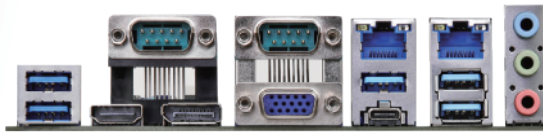
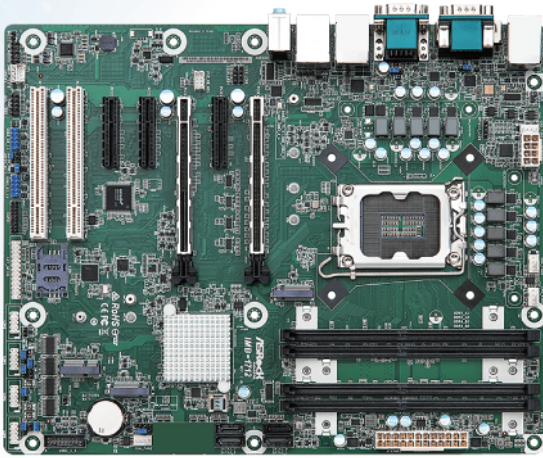
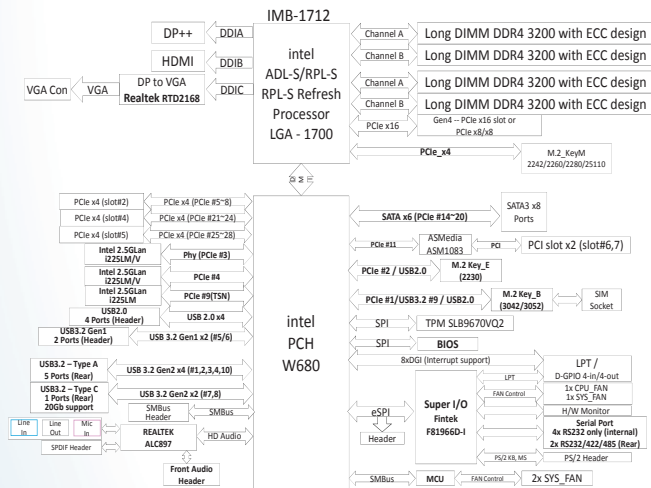


# WI-IMB-1712

## ATX Motherboard



## BLOCK DIAGRAM



## SPECIFICATION

### Processor System

<b>CPU</b>	● Intel® 14th/13th/12th Gen (Raptor Lake-S Refresh/Raptor Lake-S/ Alder Lake-S) Core™ Processors, up to 125W
<b>Chipset</b>	● Intel® Q670
<b>Socket</b>	● LGA1700
<b>BIOS</b>	● AMI SPI 256 Mbit

### Form Factor

<b>Dimensions</b>	● ATX (12-in x 9.6-in x 1.4-in, 30.5 cm x 24.4 cm x 3.6 cm)
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### Memory

<b>Technology</b>	● Dual Channel DDR4 3200 MHz
<b>Capacity</b>	● 128 GB (32 GB per DIMM)
<b>Socket</b>	● 4 x 288-pin Long-DIMM

### Graphics

<b>Controller</b>	● Intel® UHD Graphics
<b>HDMI</b>	● HDMI 2.0b ● Max resolution up to 4096x2160@60Hz
<b>DisplayPort</b>	● DisplayPort 1.4a, DP++ ● Max resolution up to 4096x2160@60Hz
<b>VGA</b>	● Max resolution up to 1920 x 1200@60Hz
<b>MultiDisplay</b>	● Triple Display

### Expansion Slot

<b>PCIe</b>	● 2 x PCIe Gen4 Slots (PCIe1/PCIe3:single at x16(PCIe1); dual at x8 (PCIe1) / x8 (PCIe3)) (PCIe1: Support riser card x8/x8)
	● 2 x PCIe x4 (Gen4) ● 1 x PCIe x4 (Gen3)
<b>PCI</b>	● 2 x PCI
<b>M.2</b>	● 1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless
	● 1 x M.2 (Key B, 3042/3052) with PCIe x1, USB 3.2 Gen1, USB 2.0 and SIM for 4G/5G
<b>SIM Socket</b>	● 1 x SIM socket connected to M.2 Key B

### Audio

<b>Interface</b>	● Realtek ALC897, High Definition Audio. Line-In / Line-Out / Mic-In
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### Ethernet

<b>Controller/ Speed</b>	● LAN1: Intel® I225LM with 10/100/1000/2500 Mbps, supports vPro
	● LAN2: Intel® I225LM/I225V with 10/100/1000/2500 Mbps

<b>Connector</b>	● 2 x RJ-45
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### Rear I/O

<b>HDMI</b>	● 1 x HDMI 2.0b
<b>DisplayPort</b>	● 1 x DP 1.4a++
<b>VGA</b>	● 1
<b>Ethernet</b>	● 2 x 2.5 Gigabit LAN
<b>USB</b>	● 5 x USB 3.2 Gen2 ● 1 x USB 3.2 Gen2x2 (Type C, 5V/3A)
<b>Audio</b>	● 3 ( Line-In, Line-Out, Mic-In )
<b>COM</b>	● COM1, COM2 (RS-232/422/485)

### Internal Connector

<b>USB</b>	● 2 x USB 3.2 Gen1 (1 x USB 3.2 header)
	● 4 x USB 2.0 (2 x 2.54 pitch header)
<b>COM</b>	● COM3, COM4, COM5, COM6 (RS-232)
<b>Parallel</b>	● 1 (shared with GPIO)
<b>GPIO</b>	● 8 x GPI, 8 x GPO (shared with LPT header)
<b>PS/2</b>	● 1 x PS2 header
<b>Thunderbolt header</b>	● 1 (only support by PCIe4)

### Security

<b>TPM</b>	● TPM 2.0 onboard IC
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### Storage

<b>M.2</b>	● 1 x M.2 (Key M, up to 25110) with PCIe Gen4 x 4 for SSD
<b>SATA</b>	● 4 x SATA3 (6Gb/s)
<b>RAID</b>	● Intel® VMD RAID 0/1/5/10
	● **supported by identical interface (PCIe or SATA)
	● PCIe interface: M.2 Key B + M.2 Key M
	● SATA interface: SATA port

### Watchdog Timer

<b>Output</b>	● From Super I/O to drag RESETCON#
<b>Interval</b>	● 256 segments, 0,1,2...255sec

### Power Requirements

<b>Input PWR</b>	● ATX PWR (8+24 Pin)
<b>Power On</b>	● AT/ATX Supported - AT : Directly PWR on as power input ready
	- ATX : Press button to PWR on after power input ready

### Environment

<b>Operating Temp</b>	● -20°C ~ 70°C
<b>Storage Temp</b>	● -40° C ~ 85° C
<b>Operating Humidity</b>	● 5% ~ 90%
<b>Storage Humidity</b>	● 5% ~ 90%