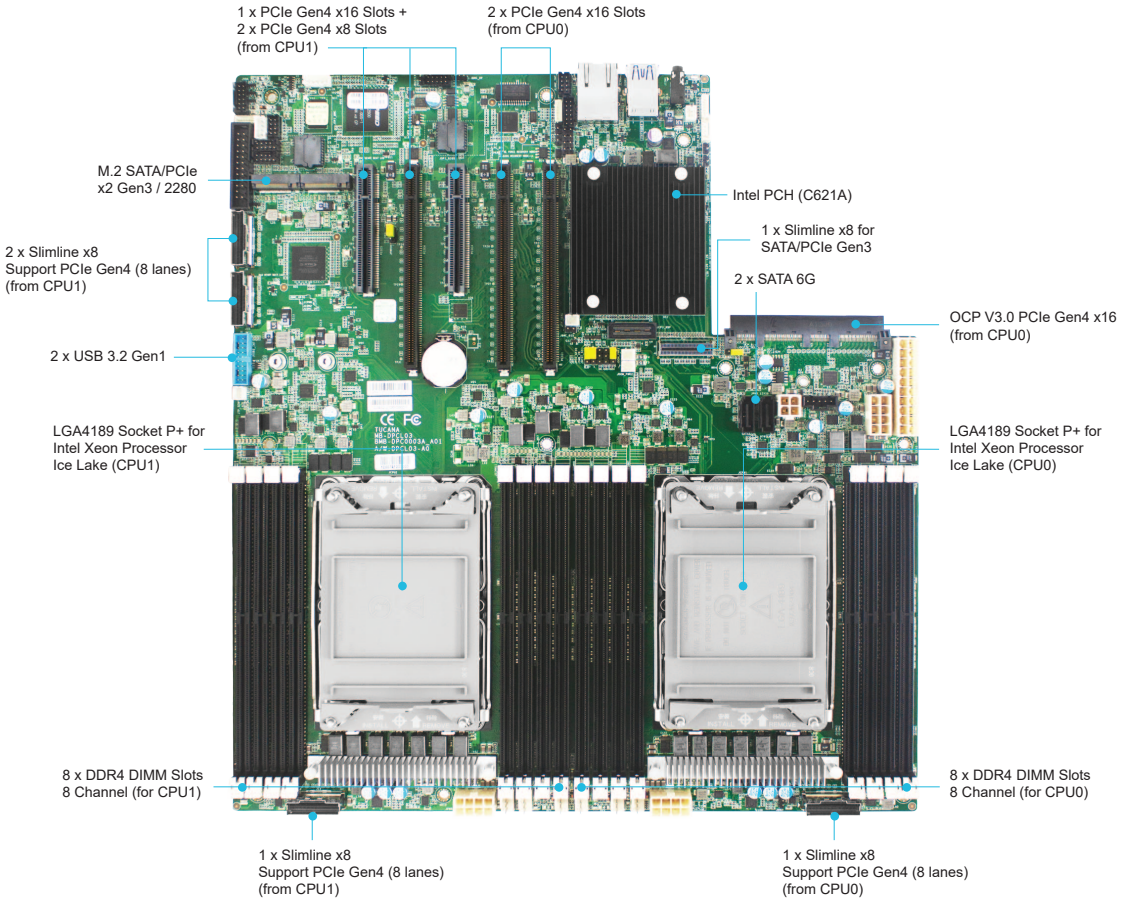
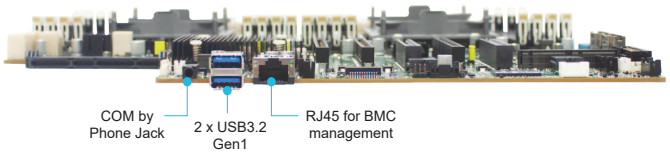
TUCANA Server Board



I/O View



Dimensions

mm : 304.8 x 330.2 / inches : 12 x 13

The Tucana 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, 2 x8 lanes, 4 slimline x8 of PCIe Gen4 and one OCP 3.0 PCIe Gen4, providing eight channels per CPU with total sixteen DIMM slots deployment which can support up to DDR4 3200/2933MHz, Tucana 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 Tucana server board enable 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, 2 x8 lanes, 4 x slimline x8, 1 x OCP 3.0 of PCIe Gen4
- 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)
	CPU TDP	270W
	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: 2 x PCIe Gen4 x16 slots + 1 x OCP V3.0 + 1 x slimline x8 • CPU1: 1 x PCIe Gen4 x16 slot 2 x PCIe Gen4 x8 3 x slimline x8
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	Lewisburg PCH on-chip solution supports 12 x SATA 6.0 Gb/s • 2 x SATA 7pin • 8 x SATA by Slimline + 2 x SATA by M.2 (supports both SATA/PCIe by PCH HSIO)
	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	• Realtek RTL8211E GbE for BMC dedicated management port (NCSI shared NIC - reserved for OCP & I210 by jumper setting) • Intel I210 GbE for BMC shared NIC management port by onboard connector (NCSI shared NIC - reserved for OCP V3.0)
	Graphics	Aspeed AST2500 Advanced PCIe Graphics & Remote Management Processor • PCIe VGA/2D Controller • 1920x1200@60Hz 32bpp
Input/Output	SATA	Lewisburg PCH on-chip solution supports 12 x SATA 6.0 Gb/s • 2 x SATA 7pin • 8 x SATA by Slimline + 2 x SATA by M.2 (supports both SATA/PCIe by PCH HSIO)
	LAN	• 1 x GbE RJ45 dedicated to BMC management
	USB	• 2 x USB3.2 double-stake Type A connectors • 2 x USB pin headers support USB3.2/2.0
	VGA	• 1 x internal VGA pin-header
	Serial Port	• 1 x external COM port • 1 x COM2 box header • 1 x COM1 box header share with rear I/O phone jack
	Others	• 1 x TPM 2.0 onboard