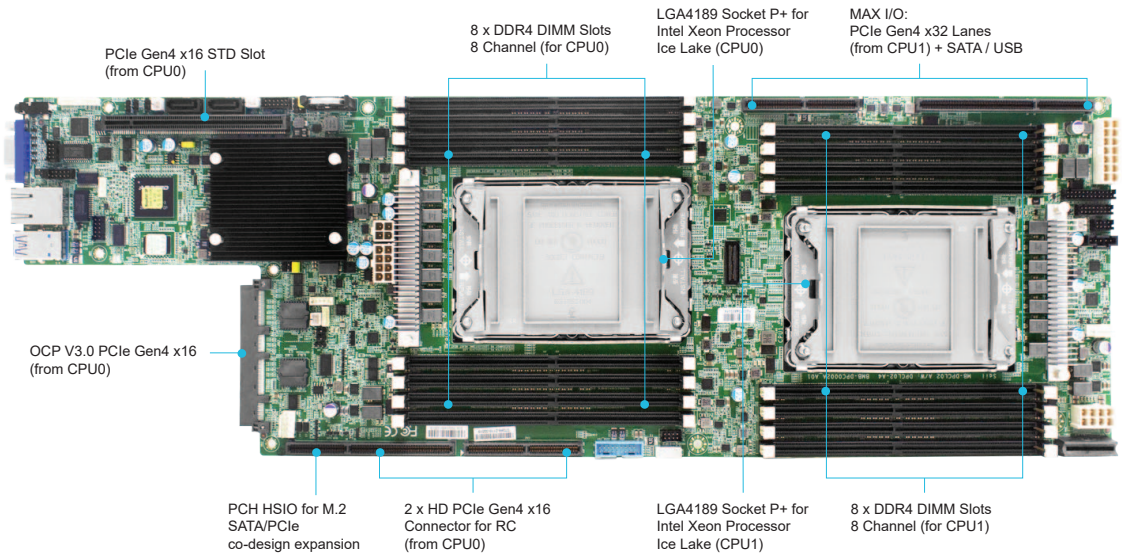
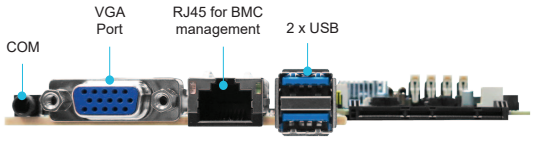
SAIL Server Board



I/O View



Dimensions

mm : 530 x 172.7 / inches : 21 x 6.8

The Sail server board offers the latest Xeon® Scalable Processors technology solutions with compelling performance and provides premium power efficiency, which is optimized for efficient performance platforms (storage, security and communications infrastructure)

By implementing Intel® Xeon® Scalable Processors, fully integrated microarchitecture supports up to 3 x 16 lanes of PCIe Gen4 with specific RC by only one CPU (CPU0) installation at 1U height, providing eight channels per CPU with total sixteen DIMM slots deployment which can support up to DDR4 3200/2933MHz, Sail server board can meet both cost efficiency and performance requirement for lots of applications.

Featured with ground breaking technologies including Intel® Next Generation Microarchitecture and Instruction Set (AVX-512, VMD), Speed Shift Technology, UPI link speeds up to 11.2GT/s, the Sail server board enables next generation server solutions with an incredible leap in performance.

Features

- Supports 3rd Gen Intel® Xeon® Scalable Processors for highest server performance and improved power efficiency
- Supports 16 DDR4 DIMM slots for maximum memory performance
- Supports up to 3 x 16 lanes of PCIe Gen4 with specific RC by only one CPU (CPU0) installation at 1U height
- Onboard Baseboard Management Controller for system management and IPMI control
- Embedded components for 5+ year long life
- Rackmount Technology Extension (RTX) form factor utilizes full internal chassis volume for optimum I/O configurations

Specifications

System	Processor Support	3rd Gen Intel® Xeon® Scalable Processors (Ice lake CPU)
	UPI Speeds	10.4 / 11.2 GT/s
	Socket Type	Socket P+ (LGA-4189)
	System Memory	• 8 x memory channels per CPU(1DPC) • 16 x DIMM slots support: DDR4 3200/2933MHz RDIMM/LRDIMM - up to 512GB RDIMM SRx4 (16Gb) - up to 1024GB RDIMM DRx4 (16Gb) - up to 4096GB RDIMM 3DS 8Rx4 (16Gb) - up to 2048GB LRDIMM QRx4 (16Gb) - up to 4096GB LRDIMM 3DS 8Rx4 (16Gb) • Intel® Optane™ DC Persistent Memory (Barlow Pass) support
	Expansion Slots	• CPU0: 1 x PCIe Gen4 x16 slot + 1 x OCP V3.0 + 2 x Gen4 x16 by High-Density Conn. • CPU1: PCIe Gen4 total 32 lanes @ MAX I/O
System BIOS	BIOS Type	AMI UEFI BIOS
	BIOS Features	• ACPI • PXE • AC loss recovery • IPMI KCS interface • SMBIOS • Serial console redirection • SRIOV • TPM • PCIe Hotplug
On-board Devices	SATA/PCIe	Intel® Lewisburg PCH C621A on-chip solution • 2 x SATA/PCIe Gen3 x2 co-design from PCH HSIO by High-Density Conn. • 2 x SATA 6.0 Gb/s (by 7pin SATA Conn.) 8 x SATA 6.0 Gb/s (by MAX I/O)
	BMC	Aspeed AST2500 Advanced PCIe Graphics & Remote Management Processor • Baseboard Management Controller • Intelligent Platform Interface 2.0 (IPMI 2.0) • iKVM, Media Redirection, IPMI over LAN, Serial over LAN • SMASH Support • HTML5 • Redfish

On-board Devices	Network Controller	• Intel I210-AT for BMC. Share NIC management port by onboard connector • Realtek RTL8211E GbE Ethernet for BMC dedicated management port
	Graphics	Aspeed AST2500 Advanced PCIe Graphics & Remote Management Processor • PCIe VGA/2D Controller • 1920x1200@60Hz 32bpp
Input/Output	SATA/PCIe	12 x SATA 6.0 Gb/s ports • 2 x SATA 6.0 Gb/s • 8 x SATA 6.0 Gb/s by MAX I/O 2 x SATA/PCIE 6.0 Gb/s by High-Density Conn. for extension
	LAN	• 1 x GbE RJ45 dedicated to BMC management • 1 x GbE by onboard pin header
	USB	• 2 x USB 3.0 Type A connectors • 2 x USB pin headers support USB3.0/2.0
	VGA	• 1 x external VGA port
	Serial Port	• 1 x external COM port by Audio Jack • 1 x internal COM2 pin-header • 1 x internal COM1 box header share with rear IO (Audio Jack)
	Others	• 1 x TPM 2.0 onboard