SKY-8134S-11

Ultra-short Depth 1U Edge Server based on 4th Gen Intel Xeon Scalable Processor

Features

- 1U 11" ultra-short depth rackmount server for 5G vRAN, Open RAN and edge computing
- Single 4th Generation Intel® Xeon® Scalable Processor supporting Platinum, Gold and Silver SKUs with Intel vRAN Boost
- 8x DIMM sockets for DDR5 4800MHz RDIMM, up to 5600MHz
- Up to Up ot 16x 25G onboard ports
- Onboard IEEE 1588 PTP, SyncE and integrated GNSS for high-precision timing sync
- 1 x PCIe Gen5 x16 FH|HL
- 2 x M.2 2280 SATA3/NVMe SSD
- Customizable Telecom Alarm Module
- IPMI 2.0 and Redfish compliant system management with reliability and security enhancements
- -40 ~ 65 °C operating temperature
- Optional field replaceable redundant DC power input units

CB CE FCC

Introduction

The SKY-8134S-11 is a carrier-grade server designed to meet vRAN and edge computing performance, sustainability and TCO objectives. It provides unrivalled density thanks to its LAN-on-Motherboard (LOM) design featuring up to up to sixteen 25G ports with high precision time synchronization for front-haul and mid-haul connectivity in an ultra-short-depth, 1U form factor. The server also provides an extra PCIe 5.0 or OCP 3.0 slot for additional acceleration or I/O.

To further optimize vRAN use cases, the SKY-8134S-11 supports 4th Gen Intel Xeon Scalable processor with Intel vRAN Boost that fully integrates vRAN acceleration into the Intel Xeon SoC. The server LOM design follows Intel reference architecture for 25G Intel Ethernet Network Adapter E810 with high-precision timing synchronization, which streamlines software validation supporting standard FW and drivers. In addition, the server is designed to support next generation Intel Xeon CPU for smoother technology transition.

The SKY-8134S-11 is designed for NEBS Level 3 carrier grade environments. It supports extreme wide range operating temperature (-40 to +65C), environmental shock, vibration and dust conditions. The SKY-8134S-11 ultra-compact form factor and front accessible network and power interfaces are ideal for network edge sites where limited space is available. The server can also be deployed in IP65 pole mount, roadside unit or street side cabinets. Its high reliability design including redundant DC power supplies, the ability to withstand single fan failures, redundant BIOS and firmware images with failsafe remote updates and hot swappable FRUs makes the SKY-8134S-11 the platform of choice for network edge applications requiring virtually zero downtime.

Specifications

Processor System	CPU	Single socket 4th Intel® Xeon® Scalable Processor	
	Chipset	Intel® C740 Series Chipsets	
Memory	Technology	Up to 8x 5600MHz DDR5 RDIMM/LRDIMM with ECC	
	Max Capacity	Max capacity per channel: 64GB Max total capacity per system: 512GB	
	Socket	8x 288-pin DDR5 DIMM	
PCIe	Expansion slot	1x standard FH|HL PCIe card (Gen5 x16)	
IO and LEDs	Front IO and LEDs	PWR, fan status, and alarm LEDs,1 x console port 2 SMA for 1PPS (one Input one Output).2x GE fiber ports (1x management port), 2x USB3.0 ports, and Telco alarm interface	
	Rear IO	None	
Ethernet	10/25/100GbE Ethernet	Up to 16x SFP28 ports w/ timing sync support (On-board ports that are not required for specific use cases can be factory-removed for cost optimization)	
	Management Interface	NC-SI (I210-IS), and dedicate Mgt (RTL8211)	
Storage		2x SATA3/PCIe M.2 2280 module	
Power	Input	1+1 800W redundant DC input feeds (A and B @-38V_{DC} ~ -72V_{DC}) Optional field replaceable DC power input units (@-38V_{DC} ~ -72V_{DC})	
Environment		Operating	Non-operating
	Temperature	-40 ~ 65°C (-40 ~ 149°F)	-40 ~ 70°C (-40 ~ 158°F)
	Humidity	50% @25°C to 95%@40°C (non condensing)	95% @60°C (non-condensing)
Cooling	Chassis Fan	9 x High Speed Fans	
	Thermal Control	Two separate thermal zones, one for payload and the other for power input, controlled by Advantech BMC solution	
	Redundancy	Resilient to single fan failure (applicable to 105W TDP CPU @65°C system inlet ambient or to 165W TDP CPU @55°C system inlet ambient)	
	Air Filter	ODM customizable	

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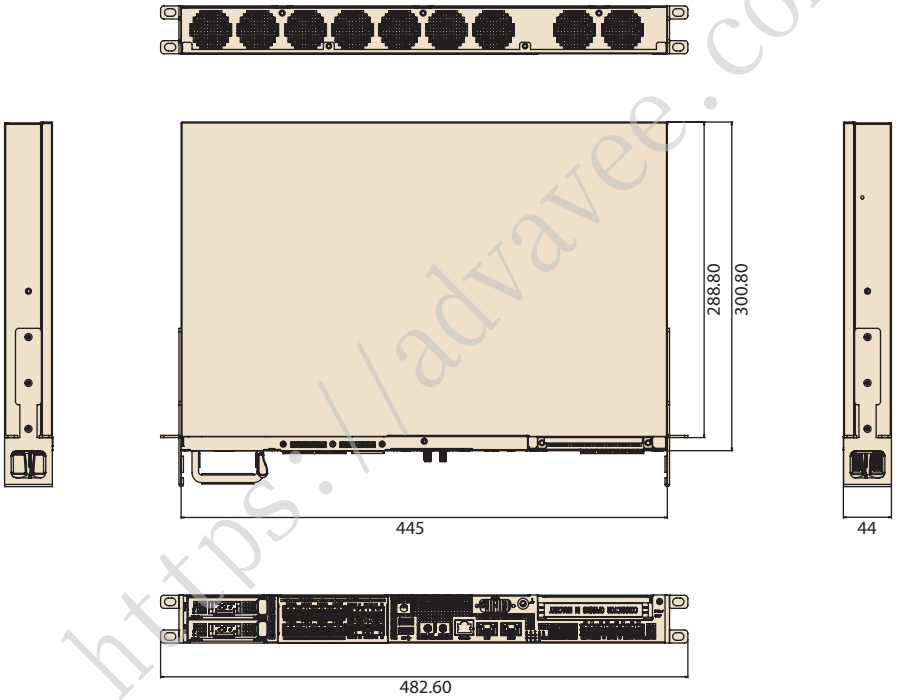
Specifications (Cont.)

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 ▪ Redfish API support ▪ iKVM Support Advantech Web GUI style Node Manager ▪ Configurable shared or dedicated NIC support
Physical	Dimensions (W x D x H)	445 x 288 x 43.8mm (17.5" x 11.5" x 1.72") Or, 445 x 331.5 x 43.8mm (17.5" x 13.1" x 1.72") with Remote Heatsink SKU (designed for 185W TDP CPU to meet 65°C operating temperature)
	Weight	Approximately 8kg

Dimensions

Unit: mm



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Front View

Rear View