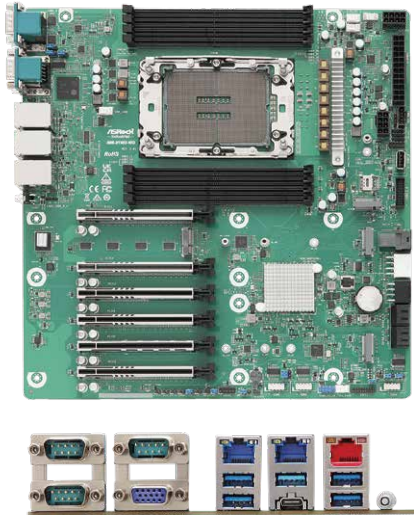


# IMB-X1902-10G

## EATX Motherboard



### KEY FEATURES

- Intel® Xeon® W-3500/3400 and W-2500/2400 Series Processors with W790 chipset
- 8 x 288-pin ECC RDIMM/RDIMM-3DS DDR5 4400/4800 MHz, up to 2TB
- 4 x PCIe x16 (Gen5), 1 x PCIe x8 (Gen5), 1 x PCIe x4 (Gen4), 1 x USB 3.2 Gen2x2, 5 x USB 3.2 Gen2, 2 x USB 3.2 Gen1, 3 x USB 2.0, 1 x M.2 Key E, 2 x M.2 Key M, 1 x M.2 Key B, 6 x COM, 1 x Mini-SAS, 4 x SATA3
- 2 x Intel 2.5 Gigabit LAN, 1 x Marvell 10 Gigabit LAN
- Supports 1 x VGA
- TPM 2.0 onboard IC
- Support Intel® vPro, VMD RAID 0/1/5/10
- ATX PWR (8+8+24 Pin)

### SPECIFICATIONS

#### Form Factor

|            |                                                             |
|------------|-------------------------------------------------------------|
| Dimensions | EATX (12-in x 11.7-in x 1.6-in, 30.5 cm x 29.7 cm x 4.0 cm) |
|------------|-------------------------------------------------------------|

#### Processor System

|         |                                                            |
|---------|------------------------------------------------------------|
| CPU     | Intel® Xeon® W-3500/3400 and W-2500/2400 Series Processors |
| Chipset | Intel® W790                                                |
| Socket  | LGA4677                                                    |
| BIOS    | AMI SPI 256 Mbit                                           |

#### Memory

|            |                                                                                                                                                                                                                                   |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Technology | Quad Channel ECC DDR5 4400/4800 MHz*<br>*1DPC 4800 MHz Natively for Xeon® W9, Xeon® W7 and Xeon® W5<br>2DPC 4400 MHz Natively for Xeon® W9, Xeon® W7 and Xeon® W5<br>Supports 4400 MHz Natively for Xeon® W3, W5-3423 and W5-3433 |
| Capacity   | 2TB                                                                                                                                                                                                                               |
| Socket     | 8 x 288-pin RDIMM/RDIMM-3DS                                                                                                                                                                                                       |

#### Graphics

|     |                                     |
|-----|-------------------------------------|
| VGA | Max resolution up to 1920x1200@60Hz |
|-----|-------------------------------------|

#### Expansion Slot

|            |                                                                                                                                                                              |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PCIe       | PCIe1: PCIe Gen5 x16<br>PCIe2: PCIe Gen5 x16<br>PCIe3/PCIe4: single at Gen5 x16 (PCIe4); dual at Gen5 x8 (PCIe3) / x8 (PCIe4)<br>PCIe5: PCIe Gen4 x4<br>PCIe6: PCIe Gen5 x16 |
| M.2        | 1 x M.2 (Key E, 2230) with PCIe Gen3 x1, USB 2.0 and CNVi for Wireless<br>1 x M.2 (Key B, 3042/3052) with PCIe Gen3 x1, USB 3.2 Gen1, USB 2.0 and SIM for 4G/5G              |
| SIM Socket | 1 x SIM socket connected to M.2 key B                                                                                                                                        |

#### Ethernet

|                   |                                                                                                                                                                              |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Controller/ Speed | LAN1: Intel® I226LM with 10/100/1000/2500 Mbps, supports vPro<br>LAN2: Intel® I226V with 10/100/1000/2500 Mbps<br>LAN3: Marvell AQC113 with 10/100/1000/2500/5000/10000 Mbps |
| Connector         | 3 x RJ-45                                                                                                                                                                    |

#### Rear I/O

|             |                                                        |
|-------------|--------------------------------------------------------|
| VGA         | 1                                                      |
| Ethernet    | 1 x 10 Gigabit LAN<br>2 x 2.5 Gigabit LAN              |
| USB         | 5 x USB 3.2 Gen2<br>1 x USB 3.2 Gen2x2 (Type-C, 5V/3A) |
| Serial Port | COM3 (RS-232)<br>COM1, COM2 (RS-232/422/485)           |

#### Internal Connector

|      |                                                                                                            |
|------|------------------------------------------------------------------------------------------------------------|
| USB  | 2 x USB 3.2 Gen1 (1 x USB 3.2 header)<br>2 x USB 2.0 (1 x 2.54 pitch header)<br>1 x USB 2.0 (vertical con) |
| COM  | COM4, COM5, COM6 (RS-232)                                                                                  |
| GPIO | 4 x GPI, 4 x GPO                                                                                           |

#### Storage

|          |                                                                                                                                                                         |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| M.2      | 1 x M.2 (Key M, 2242/2280/25110) with PCIe Gen4 x4 and SATA3 for SSD<br>1 x M.2 (Key M, 2260/2280/25110) with PCIe Gen4 x4 for SSD                                      |
| Mini-SAS | 1 x Mini-SAS with PCIe Gen4 x4                                                                                                                                          |
| SATA     | 4 x SATA3, SATA3_4 shared with M.2 Key M1                                                                                                                               |
| RAID     | Intel® VMD RAID 0/1/5/10<br>***supported by identical interface (PCIe or SATA)<br>PCIe interface: M.2 Key B + M.2 Key M1/2 or 2* M.2 Key M<br>SATA interface: SATA port |

#### Security

|     |                    |
|-----|--------------------|
| TPM | TPM 2.0 onboard IC |
|-----|--------------------|

#### Watchdog Timer

|          |                                  |
|----------|----------------------------------|
| Output   | From Super I/O to drag RESETCON# |
| Interval | 256 Segments, 0, 1, 2, ...255sec |

#### Power Requirements

|           |                                                                                                                           |
|-----------|---------------------------------------------------------------------------------------------------------------------------|
| Input PWR | 1 x 24-pin ATX PWR connector<br>2 x 8-pin 12V PWR connector<br>1 x 8-pin and 1 x (6+2)-pin 12V PWR connector for PCIe     |
| Power On  | AT/ATX Supported<br>- AT : Directly PWR on as power input ready<br>- ATX : Press button to PWR on after power input ready |

#### Environment

|                    |              |
|--------------------|--------------|
| Operating Temp     | -20°C ~ 70°C |
| Storage Temp       | -40°C ~ 85°C |
| Operating Humidity | 5% ~ 90%     |
| Storage Humidity   | 5% ~ 90%     |