# EC0-1821

#### **ATX Structure Motherboard**

ECO-1821 motherboard adopts standard ATX specifications and Intel® C246 platform, and supports Intel 8/9th Gen processors. It supports PCI+PCIE expansion combination, multiple COM ports, multiple USB ports, and SATA RAID 0, 1, 5, 10. The product can be widely used in industrial automation, IOT, self-service terminals, petrochemical industry, safety monitoring, intelligent transportation, environmental protection, communication and other fields.



#### Product Features



supports Intel® 8/9th Gen processors



Supports 4 x memory slot

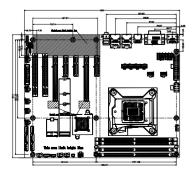


12 x USB port



2 x PCI+ 5 x PCIE expansion

# Product Dimensions Drawing





### Product Specifications

Item	Description	
Processor	Supports Intel LGA 1151 pin: 8/9th Gen processors, Xeon E-21xx/E-22xx series processors	
Chipset	C246	
Memory	4 x DDR4 DIMM memory slot, a single memory supporting 32GB, the four supporting up to 128GB	
Display Ports	Any three display ports among VGA, HDMI, DVI-D and DP	
Audio Ports	Supports MIC-IN/LINE-IN/LINE-OUT	
LAN	2 x Gigabit LAN port, LAN1 supporting Wake-on-LAN	
Storage	4 x SATA3.0, supporting RAID 0, 1, 5, 10	
IO Ports	6 x COM port, COM1, COM2 support RS-232/RS-422/RS-485 mode selection 6 x USB 2.0 port, 4 x USB3.1 GEN2 port (10Gb/s), 2 x USB3.1 GEN1 port (5Gb/s) 1 x PS/2 port 1 x 8-channel digital I/O port 1 x TPM port	
Bus Expansion	2 x PCI, 3 x PCIEx4 2 x PCIEx16 (when PCIE5 slot is occupied, the two PCIE slots adopts PCIEx8 speed by default) 1 x M.2 KEY M port (PCIe X4, supporting sizes 2242/2260/2280/22110) 1 x M.2 KEY E port (PCIe X1, supporting size 2230)	
Power Supply	ATX power supply	
Working Environment	-10°C~60°C	
Storage Environment	-20°C~80°C	
Constant Damp Heat	40°C 95%RH, non-condensing	
Dimnensions	305mm (L)×244mm (W)	
Operating System	WIN10, Linux	

## Ordering Information

Part No.	Model	Description
0030-023201	EC0-1821	ATX structure motherboard/C246 chipset/supports Intel® 8/9th Gen processors/provides 4 x DDR4 DIMM, expandable up to 128 GB/any three display ports among DP, HDMI, VGA, DVI-D/4 x SATA3.0, supporting RAID 0, 1, 5, $10/2 \times \text{Gigabit LAN port/12} \times \text{USB}/6 \times \text{COM port/1}$ group of audio ports/1 x 8-channel GPIO/1 x TPM port/1 x PS pin on motherboard/expansion ports: 2 x PCI, 3 x PCle x4, 2 x PCle x16/1 x M.2 KEY M port (PCIe X16, supporting sizes 2242/2260/2280/22110), 1 x M.2 KEY E port (PCIe X1, supporting size 2230) Note: When the two PCIE x16 slots are occupied at same time, the speed will be reduced to the speed of PCIE x8
0030-023211	EC0-1821-l210	ATX structure motherboard/C246 chipset/supports Intel 8/9th Gen processors/provides $4 \times DDR4 DIMM$ , expandable up to 128 GB/any three display ports among DP, HDMI, VGA, DVI-D/4 x SATA3.0, supporting RAID 0, 1, 5, $10/2 \times Gigabit LAN port/12 \times USB/6 \times COM port/1 group of audio ports/1 x 8-channel GPIO/1 x TPM port/1 x PS2 pin on motherboard/expansion port: 2 \times PCI, 3 \times PCIe \times 4, 2 \times PCIe \times 16/1 \times M.2 KEY M port (PCIe X4, supporting sizes 2242/2260/2280/22110), 1 \times M.2 KEY E port (PCIe X1, supporting size 2230) Note: When the two PCIE x16 slots are occupied at same time, the speed will be reduced to the speed of PCIE x8$
0020-064981	IPC-810/EC0-1821/300W	C246 platform motherboard/300W power supply/ $2 \times \text{COM}/2 \times \text{Gigabit LAN port/8} \times \text{USB } (2 \text{ at front, 6 at rear) /any three display ports among VGA, DVI-D, DP, HDMI/1 group of audio ports/expansion: 2 \times \text{PCI}, 3 \times \text{PCIe} \times 4, 2 \times \text{PCIe} \times 16/1 \times \text{M.2 KEY M} port(PCIe X4, supporting sizes 2242/2260/2280/22110); 1 \times \text{M.2 KEY E} port (PCIe X1, supporting size 2230)  Note: When the two PCIE x16 slots are occupied at same time, the speed will be reduced to the speed of PCIE x8$
0020-065481	IPC-810/EC0-1821- NS/300W	C246 platform motherboard/300W power supply/2 x COM/2 x Gigabit LAN port/8 x USB (2 at front, 6 at rear) /any three display ports among VGA, DVI-D, DP, HDMI/no sound card/ expansion: 2 x PCI, 3 x PCIe x4, 2 x PCIe x16/1 x M.2 KEY M port(PCIe X4, supporting sizes $2242/2260/2280/22110$ ); 1 x M.2 KEY E port (PCIe X1, supporting size $2230$ ) Note: When the two PCIE x16 slots are occupied at same time, the speed will be reduced to the speed of PCIE x8
0020-064991	IPC-860/EC0-1821/600W	C246 platform motherboard/600W power supply/ $2 \times \text{COM}/2 \times \text{Gigabit LAN port/8} \times \text{USB (2 at front, 6 at rear)/any three display ports among VGA, DVI-D, DP, HDMI/1 group of audio ports/expansion: 2 \times \text{PCI}, 3 \times \text{PCIe} \times 4, 2 \times \text{PCIe} \times 16/1 \times \text{M.2 KEY M} port (PCIe X4, supporting sizes 2242/2260/2280/22110); 1 \times \text{M.2 KEY E} port (PCIe X1, supporting size 2230)  Note: When the two PCIE x16 slots are occupied at same time, the speed will be reduced to the speed of PCIE x8$
0010-151371	IPC-810E/EC0-1821/I7- 8700/8G/1T/300W	C246 platform motherboard/i7-8700/8G memory/1T HDD/300W power supply/6 x COM/2 x Gigabit LAN port/8 x USB (2 at front, 6 at rear) /any three display ports among VGA, DVI-D, DP, HDMI, 1 group of audio ports; expansion: $2 \times PCI$ , $3 \times PCIe \times 4$ , $2 \times PCIe \times 16$ ; $1 \times M.2$ KEY M port (PCIe X4, supporting sizes 2242/2260/2280/22110); $1 \times M.2$ KEY E port (PCIe X1, supporting size 2230) Note: When the two PCIE x16 slots are occupied at same time, the speed will be reduced to the speed of PCIE x8

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