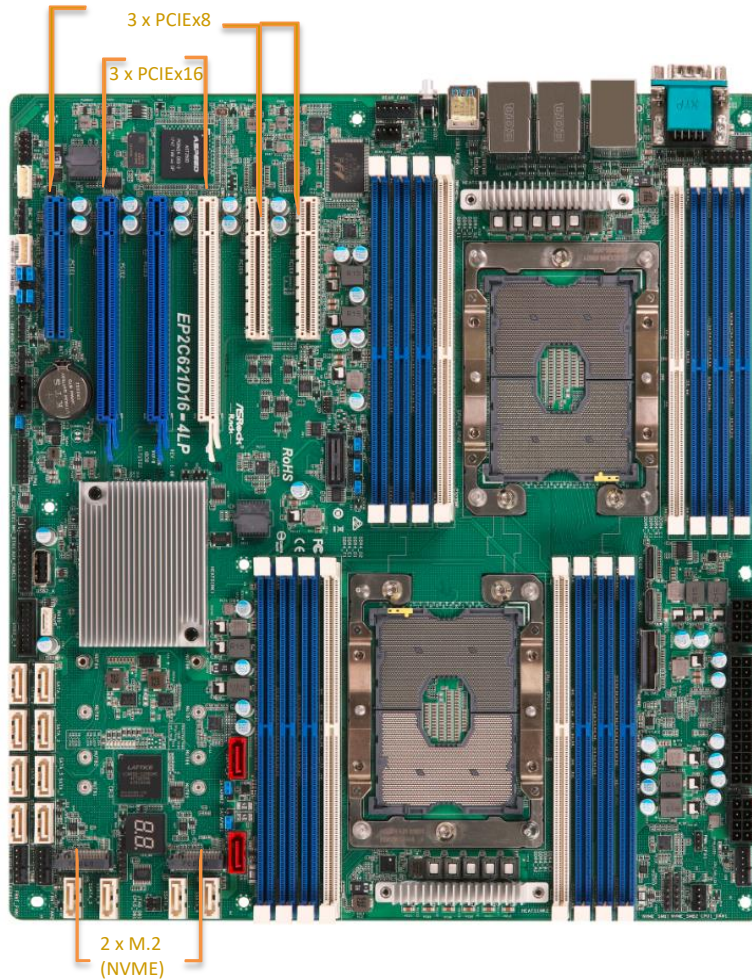




## EP2C621D16-4LP



### Product Brief

- EEB 12"x13"
- Dual socket Xeon Scalable Processor Family
- Supports DDR4 2666/2400 R and LRDIMM, 16 x DIMM slots
- Supports 14 x SATA3 6.0 Gb/s by INTEL C621 (including 2x SATA DOM ports and 2x SATA switch w/2xM.2 NVME ports)
- Supports 3x PCIe3.0x 16, 3x PCIe3.0x 16



Stable and  
Reliable Solution

# Server Motherboard



MB Physical Status	
Form Factor	- EEB
Dimensions	- 12"x13"
Processor System	
CPU	- Intel® Xeon® Scalable Processor Family (Max 205W)
Socket	- Dual Socket P
Chipset	- Intel® C621
System Memory	
Capacity	- 16 DIMM slots
Type	- Quad Channel memory technology - Support DDR4 2666/2400 RDIMM and LRDIMM
DIMM Size	- RDIMM: 32GB, 16GB, 8GB, 4GB - LRDIMM: 64GB, 32GB
Voltage	- 1.2V
Expansion Slot	
PCIe 3.0 x 8	- 3 slots
PCIe 3.0 x 16	- 3 slots
Storage	
SATA Controller	-Intel® C621 : 14 x SATA3 (including 2x SATA DOM ports and 2x SATA which switch w/2xM.2 ports)
NVME (M.2)	2 x M.2 slot
OCuLink for U.2	3 (Slimline x8 from CPU2, Oculink x4 from CPU2, Oculink x4 from CPU2)
Ethernet	
Interface	- Gigabit LAN 10/100/1000 Mb/s
LAN controller	- 4 x RJ45 GLAN by Marvell 88E1543 - 1 x RJ45 Dedicated IPMI LAN port - Supports Wake-On-LAN - Supports Energy Efficient Ethernet 802.3az - Supports Dual LAN with Teaming function - Supports PXE - LAN1 Supports NCSI
Management	
BMC Controller	- ASPEED AST2500 : IPMI (Intelligent Platform Management Interface) 2.0 with Ikmv 、 vMedia support
IPMI Dedicated LAN	- 1 x Realtek RTL8211E for dedicated management GLAN
Features	- Watch Dog - NMI
Graphics	
Controller	- ASPEED AST2500

VRAM	- DDR4 16MB
<b>Rear Panel I/O</b>	
VGA Port	- 1 x D-Sub
Serial port	- 1 x COM port
USB 3.0 Port	-4
Lan Port	- 4+ 1 (IPMI 2.0)
	- LAN Ports with LED (ACT/LINK LED and SPEED LED)
<b>Internal Connector</b>	
Auxiliary Panel Header	- 1 (includes chassis intrusion, location button & LED, front LAN LED)
TPM Header	- 1
IPMB Header	- 1
Front VGA header	- 1
Buzzer	- 1
Fan Header	- 2x CPU Fan (4-pin), 4x system Fan (6-pin)
ATX Power	- 1 (24-pin) + 2 (8-pin)
USB 3.0 Header	- 1 ( support 2 USB 3.0)
M.2	- 2 (M key up to 2280), support NVMe SSD and SATA SSD optional
Type A USB 2.0 Port	- 1
SATA DOM	- 2 (SSATA)
<b>System BIOS</b>	
BIOS Type	- 128Mb AMI UEFI Legal BIOS
BIOS Features	- Plug and Play (PnP)
	- ACPI 2.0 Compliance Wake Up Events
	- SMBIOS 2.8 Support
	- ASRock Rack Instant Flash
<b>Hardware Monitor</b>	
Temperature	- CPU Temperature Sensing
	- System Temperature Sensing
Fan	- CPU/Rear/Front Fan Tachometer
	- CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature)
	- CPU/Rear/Front Fan Multi-Speed Control
Voltage	- Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore, DRAM, 1.05V_PCH, +BAT, 3VSB, 5VSB



## MB Block Diagram

### CPU

1-2x Skylake-EP Processor (*Up to 205W CPU*)  
Up to 28 cores / socket  
Socket P0(LGA-3647)

### Memory

16 x DDR4-2666  
RDIMM (1.2V)

