 35 °C (non-condensing)
	Non-operating Temperature/Humanity	- 40 ~ 60 °C (-40 ~ 140 °F) / 5% to 95% @ 60 °C (non-condensing)
Regulation	CE/FCC	Class A
	UL/cUL/CB	Class A
	VCCI	Class A
RoHS	RoHS 6/6 Complaint	Yes

Mainboard for CPU Node (Model name: MIC-8320)

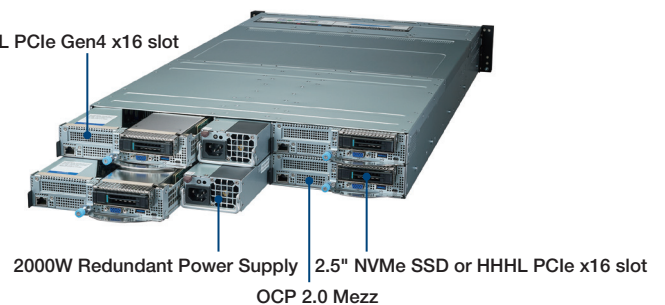
Processor	Supported CPU Series	Single/Dual Intel® Xeon® Scalable Processors (Socket P4, LGA 4189) Dual UPI up to 11.4 GT/s (CPU SKU Depends)
	Thermal Design Power (TDP)	Up to 135W (Dual processors) or 165W (Single processor) (2U4N with redundant 8076 fan design)
Chipset	Supported Chipset Series	Intel® C621A
Memory	Support DIMM Quantity	16 x DIMM slots; Optional to support DCPMM DIMM (CPU SKU Depends)
	DIMM Type/Speed	DDR4 ECC RDIMM/RDIMM 3DS/LRDIMM/LRDIMM 3DS Up to 3200MHz (CPU SKU Depends)
	Capacity	Up to 2TB ECC 3DS RDIMM, 512GB ECC RDIMM (CPU SKU Depends)
	Memory Channel	8 Channels
	Memory Voltage	1.2V
I/O	PCIe Slot	SKU A: 2 x PCIe Gen4 x16 slots (half height, half length) SKU B: 1 x PCIe Gen4 x16 slot (half height, half length)
	OCP2.0 Mezzanine Slot (Type1 form factor)	1 x PCIe Gen3 x8 slot
	Console Port	MicroUSB
	Management Port	1x RJ-45 connector
	VGA	DB-15
	USB	1xUSB 3.0, Type-A
Node Storage	2.5" Device	SKU B: PCIe Gen4 x4 or SATA 6Gb SSD, up to 15mm height
	M.2 Device	2 x SATA 6Gb/s or PCIe Gen3 x4 M.2 SSD (2280) slots
TPM	TPM module	Optional
Server Management	Solution	Onboard ASPEED AST2500 IPMI 2.0 based on Advantech IPMI Core
BIOS	Solution	Redundant AMI 32MB SPI Flash

*Please contact your local Advantech sales representative for other SKU demand.

Front View



Rear View



MIC-8320 Mainboard

