

# SKY-8100

## 1U Carrier Grade Server based on Intel® Pentium® Processor D and Intel® Xeon® Processor D series



### Features

- 1U network server, < 20" deep
- Supports Intel® Pentium® Processor D1508, Intel® Xeon® Processor D-1527, D-1528, and D-1548
- Four DIMM sockets support up to 128 GB DDR4 1600/1866/2133/2400 MHz SDRAM(ECC/UDIMM)
- Supports PCIe Gen3
- 2 x PCIe x8, Full-Height/Full-Length
- 2 x 2.5" hot-swappable HDDs or on board SFF SSDs
- Carrier Grade BIOS Features
- LOM (Light Out Management) module for BMC support (AST2400)
- Red Hat certified, including Red Hat Enterprise Linux, Red Hat Virtualization, Red Hat Enterprise Linux for Real Time, and Red Hat Openstack Platform
- VMware ESXi 6.7 U3 certified



### Introduction

The Advantech SKY-8100 is a highly configurable carrier-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 next-generation networking equipment needs. It is specifically designed for applications where offload and acceleration technology is essential. The power and cooling options along with the streamlined mechanical design make it ideal for Digital Signal Processing and other high tdp PCIe adapter cards. Architected around single 5th Intel® Pentium® Processor and Intel® Xeon® Processor D series, processors, the SKY-8100 combines cutting-edge performance with the ruggedness, reliability, and long sytem lifecycles required by both industrial and networking equipment providers. The system supports single Intel® Pentium D-1508, Intel® Xeon® Processor D-1527, D-1528, and D-1548 with a maximum memory capacity up to 128GB with 4 DIMM sockets.

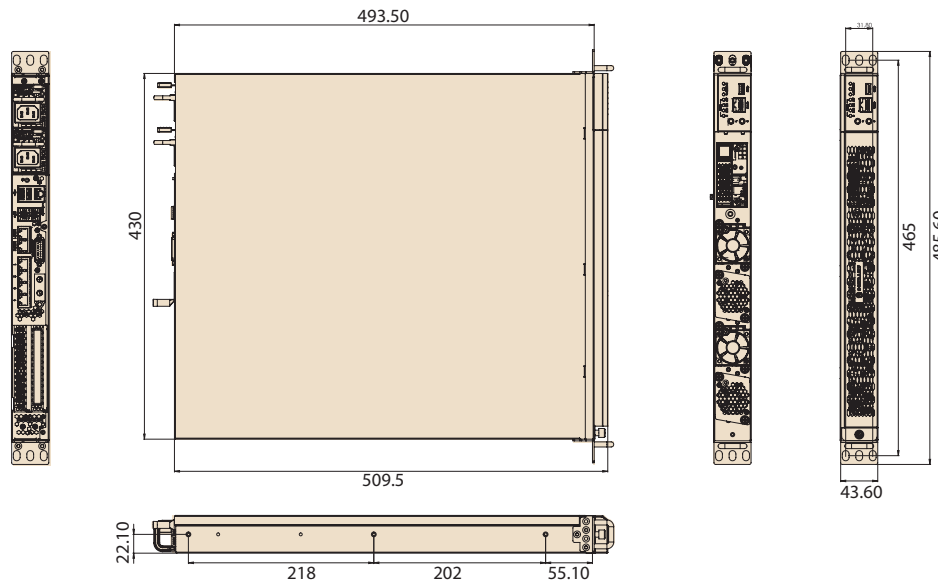
The system provides hot-swappable and redundant 650W power supply modules, 4 sets of hot-swappable fans, 2 hot-swappable hard disk drives, and 2 FH/FL PCIe expansion slots. A management card provides 4 GbE Ethernet ports, 2 10GbE ports, 2 USB and a TAM alarm module connector. The SKY-8100 is designed for NEBS Level 3 carrier grade environments and where limited rack space is available. Interoperability testing is performed with a wide selection of third-party PCIe card vendors.

### Specifications

Processor System	CPU	Supports Intel® Pentium D-1508, Intel® Xeon® Processor D-1527, D-1528, and D-1548
Memory	Technology	4 x DDR4 DIMMs, ECC/non-ECC UDIMM/RDIMM, 1600/1866/2133/2400 MHz
	Capacity	Max memory capacity per channel RDIMM: 64GB UDIMM: 32GB RDIMM: 32GB per slot UDIMM: 16GB per slot Max memory capacity total in system RDIMM: 128GB UDIMM: 64GB RDIMM: 32GB x 4 DIMMs UDIMM: 16GB x 4 DIMMs
	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, For VGA SKU, please contact Advantech local representatives
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
	Watt	2 x 2.5", hot-swappable, SATA/SSD trays in front
Power Supply	Watt	650W AC/DC Redundant PSU
	Input	(AC) 100-240V <sub>ac</sub> , 12-10A, 50-60Hz (DC) -36 ~ -72V <sub>dc</sub> , 25-11A
Environment	Humidity operational (non-condensing)	5% to 85%
	Operational temperature	-5 °C (23 °F) to 55 °C (131 °F)
	Storage temperature	-40 °C (-40 °F) to 70 °C (158 °F)
Cooling	Chassis Fan	4 * 40 x 56 high speed fan
	Air Filter	Yes
System Management	IPMI	Aspeed AST2400 iBMC
		Supports IPMI 2.0
		Supports iKVM
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-8100AS-0000E	1U HPS w GSMB-3010 Intel® Xeon® Processor D-1548 8C/STD AC/PCIEx8
SKY-8100BS-0000E	1U HPS w GSMB-3010 Pentium® Processor D1508 2C/STD AC/PCIEx8
SKY-8100CS-0000E	1U HPS w GSMB-3010 Xeon® Processor D-1527 4C/STD AC/PCIEx8
SKY-8100DS-0000E	1U HPS w GSMB-3010 Xeon® Processor D-1528 6C/STD AC/PCIEx8
SKY-8100AS-0001E	1U HPS w GSMB-3010 Xeon® Processor D-1548 8C/STD DC/PCIEx8
SKY-8100BS-0001E	1U HPS w GSMB-3010 Pentium® Processor D1508 2C/STD DC/PCIEx8
SKY-8100CS-0001E	1U HPS w GSMB-3010 Xeon® Processor D-1527 4C/STD DC/PCIEx8
SKY-8100DS-0001E	1U HPS w GSMB-3010 Xeon® Processor D-1528 6C/STD DC/PCIEx8

**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