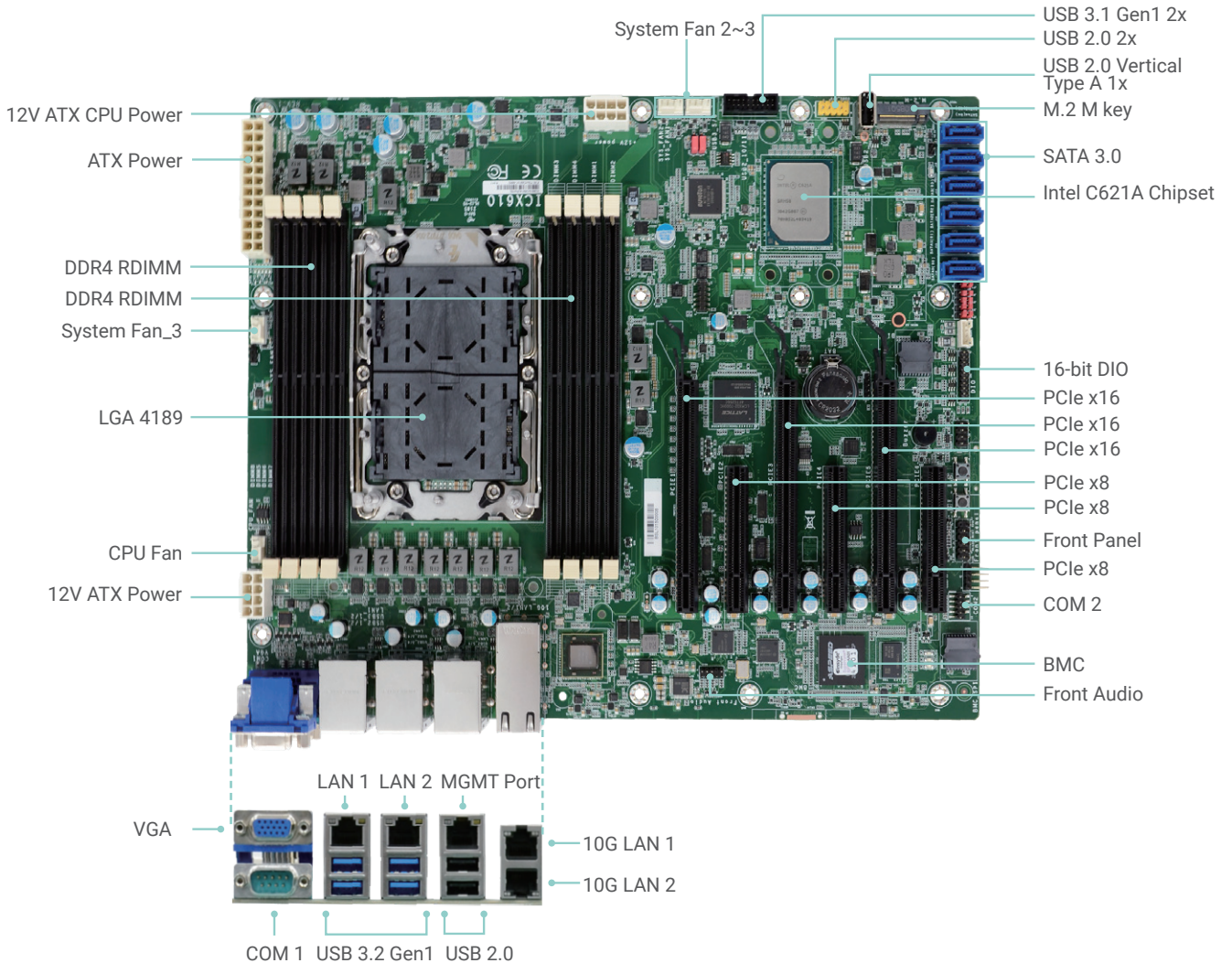


ICX610-C621A Server Grade

3rd Gen Intel® Xeon® Scalable Processor Family
ATX



Top View

KEY FEATURES



DDR4

8 ECC-RDIMM up to 512GB



10GLAN

2 10GbE



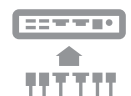
IPMI

OOB Remote Management



Multiple Expansion

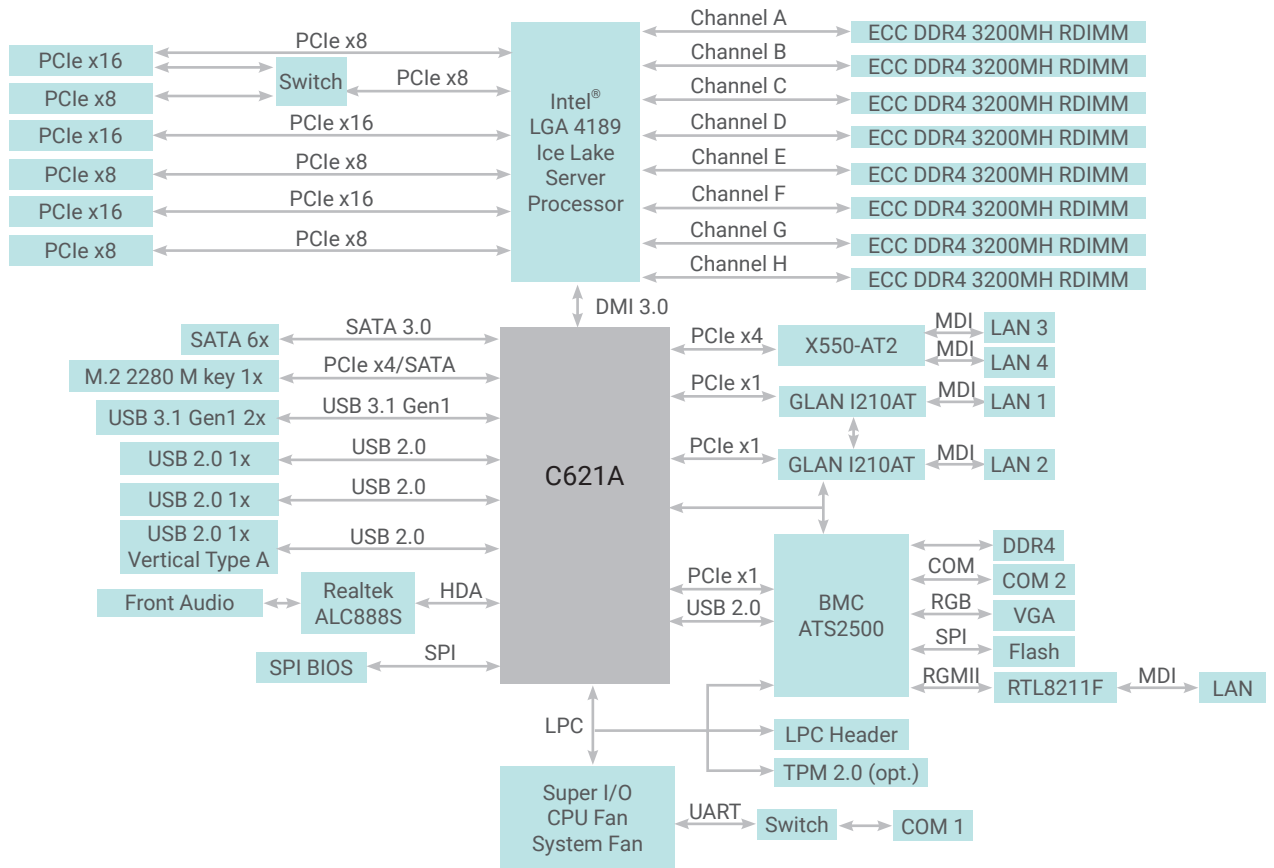
3 PCIe x16 (Gen4),
2 PCIe x8 (Gen4),
1 M.2 M key



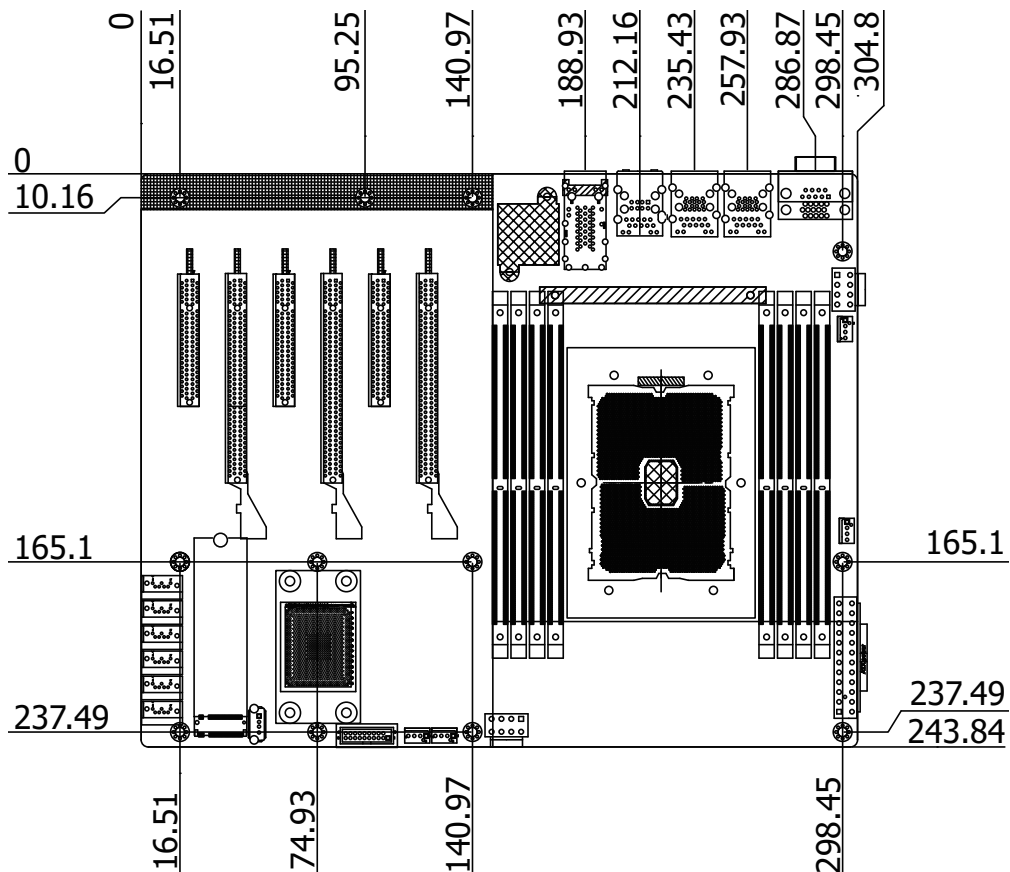
Rich I/O

2 Intel GbE, 2 COM,
1 Dedicated IPMI,
5 USB 3.1 Gen1, 5 USB 2.0

BLOCK DIAGRAM



MECHANICAL DRAWING



SPECIFICATION

System	Processor	3rd Gen Intel® Xeon® Scalable Processor Family, LGA 4189 (Socket P+)	
	Chipset	Intel® C621A Chipset	
	Memory	8 x 288-pin ECC-RDIMM up to 512GB Single Channel DDR4 up to 3200 MHZ	
	BIOS	Insyde SPI 128Mbit	
Graphics	Controller	BMC AST2500	
	Display	1 x VGA	VGA: resolution up to 1920x1200 @ 60Hz
	Single Display	VGA	
Expansion	Interface	3 x PCIe x16 (Gen 4)(Slot 1 share w/ 2 x8)	
		2 x PCIe x8 (Gen 4)	
		1 x M.2 2280 M key (SATA/PCIe Gen3 x4 NVMe)	
Audio	Audio Codec	ALC888S	
Ethernet	Controller	2 x Intel® I210AT PCIe (10/100/1000Mbps)	
		2 x Intel® X550-AT2 PCIe (10Gbps)	
		IPMI: RTL8211F	
Rear I/O	Ethernet	2 x GbE (RJ-45)	
		2 x 10GbE (RJ-45)	
		1 x Dedicated IPMI LAN	
	Serial	1 x RS-232 (DB-9)	
	USB	4 x USB 3.1 Gen1 (w/ RJ45 + USB 3.1 stack) 2 x USB 2.0 (w/ RJ45 + USB 2.0 stack)	
Internal I/O	USB	2 x USB 3.1 Gen1	
		2 x USB 2.0	
		1 x USB 2.0 Vertical Type A	
	Serial	1 x RS-232 (2x5-pin)	
	Audio	1 x Front Audio Header	
	SATA	6 x SATA 3.0 (up to 6Gb/s)	RAID 0/1/5/10
	LPC	1 x LPC	
	DIO	1 x 16-bit DIO	
SMBus	1 x SMBus		
Watchdog Timer	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
Security	TPM	Infineon TPM2.0 (opt., MOQ required)	
Power	Type	ATX	
	Connector	8-pin ATX 12V CPU power	
		24-pin ATX power	
	Consumption	TBD	
Battery	CR2032 Coin Cell		
OS Support	Windows	Windows 10 IoT Enterprise LTSC RS5(64-bit) Windows Server 2019	
	Linux	Ubuntu 20.04	
Environment	Temperature	Operating: -5 to 65°C	
		Storage: -40 to 85°C	
	Humidity	Operating: 5 to 90% RH, Non-condensing Storage: 5 to 90% RH, Non-condensing	
Mechanism	MTBF	TBD	
	Dimensions	ATX Form Factor 305mm (12") x 244mm (9.6")	
	Height	PCB: 1.6mm	Top Side: 37.34mm

PACKING LIST

1 ICX610-C621A Motherboard	
2 M.2 screw	A32-112016-041G
1 CPU Clip	TBD

OPTIONAL ITEMS

USB 2.0 port cable (Length: 350mm)	A81-001066-016G
Cooler	TBD
USB 3.1 Gen1 cable (Length: 320mm)	A81-001052-023G
Serial ATA data cable (Length: 500mm)	332-553001-005G