

SKY-8100(EX)

1U Industrial Grade Server based on Intel® Xeon® Processor Pentium & Xeon® D series



Features

- 1U network server, < 20" deep
- Supports Intel® Pentium® Processor D-1519, Intel® Xeon® Processor D-1539 with Extended Temperature (eTEMP)
- Four DIMM sockets support 128GB Maximum Memory Capacity with 4x DDR4 DIMMs (ECC/RDIMM)
- -20°C to 70°C Extended Operating Temperature
- Power Surge & ESD Protection
- Withstand High Shock and Vibration
- Air Filter to Prevent Dust
- Supports PCIe Gen3
- 2 x PCIe x 8, Full-Height/Full-Length
- 2 x 2.5" hot-swappable HDDs or on board SFF SSDs
- LOM (Light Out Management) module for BMC support (AST2400)



Introduction

The Advantech SKY-8100 is a highly configurable industrial-grade server designed to balance the best in x86 server-class processing performance with maximum I/O and offload density in a 20" depth chassis. The system is a cost effective, highly available platform optimized to meet the requirements of industrial environment. It is specifically designed for industrial applications with extended operating temperature, power surge & ESD protection, high shock & vibration, and dust prevention features. Intel eTEMP is a stringent operating temperature range that ensures that a electrical and mechanical component can operate reliably in a -20°C to 70°C environment. SKY-8100 comes with special circuit design to tackle with power surge and has air filter in the front panel that blocks external dust. Architected around single 5th Intel® Pentium® Processor and Intel® Xeon® Processor D series, the SKY-8100 combines cutting-edge performance with the ruggedness, reliability, and long system lifecycles required by both industrial and networking equipment providers. The system supports single Intel® Pentium D-1519, Intel® Xeon® Processor D-1539 with a maximum memory capacity up to 128GB with 4 DIMM sockets.

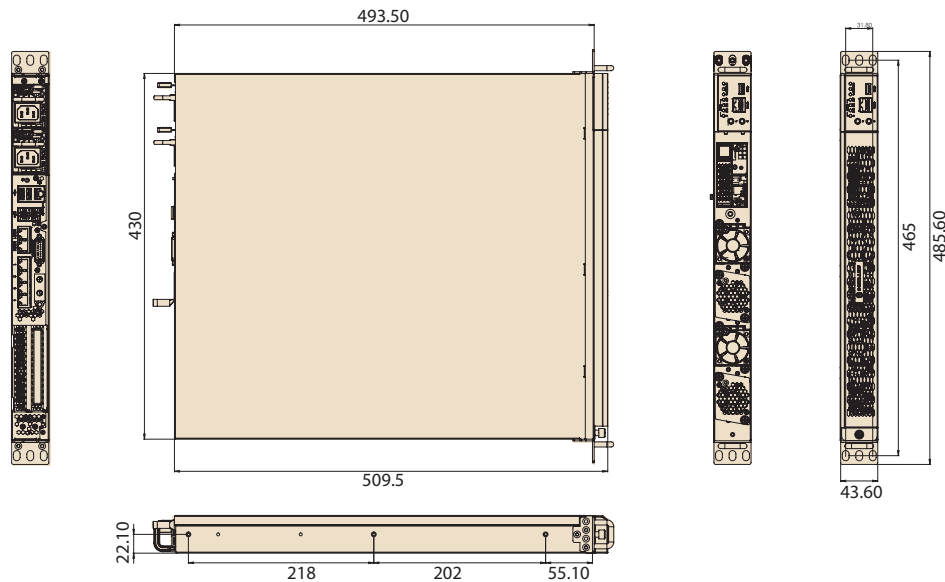
The system provides hot-swappable and redundant 650W power supply modules, 4 sets of hot-swappable fans, 2 hot-swappable hard disk drives, and 2 FH/FL PCIe expansion slots. A management card provides 4 GbE Ethernet ports, 2 10GbE ports, 2 USB and a TAM alarm module connector. The SKY-8100 applies to industrial grade environments where there are noise, dust, cold & hot air, and unstable power supply.

Specifications

Processor System	CPU	Supports Intel® Pentium D-1519, Intel® Xeon® Processor D-1539
Memory	Technology	4 x DDR4 DIMMs, ECC/non-ECC, RDIMM, 1600/1866/2133/2400 MHz
	Capacity	Max memory capacity per channel RDIMM: 64GB RDIMM: 32GB per slot Max system memory capacity RDIMM: 128GB RDIMM: 32GB x 4 DIMM
	Socket	4 x 288-pin DIMM
PCIe	Expansion slot	Total 2 x PCIe x8 FH/FL
IO	Front Mgmt IO	1 x PWR button, 1 x ID button, 1 x RJ45-type console, 2 x USB, LEDs
	Rear Mgmt IO	1 x RJ45-type console, 1 x DB15 for TAM, 2 x USB, 2 x GbE Mgmt ports (1 for IPMI) 4 x GbE Ethernet ports, 2 x 10GbE Ethernet ports, 1 x VGA (Optional)
Ethernet	Management Interface	10/100/1000 Mbps
	Controller	GbE LAN1: Intel® I210-AT, GbE LAN2: Intel® I210-AT
	Connector	RJ-45 x 2
	Traffic Interface	10/100/1000 Mbps, 10Gbps
Storage	Controller	GbE LAN1-LAN4: Intel® I350-AM4, 10Gbps LAN1-LAN2: Intel® BDE
	Connector	RJ-45 x 4, SFP x 2
Power Supply	Watt	2 x 2.5", hot-swappable, SATA/SSD trays in front 650W AC/DC Redundant PSU
	Input	(AC) 100-240V _{AC} , 12-10A, 50-60Hz (DC) -36 ~ -72V _{DC} , 25-11A
Environment	Relative Humidity (non-condensing)	95% @ 40°C
	Operational temperature	-20°C (-4°F) to 70°C (158°F)
	Storage temperature	-40°C (-40°F) to 85°C (185°F)
	Vibration During Operation	With HDD: 0.3Grms, IEC 60068-2-64, random, 5-500Hz, 3 axes, 1hr/axis
Certificate	Shock During Operation	With HDD: 10G, IEC 60068-2-27, half sine, 11 ms duration
	EMC	CE/FCC Class B, ESD Air*+/-15KV" & Contact*+/-8KV", Surge Line to Earth*+/-4KV" & Line to Line*+/-2KV"
Cooling	Safety	UL, CB, CCC
	Chassis Fan	4 * 40 x 56 high speed fan
System Management	Air Filter	Yes
	IPMI	Aspeed AST2400 Supports IPMI 2.0 Supports iKVM Shared NIC via NC-SI on management LAN ports
Physical	Dimension (W x D x H)	430 x 493.5 x 43.6 mm (16.93" x 19.43" x 1.72")
	Weight (N.W)	15kg

Dimensions

Unit: mm [inch]



Front View



Rear View



Ordering Information

Part Number	Description
SKY-8100AE-0000E	1U HPS w GSMB-3010 Intel® Pentium D-1519 4C/STD AC/PCIEx8
SKY-8100BE-0000E	1U HPS w GSMB-3010 Intel® Xeon D-1539 8C/STD AC/PCIEx8
SKY-8100AE-0001E	1U HPS w GSMB-3010 Intel® Pentium D-1519 4C/STD DC/PCIEx8
SKY-8100BE-0001E	1U HPS w GSMB-3010 Intel® Xeon D-1539 8C/STD DC/PCIEx8
SKY-8100BE-CP01E	1U HPS w GSMB-3010 Intel® Xeon D-1539 8C/STD DC/PCIEx8 (Operating temperature: -20°C ~ 70°C) PS: For more details, please contact your Advantech Key Account Sales.

Packing List

Part Number	Description	Qty
9680017059	20" slide rail (pair)	1
1700012372-11	Console cable	1

Optional Accessories

Part Number	Description
1702002600-02	Power Cord 3P UL/CSA(USA) 125V 10A 1.83M 180D
1702002605-02	Power Cord 3P European 10A/16A 250V 1.83M 90D
1702031801	Power Code 3P (UK) 5A-Fuse 183cm
1700000237-01	Power Cord 3P PSE 12A 125V 1.83M Japan

Peripherals with eTEMP

Part Number	Description
96D4I-4G2400R-ATL	4G DDR4 2400 512x8 RDIMM
96D4I-8G2400R-ATL	8G DDR4 2400 1Gx8 RDIMM
96D4I-16G2400R-ATL	16G DDR4 2400 2Gx4 RDIMM
96FD25-S512-PLG2	512GB 2.5" SATA3 MLC SSD
96FD25-S1TB-PLG2	1TB 2.5" SATA3 MLC SSD
96FD25-S512-ITR4	512GB 2.5" SATA3 MLC SSD
96FD25-S1TB-ITR4	1TB 2.5" SATA3 MLC SSD