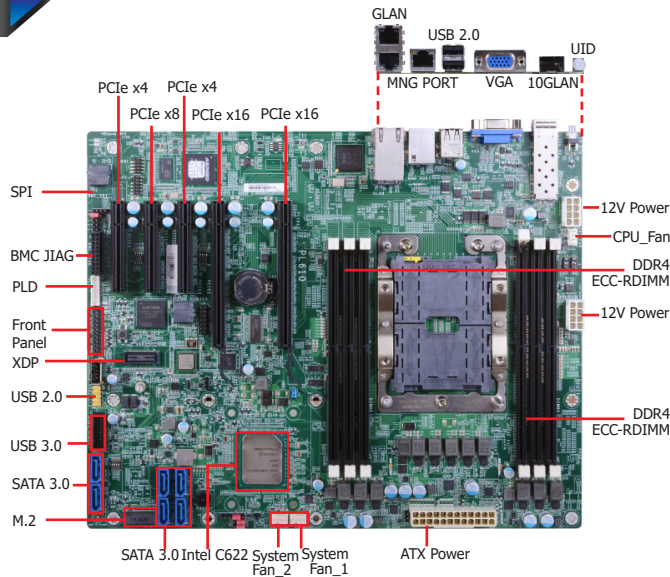




# PL610-C622

Server-grade

C622

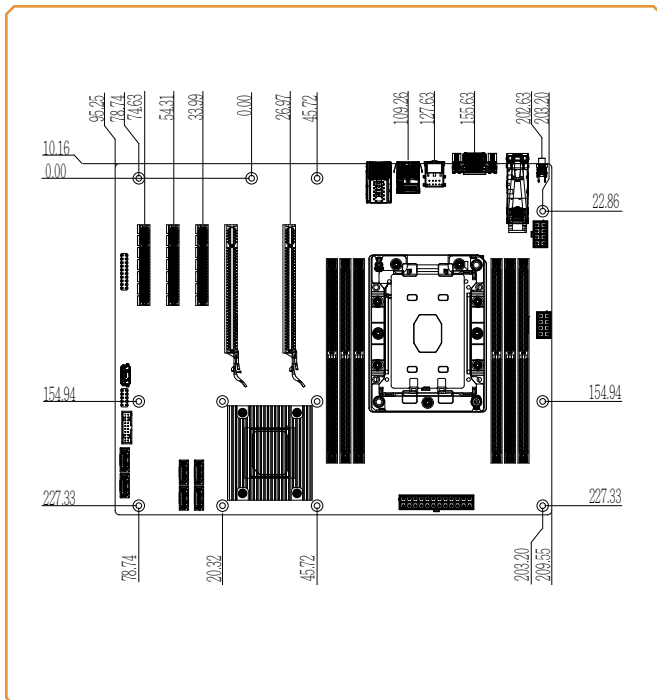


## Features

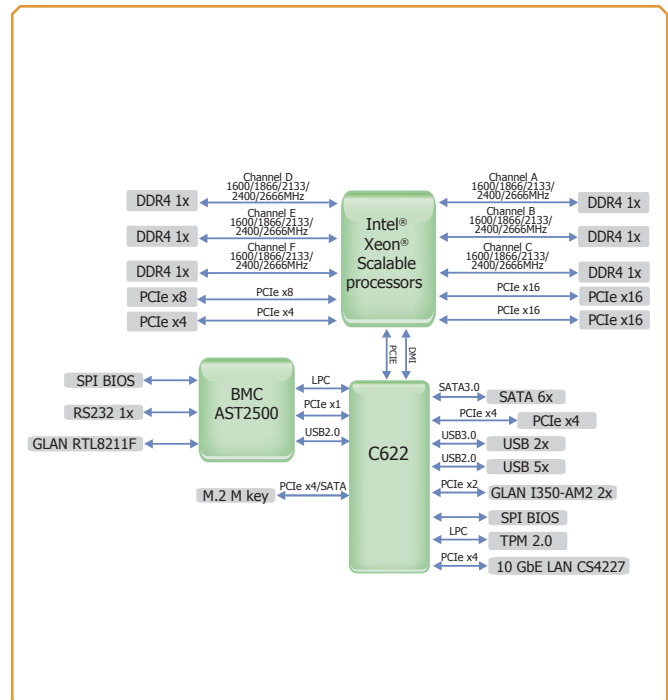
- 6 DDR4 ECC-RDIMM up to 384GB
- VGA resolution up to 1920x1200 @ 60Hz
- Multiple expansion:  
2 PCIe x16, 1 PCIe x8, 2 PCIe x4, 1 M.2
- Rich I/O: 2 Intel GbE, 1 dedicated IPMI LAN, 1x Fiber 10 GbE, 1 COM, 6 SATA 3.0, 5 USB 2.0, 2 USB 3.0



## Mechanical Drawing



## Block Diagram



## Specifications

|                       |                              |   |  |
|-----------------------|------------------------------|---|--|
| <b>SYSTEM</b>         | <b>Processor</b>             | Intel® Xeon® Scalable Processor Family, LGA 3647 Socket, TDP up to 145W<br>Intel® Xeon® Gold 6138T (20 Cores, 27.5M Cache, up to 3.7 GHz); 125W<br>Intel® Xeon® Gold 6138 (20 Cores, 27.5M Cache, up to 3.7 GHz); 125W<br>Intel® Xeon® Gold 6130T (16 Cores, 22M Cache, up to 3.7 GHz); 125W<br>Intel® Xeon® Gold 6130 (16 Cores, 22M Cache, up to 3.7 GHz); 125W<br>Intel® Xeon® Gold 6126T (12 Cores, 19.25M Cache, up to 3.7 GHz); 125W<br>Intel® Xeon® Gold 6126 (12 Cores, 19.25M Cache, up to 3.7 GHz); 125W<br>Intel® Xeon® Gold 5120T (14 Cores, 19.25M Cache, up to 3.2 GHz); 105W<br>Intel® Xeon® Gold 5119T (14 Cores, 19.25M Cache, up to 3.2 GHz); 85W<br>Intel® Xeon® Gold 5118 (12 Cores, 16.5M Cache, up to 3.2 GHz); 105W<br>Intel® Xeon® Silver 4116T (12 Cores, 16.5M Cache, up to 3.0 GHz); 85W<br>Intel® Xeon® Silver 4116 (12 Cores, 16.5M Cache, up to 3.0 GHz); 85W<br>Intel® Xeon® Silver 4114T (10 Cores, 13.75M Cache, up to 3.0 GHz); 85W<br>Intel® Xeon® Silver 4110 (8 Cores, 11M Cache, up to 3.0 GHz); 85W<br>Intel® Xeon® Silver 4109T (8 Cores, 11M Cache, up to 3.0 GHz); 70W<br>Intel® Xeon® Bronze 3106 (8 Cores, 11M Cache, 1.7 GHz); 85W |  |
|                       | <b>Chipset</b>               | Intel® C622 Chipset   |  |
|                       | <b>Memory</b>                | Six 288-pin ECC-RDIMM up to 384GB   | Single Channel DDR4<br>1600/1866/2133/2400/2666MHz |
|                       | <b>BIOS</b>                  | Insyde SPI 128Mbit  |  |
|                       | <b>Display</b>               | 1 x VGA   |  |
| <b>GRAPHICS</b>       | <b>Single Displays</b>       | VGA   |  |
| <b>EXPANSION</b>      | <b>Interface</b>             | 2 x PCIe x16 (Gen 3)<br>1 x PCIe x8 (Gen 3)<br>2 x PCIe x4 (Gen 3)<br>1 x M.2 2280 M key (PCIe Gen3 x 4 NVMe/SATA)  |  |
|                       | <b>Audio Codec</b>           | N/A   |  |
| <b>AUDIO</b>          | <b>Controller</b>            | GbE: i350-AM2<br>10GbE: CS4227<br>IPMI: RTL8211F  |  |
| <b>ETHERNET</b>       | <b>Ethernet</b>              | 2 x GbE (RJ-45)<br>1 x dedicated IPMI LAN<br>1x Fiber 10 GbE  |  |
|                       | <b>USB</b>                   | 2 x USB 2.0   |  |
|                       | <b>PS/2</b>                  | 1 x PS/2 (mini-DIN-6)   |  |
|                       | <b>Display</b>               | 1 x VGA   |  |
| <b>INTERNAL I/O</b>   | <b>Serial</b>                | 1 x RS-232 (2.54mm pitch)   |  |
|                       | <b>USB</b>                   | 2 x USB 2.0 (2.54mm pitch)<br>1 x Vertical USB 2.0<br>2 x USB 3.0   |  |
|                       | <b>SATA</b>                  | 6 x SATA 3.0 (up to 6Gb/s)  | RAID 0/1/5/10                                      |
|                       | <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 (optional)  |  |
| <b>POWER</b>          | <b>Type</b>                  | ATX   |  |
|                       | <b>Connector</b>             | 8-pin ATX 12V power   | 24-pin ATX power                                   |
|                       | <b>Consumption</b>           | Typical: 5120T: 3.3V @ 0.42A (1.386Watt); 5V @2.33A (11.65Watt); 12V @ 2.34A (28.08Watt)<br>Max.: 5120T:3.3V @ 0.43A (1.419Watt); 5V @ 2.4A (12.0Watt); 12V @ 12.51A (150.12Watt)   |  |
|                       | <b>RTC Battery</b>           | CR2032 Coin Cell  |  |
| <b>OS SUPPORT</b>     |                              | Windows 10 IoT Enterprise LTSB RS1(64-bit)<br>Windows Server 2012R2<br>Windows Server 2016<br>Linux   |  |
| <b>ENVIRONMENT</b>    | <b>Temperature</b>           | Operating: 0 to 60°C  | Storage: -40 to 85°C                               |
|                       | <b>Humidity</b>              | Operating: 5 to 90% RH  | Storage: 5 to 90% RH                               |
|                       | <b>MTBF</b>                  | 493,780 hrs @ 25°C; 290,407 hrs @ 45°C ; 187,006 hrs @ 60°C<br>Calculation Model: Telcordia Issue 4<br>Environment: GB, GC - Ground Benign, Controlled  |  |
| <b>MECHANICAL</b>     | <b>Dimensions</b>            | ATX Form Factor   | 305mm (12") x 244mm (9.6")                         |
|                       | <b>Height</b>                | PCB: TBD  | Top Side: TBD mm Bottom Side: TBD                  |

## Ordering Information

| Model Name   | P/N             | 10GbE | GbE | RS-232/422/485 | RS-232 | USB 3.0 | USB 2.0 | Temp.  |
|--------------|-----------------|-------|-----|----------------|--------|---------|---------|--------|
| PL610-C622BI | 770-PL6101-000G | 1     | 2   | 0              | 1      | 2       | 5       | 0~60°C |

## Packing List

|                            |                 |
|----------------------------|-----------------|
| • 1 PL610-C622 motherboard |                 |
| • 1 I/O shield             | A49-PL6100-000G |
| • 1 M.2 screw              | A32-112016-041G |
| • 1 CPU clip               | 348-436471-100G |

## Optional Items

|                                      |                 |
|--------------------------------------|-----------------|
| • Serial ATA cable (Length: 500mm)   | 332-553001-005G |
| • USB 2.0 port cable (Length: 350mm) | A81-001066-016G |
| • USB 3.0 port cable (Length: 320mm) | A81-001052-023G |
| • LGA3647 cooler                     | A71-101400-000G |