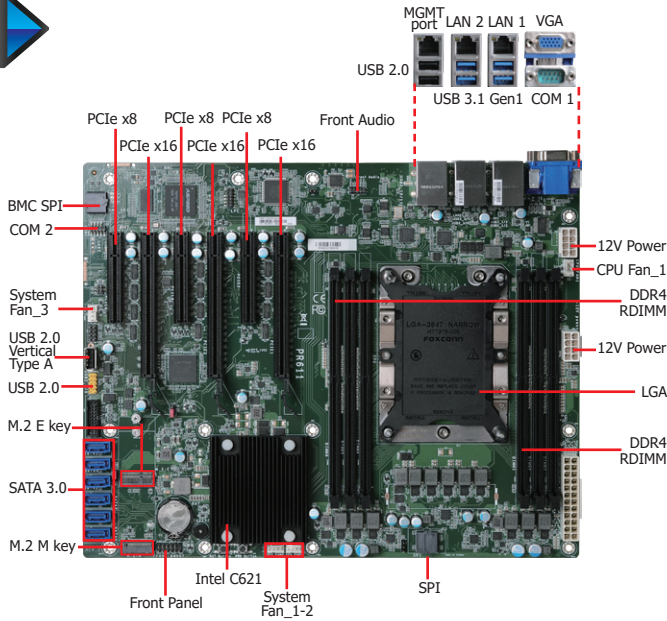




# PR611-C621

Server-grade

C621



## Features

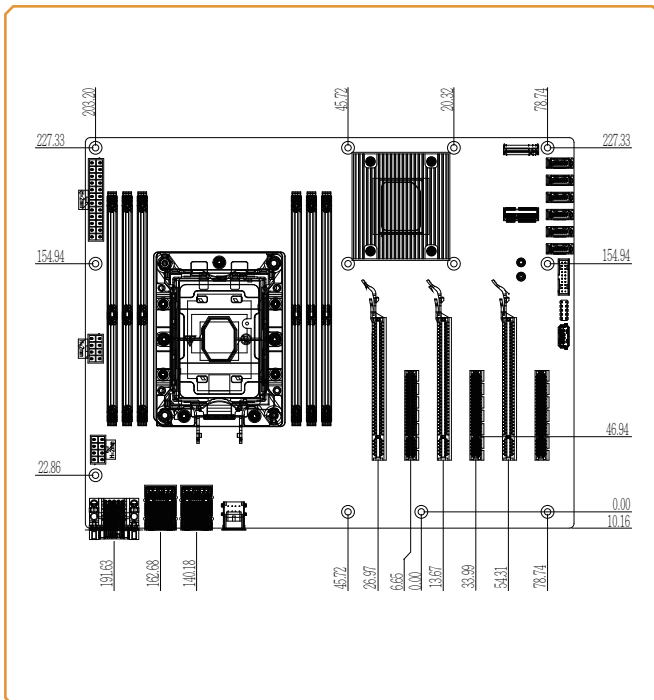
- 6 DDR4 RDIMM up to 192GB
- Multiple expansion: 3 PCIe x16, 3 PCIe x8 (share w/ PCIe x16), 2 M.2
- Rich I/O: 2 Intel GbE, 1 COM, 6 SATA 3, 5 USB 2.0, 6 USB 3.1 Gen1



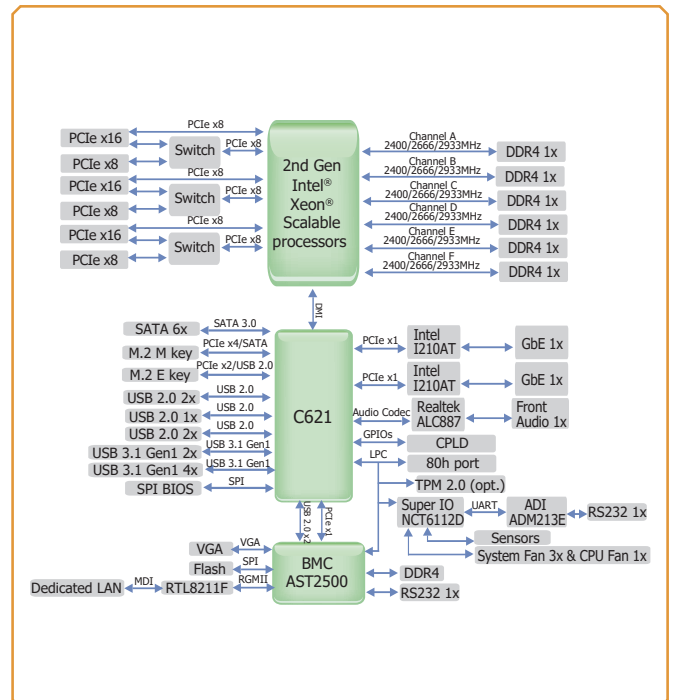
## Ordering Information

Model Name	P/N	GbE	RS-232	USB 3.1 Gen1	USB 2.0	VGA	IPMI-Mgmt	Temp.
PR611-C621DRI	770-PR6111-000G	2	1	6	5	1	1	-5~65°C
PR611-C621DR	770-PR6111-100G	2	1	6	5	0	0	-5~65°C

## Mechanical Drawing



## Block Diagram



## Specifications

<b>SYSTEM</b>	<b>Processor</b>	1st Generation Intel® Xeon® Scalable Processor Family, LGA 3647 Socket: Intel® Xeon® Platinum 8160T (24 Cores, 27.5M Cache, up to 3.7 GHz); 150W Intel® Xeon® Gold 6138T (20 Cores, 27.5M Cache, up to 3.7 GHz); 125W Intel® Xeon® Gold 6138 (20 Cores, 27.5M Cache, up to 3.7 GHz); 125W Intel® Xeon® Gold 6130T (16 Cores, 22M Cache, up to 3.7 GHz); 125W Intel® Xeon® Gold 6130 (16 Cores, 22M Cache, up to 3.7 GHz); 125W Intel® Xeon® Gold 6126T (12 Cores, 19.25M Cache, up to 3.7 GHz); 125W Intel® Xeon® Gold 6126 (12 Cores, 19.25M Cache, up to 3.7 GHz); 125W Intel® Xeon® Gold 5120T (14 Cores, 19.25M Cache, up to 3.2 GHz); 105W Intel® Xeon® Gold 5119T (14 Cores, 19.25M Cache, up to 3.2 GHz); 85W Intel® Xeon® Gold 5118 (12 Cores, 16.5M Cache, up to 3.2 GHz); 105W Intel® Xeon® Silver 4116T (12 Cores, 16.5M Cache, up to 3.0 GHz); 85W Intel® Xeon® Silver 4116 (12 Cores, 16.5M Cache, up to 3.0 GHz); 85W Intel® Xeon® Silver 4114T (10 Cores, 13.75M Cache, up to 3.0 GHz); 85W Intel® Xeon® Silver 4110 (8 Cores, 11M Cache, up to 3.0 GHz); 85W Intel® Xeon® Silver 4109T (8 Cores, 11M Cache, up to 3.0 GHz); 70W Intel® Xeon® Bronze 3106 (8 Cores, 11M Cache, 1.7 GHz); 85W 2nd Generation Intel® Xeon® Scalable Processor Family, LGA 3647 Socket: Intel® Xeon® Gold 6252N (24 Cores, 35.75M Cache, up to 3.6 GHz); 150W Intel® Xeon® Gold 6238T (22 Cores, 30.25M Cache, up to 3.7 GHz); 125W Intel® Xeon® Gold 6230T (20 Cores, 27.5M Cache, up to 3.9 GHz); 125W Intel® Xeon® Gold 6230N (20 Cores, 27.5M Cache, up to 3.5 GHz); 125W Intel® Xeon® Gold 6230 (20 Cores, 27.5M Cache, up to 3.9 GHz); 125W Intel® Xeon® Gold 6226 (12 Cores, 19.25M Cache, up to 3.7 GHz); 125W Intel® Xeon® Gold 5220T (18 Cores, 24.75M Cache, up to 3.9 GHz); 105W Intel® Xeon® Gold 5218T (16 Cores, 22M Cache, up to 3.8 GHz); 105W Intel® Xeon® Gold 5218N (16 Cores, 22M Cache, up to 3.7 GHz); 110W Intel® Xeon® Gold 5215 (10 Cores, 13.75M Cache, up to 3.4 GHz); 85W Intel® Xeon® Silver 4216 (16 Cores, 22M Cache, up to 3.2 GHz); 100W Intel® Xeon® Silver 4215 (8 Cores, 11M Cache, up to 3.5 GHz); 85W Intel® Xeon® Silver 4214 (12 Cores, 16.5M Cache, up to 3.2 GHz); 85W Intel® Xeon® Silver 4210 (10 Cores, 13.75M Cache, up to 3.2 GHz); 85W Intel® Xeon® Silver 4209 (8 Cores, 11M Cache, up to 3.2 GHz); 70W			
	<b>Chipset</b>	Intel® C621 Chipset			
	<b>Memory</b>	6 x 288-pin RDIMM up to 192GB Single Channel DDR4 up to 2933 MHZ	Support Optane DC persistent memory module(DCPMM) in DIMM3 and DIMM6 (2nd Gen Xeon Scalable (62xx/52xx/4215) processors only)		
	<b>BIOS</b>	Insyde SPI 128Mbit			
	<b>Graphics</b>	<b>Display</b>	1 x VGA (opt.)		
	<b>Single Displays</b>	VGA (opt.)			
<b>EXPANSION</b>	<b>Interface</b>	3 x PCIe x16 (Gen 3) 3 x PCIe x8 (Gen 3)(share w/ PCIe x16) 1 x M.2 M key 2280 (SATA/PCIe Gen3 x4 NVMe) 1 x M.2 E key 2230 (USB 2.0/PCIe Gen3 x2)			
	<b>Audio Codec</b>	ALC887			
<b>AUDIO</b>	<b>Controller</b>	2 x Intel® I210AT PCIe (10/100/1000Mbps) IPMI: RTL8211F (opt.)			
<b>ETHERNET</b>	<b>Ethernet</b>	2 x GbE (RJ-45) 1 x dedicated IPMI LAN (opt.)			
	<b>USB</b>	4x USB 3.1 Gen1 2x USB 2.0 stack (opt.w/ RJ45+USB2.0 stack)			
	<b>Serial</b>	1 x RS-232 (DB-9)			
<b>REAR I/O</b>	<b>USB</b>	2x USB 2.0 header (2x USB 2.0) 1x USB 2.0 vertical Type A 1x USB 3.1 Gen1 header (2x USB 3.1 Gen1)			
	<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 sec/Min		
<b>SECURITY</b>	<b>TPM</b>	TPM 2.0 (opt.)			
<b>POWER</b>	<b>Type</b>	ATX			
	<b>Connector</b>	8-pin ATX 12V power	24-pin ATX power		
	<b>Consumption</b>	Idle: Xeon Gold 5218 - 3.3V @ 0.06A (0.198Watt); 5V @ 1.75A (8.75Watt); 12V @ 1.67A (20.04Watt) Max.: Xeon Gold 5218 - 3.3V @ 0.08A (0.264Watt); 5V @ 2.94A (14.7Watt); 12V @ 11.53A (138.36Watt) Idle: Xeon Platinum 8276M - 3.3V @ 0.03A (0.099Watt); 5V @ 1.65A (8.25Watt); 12V @ 1.63A (19.56Watt) Max.: Xeon Platinum 8276M - 3.3V @ 0.05A (0.165Watt); 5V @ 2.65A (13.25Watt); 12V @ 18.43A (221.16Watt)			
	<b>RTC Battery</b>	CR2032 Coin Cell			
<b>OS SUPPORT</b>		Windows 10 IoT Enterprise LTSB RS5(64-bit) Windows Server 2019 Windows Server 2016	Linux		
<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>MTBF</b>	PR611-C621: 558,025 hrs @ 25°C; 339,879 hrs @ 45°C; 224,136 hrs @ 60°C PR611-C621 w/ IPMI-Mgmt: 510,709 hrs @ 25°C; 306,113 hrs @ 45°C; 200,130 hrs @ 60°C Calculation Model: Telcordia Issue 4 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: 1.6mm Top Side: 37.34mm			

## Packing List

• 1 PR611-C621 motherboard	
• 1 I/O shield	A49-PR6110-020G
• 2 M.2 screw	A32-112016-041G
• 1 CPU Clip	348-436471-100G

## Optional Items

• USB 2.0 port cable (Length: 350mm)	A81-001066-016G
• Cooler (Narrow ILM LGA 3647)	A71-101400-000G
• USB 3.1 Gen1 cable (Length: 320mm)	A81-001052-023G
• Serial ATA data cable (Length: 500mm)	332-553001-005G