

SKY-8132S

Compact 1U Edge Server based on 3rd Gen Intel Xeon Scalable Processors

Preliminary



Features

- 1U 20.4" deep rackmount server for 5G Open RAN and edge computing
- Single 3rd Gen Intel® Xeon® Scalable Processor supporting Platinum, Gold and Silver SKUs
- 8 x DIMM sockets DDR4 3200 MHz DDR4 (ECC/RDIMM/LRDIMM)
- 2 x FH/FL PCIe x16 Gen4 and 2xFH/HL PCIe x16 Gen4 slots
- 4 x 2.5" SATA/NVMe HDD/SSD drives
- 2 x M.2 2280 SATA SSD
- IPMI 2.0 and Redfish compliant system management with reliability and security enhancements
- Optional LCM module and dust filter



Introduction

The Advantech SKY-8132S is a highly efficient, high performance, carrier-grade edge server designed to balance the best in x86 server-class processing with maximum I/O and offload density in a 20" depth chassis. The system is a cost effective, robust platform optimized for superior reliability in business critical applications including, but not limited to, communications, edge and industrial high performance computing. It is specifically designed for high density PCIe card payloads where maximum IO connectivity is needed or the integration of industry leading offload and acceleration technology is essential. The power and cooling options along with the streamlined mechanical design make it ideal for demanding applications requiring high performance acceleration technologies such as GPU, DSP and FPGA cards or dedicated vRAN accelerators.

Architected around the 3rd Gen Intel Xeon Scalable processor, the single-socket SKY-8132S combines cutting-edge performance with the ruggedness, reliability, and long system lifecycles required by the industry. Advantech's customized COTS framework for specific semi-custom electronic, mechanical design and BIOS firmware strings enable the system offers best-in-class integration in a compact 1U, 20" deep form factor.

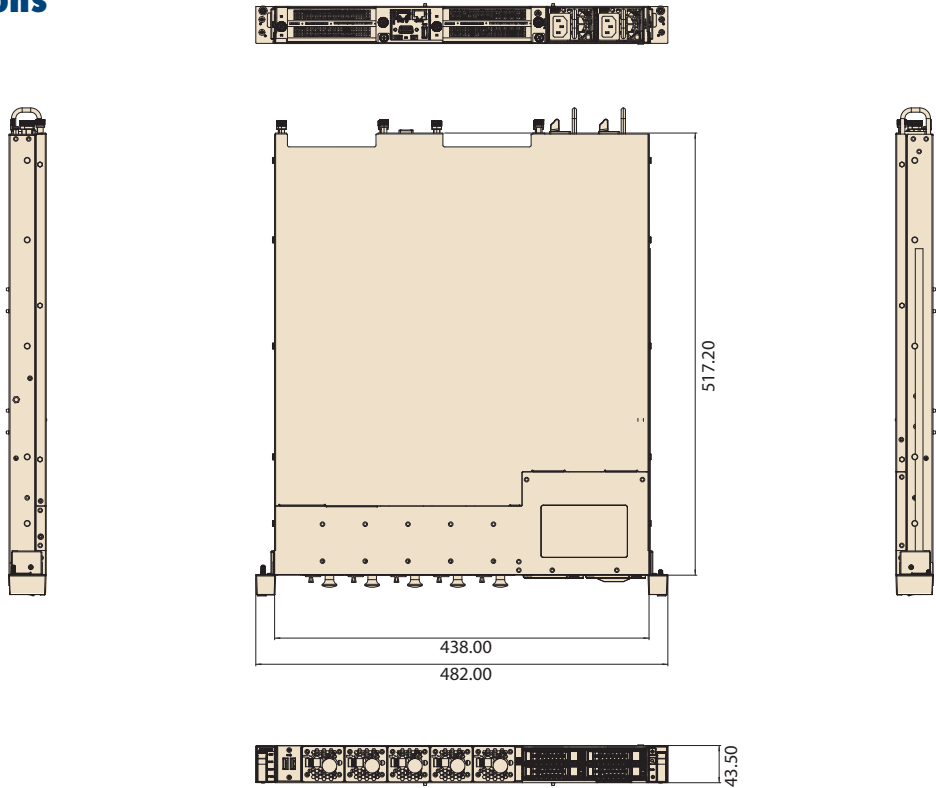
The SKY-8132S is designed to withstand extended environmental conditions in terms of shock, vibration and operating temperature. An optional replaceable front air filter is supported to cope with dust. Redundant power supplies, the ability to withstand single fan failures, redundant firmware images with failsafe upgrades and hot swappable FRUs make the SKY-8132S the platform of choice for applications requiring zero downtime. The SKY-8132S 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	Single socket 3rd Generation Intel® Xeon® Scalable Processor up to 185W TDP	
	Chipset	Intel® PCH C62xA series	
Memory	Technology	Up to 8x 3200MHz DDR4 ECC Standard ECC RDIMM/LRDIMM	
	Max Capacity	Max capacity per channel: 64GB Max total capacity per system: 512GB	
	Socket	8 x 288-pin DIMM	
PCIe	Expansion slot	2x rear PCIe x16 (FH/FL), plus 2x rear PCIe x16 (FH/HL) or 2x rear PCIe x8 expansion slots(LP) for Advantech Personalization card	
	Front IO	2 x USB, PWR, Status and ALARM LEDs	
IO	Rear IO	1 x GbE LAN RJ45(Management port), 1 x VGA, 1 x USB3.0, 1 x Console port	
	Management Interface	NC-SI(BMC to I2010-IS)	
Ethernet	10/25GbE Ethernet	Via Add-on PCIe card	
	Controller	GbE LAN: Intel i210-AT support	
	Connector	1 x RJ45	
Storage	Front Access	Up to 4x hot-swap SFF SATA3/NVMe U.2(optional)	
	Internal (on-board)	2x M.2 2280 (SATA3/PCIe)	
Power	Input	700W AC/DC (AC) 100 - 240Vac, 9-4A, 50-60Hz (DC) -44 - -65Vdc, 18-10A (DC) -36 - -72Vdc, 40-25A	
	Output Current Rating	700W AC/DC PSU 100-240Vac, 9-4A, 50-60Hz 600W DC/DC PSU -44 - -65Vdc, 18-10A	
Environment	Temperature	Operating -5 - 55°C (23 - 131°F)	Non-operating -40 - 70°C (-40 - 158°F)
	Humidity	50% @25°C to 95% @40°C (non condensing)	95% @60°C (non-condensing)
Cooling	Chassis Fan	5 x high speed fans	
	Thermal Control	Two separate thermal zones for motherboard and Full Length (FL) PCIe cards	
	Reliability	Resilient to single fan failure	
	Air Filter	Yes (Optional)	
System Management	IPMI2.0 and Redfish API	Aspeed AST2500 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	
		Physical	Dimensions (W x D x H) Net Weight

Dimensions

Unit: mm [inch]



Front View



Rear View



Ordering Information

Part Number	Description
SKY-8132SAS-A000E	20" 1U server, single Intel® Xeon® Scalable Processor, Intel® Whitley Platform LBG-R chipset, AC 700W PSU, 4x2.5" HDD/SDD slot, 2xFH/FL slots, 2xLP slots
SKY-8132DAS-D000E	20" 1U server, single Intel® Xeon® Scalable Processor, Intel® Whitley Platform LBG-R chipset, DC 600W PSU, 4x2.5" HDD/SDD slot, 2xFH/FL slots, 2xLP slots

Optional Accessories

Part Number	Description
SKY-8132S-SLRLKE	Slide rail set for SKY-8132S
SKY-8101S-PSUACE	AC PSU Module, 700W, common with SKY-8101S
SKY-8101S-PSUDCE	DC PSU Module, 600W, common with SKY-8101S
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
1700000237-01	Power Cord 3P PSE 12A 125V 1.83M Japan