SKY-712V4

1U High Performance Server based on Intel® Xeon® 6 Processor

Features

- 1U 31" deep rackmount server
- Dual Intel® Xeon® 6 processor
- DC-MHS M-FLW motherboard
- 32 x DDR5 DIMM slots (16 DIMM per CPU), maximum up to 4TB, speeds up to 6400MHz(1DPC)/5200(2DPC)
- 2 x PCIe Gen5 x16 (FH | 3/4L)
- 1 x OCP3.0 Gen5 x16
- 16 x E3.S /12 x U.2 NVMe drives
- 2 x NVMe 2280 M.2 drives
- IPMI 2.0-compliant management with reliability and security enhancements

Introduction

Introducing our latest product, designed to revolutionize your computing experience with its exceptional multitasking performance. Powered by the Intel® Xeon® 6 scalable processor, which delivers superior performance per watt, higher core density, and enhanced rack density for networking workloads, this system achieves exceptional performance and low total cost of ownership (TCO) for edge workloads. Equipped with 32 DDR5 RDIMM modules running at speeds up to 6400MHz 1DPC, this system ensures robust computational power. It effortlessly handles complex workloads and high-efficiency multitasking, making it an ideal choice for demanding environments such as networking optimization, video broadcasting, data centers, research institutions, and enterprises requiring high-performance computing.

Our product features a modular and scalable architecture, utilizing the DC-MHS M-FLW motherboard design. This allows for seamless integration and optimization, making it perfect for modern data centers and diverse IT environments. The all-NVMe storage design supports up to 16 E3.S NVMe drives or 12 U.2 NVMe drives, optimized for high-speed data access, rapid throughput, and efficient handling of large workloads. This makes it particularly suitable for industries like finance, healthcare, and technology, where data-intensive applications are critical.
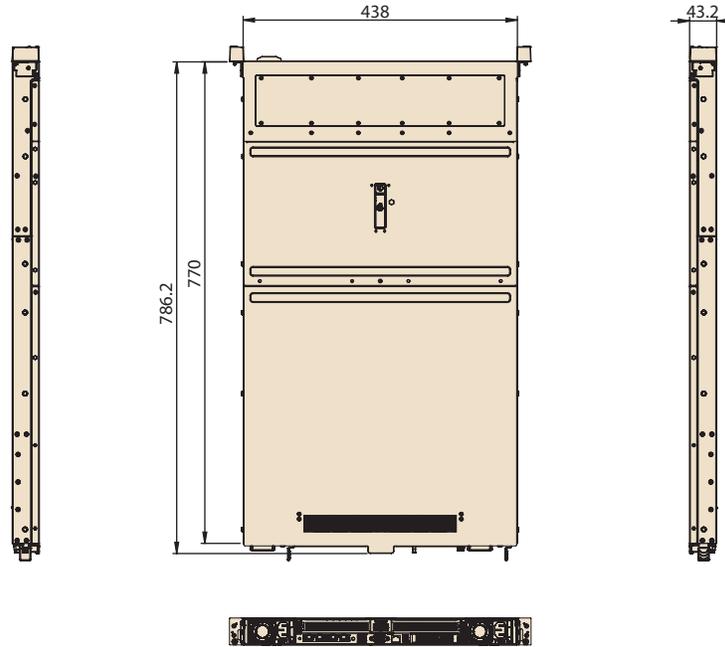
Additionally, the optimized air cooling solution incorporates hot-swappable fan modules to enhance maintenance and airflow optimization. Combined with a dual-sided PSU configuration to separate heat, it ensures efficient thermal management for up to 250W TDP. The tool-free, easy-to-maintain design includes tool-less access features like top cover handles and optimized fan modules, improving cable management and simplifying maintenance. Enhanced security is provided through IPMI 2.0-compliant management with reliability and security enhancements, ensuring your system remains secure and reliable. This product is ideal for IT professionals, system administrators, and organizations prioritizing security and reliability in their operations.

Specifications

Processor System	CPU	Two Intel® Xeon® 6 processors , CPU TDP up to 250W
Memory	Technology	DDR5 DIMM slot, supports registered ECC DDR5 DIMM only
	Max Capacity	Max memory up to 2TB 6400MHz(1DPC)/4TB 5200 MHz(2DPC)
	Socket	32 x 288-pin DIMM
PCIe	Expansion slot	2 x PCIe Gen5 x16 (FH|3/4L) 1 x OCP3.0 Gen5 x16
IO and LEDs	Front IO and LEDs	USB3.2 Gen1; Power button/LED; ID button/LED; Reset button; Status LED*
	Rear IO	ID button/LED; VGA; 2x USB3.2 Gen 1; RS-45 Console; Software definable button
Ethernet	Management Interface	NC-SI (BMC to I210-AT)
	LAN	2 x RJ45 1 GbE/2 x 10Gbase-T
	LAN Controller	1 GbE: Intel i210-AT/10 GBase-T: Intel X710-AT2
Storage		16 x E3.S or 12 x U.2 NVMe drive 2 x NVMe 2280 M.2 drive
Power Supply	Input	1600W 1+1 platinum redundant power supply with PMBus
Environment	Humidity Operational (non-condensing)	95%@40 °C
	Operation Temperature	0 °C (32 °F) to 35 °C (95 °F)
	Storage Temperature	-40 °C (-40 °F) to 70 °C (158 °F)
Cooling	Chassis Fan	8x 4056 fan with SmartFan control
	Thermal Control	Three separate thermal zones for motherboard and PCIe cards
	Redundancy	Resilient to single fan failure
System Management	IPMI2.0 and Redfish API	Aspeed AST2600 BMC with Advantech System Management Solution Advanced Lights Out Management compliant to IPMI2.0 with security and availability enhancements iKVM Support Advantech Web GUI style Node Manager Configurable shared or dedicated NIC support Optional TPM 2.0 Optional Secure Boot Chassis Intrusion Protection Cryptographically signed BMC firmware, optional signed BIOS firmware NIST.SP.800-193 Sustainable, see https://campaign.advantech.online/en/Cloud-IoT/software/pop_EnhancedSecurity.html
Physical	Dimensions (W x D x H)	438.0 x 770.0 x 43.2 mm (17.2" x 30.3" x 1.7")
	Weight	20kg

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Dimensions

Unit: mm

438

786.2

770

43.2

Front View

SKY-712V4-316R0000

SKY-712V4-N12R0000

Rear View

Ordering Information

Part Number	Description
SKY-712V4-316R0000	31" 2-socket 1U Server Intel® 6 Processor, 16 x E3.S NVMe drive, 2 x PCIe G5 x16 FH3/4L slot, 1 x OCP3.0 slot, AC 1600W 1+1 Power Supply
SKY-712V4-N12R0000	31" 2-socket 1U Server Intel® 6 Processor, 12 x U.2 NVMe drive, 2 x PCIe G5 x16 FH3/4L slot, 1 x OCP3.0 slot, AC 1600W 1+1 Power Supply

Optional Accessories

Part Number	Description
1700027909-02	Power cable 3P 183 cm, USA
1702002605	Power cable 3P 180 cm, Europe
1700000237	Power cable 3P 180 cm, JP
1700009652	Power cord 3P 180 cm, China
968DE00079	1U SKY-7 slide rail