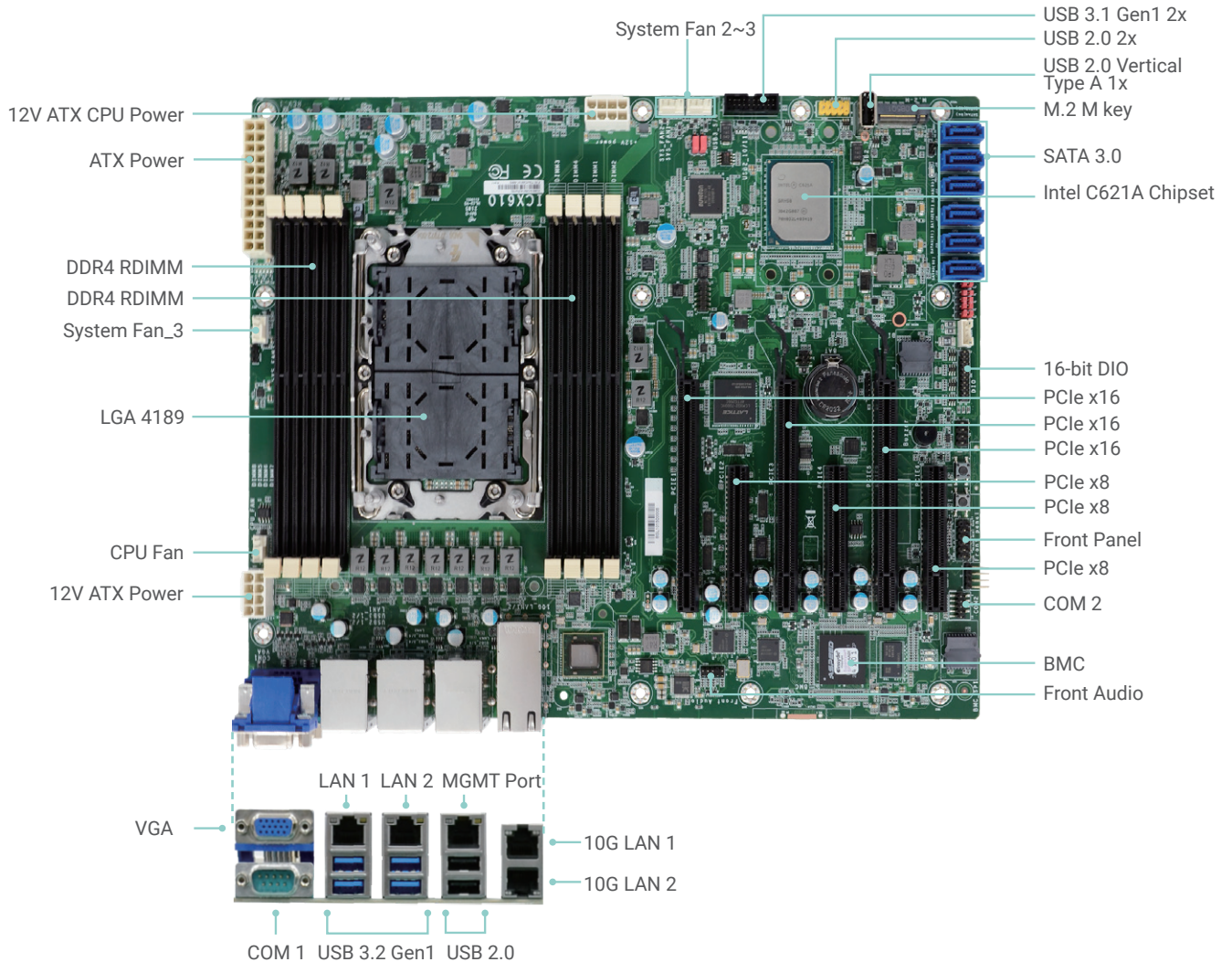


# ICX610-C621A Server Grade

3rd Gen Intel® Xeon® Scalable Processor Family  
ATX



Top View

## KEY FEATURES



### DDR4

8 ECC-RDIMM up to 512GB



### 10GLAN

2 10GbE



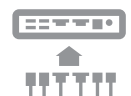
### IPMI

OOB Remote Management



### Multiple Expansion

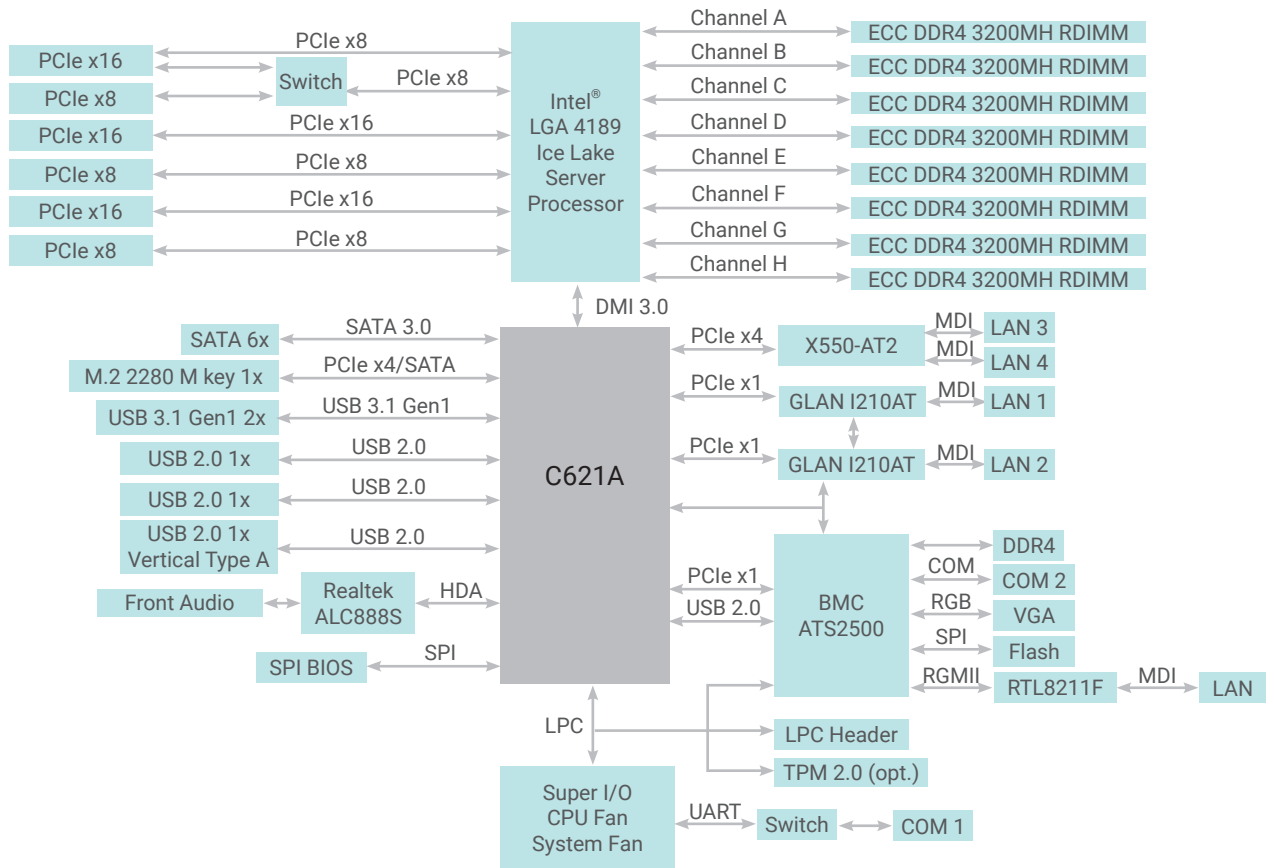
3 PCIe x16 (Gen4),  
2 PCIe x8 (Gen4),  
1 M.2 M key



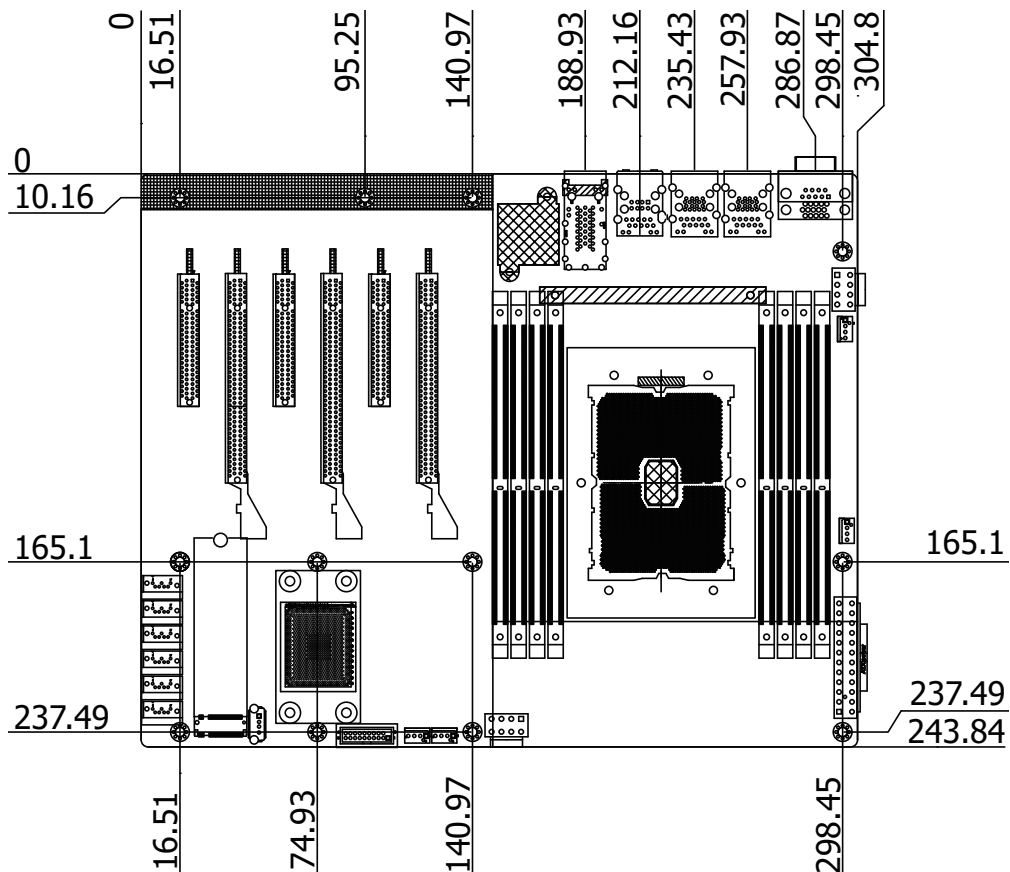
### Rich I/O

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

## BLOCK DIAGRAM



## MECHANICAL DRAWING



## SPECIFICATION

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