



KEY FEATURES

- Intel® 10th Gen Xeon® W or Core™ Processors with W480E Chipset
- 4 x 260-pin DDR4 SO-DIMM up to 128GB (32GB per DIMM)
- 1 x M.2 Key M, 1 x M.2 Key B, 1 x M.2 Key E, 2 x Mini PCIe
- 4 x USB 3.2 Gen2x1, 2 x USB 2.0, 6 x COM, 4 x SATA3, 8 x DI, 8 x DO
- 5 x Intel Gigabit LAN (2 support PoE)
- Supports Triple Display, 2 x Displayport, 1 x VGA

SPECIFICATIONS

Processor System

| | |
|---------|---|
| CPU | Intel® 10th Gen Xeon® W or Core™ Processors |
| Chipset | Intel® W480E |
| Socket | LGA 1200 |

Memory

| | |
|------------|---|
| Technology | Dual Channel DDR4 2400 MHz (ECC memory supported by W480E w/ Xeon W/Core i3 CPU) |
| Capacity | 128 GB (32 GB per DIMM) |
| Socket | 4 x 260-pin SO-DIMM |

Graphics

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|--------------|--|
| Controller | Intel® UHD Graphics |
| DisplayPort | DisplayPort 1.4, DP++ Max resolution up to 4096x2160@60Hz |
| VGA | Max resolution up to 1920x1200@60Hz |
| MultiDisplay | Triple Display |

Expansion Slot

| | |
|------------|--|
| Mini-PCIe | 2 x Full/Half size with PCIe Gen3 x1 and USB 2.0 |
| RF Antenna | 8 x SMA connector hole reserved |
| M.2 | 1 x M.2 (Key E, 2230) with CNV/PCIe Gen3 x1 and USB 2.0 for Wi-Fi/BT module 1 x M.2 (Key B, 2280/3042/3052) with PCIe Gen3 x1 / USB3.2 Gen1x1 for 4G / 5G |
| SIM Socket | 2 x Nano SIM Card slot (1 connected to Mini PCIe, 1 connected to M.2 Key B) |

Audio

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|-----------|--|
| Interface | Realtek ALC897, High Definition Audio. |
|-----------|--|

Ethernet

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|-------------------|---|
| Controller/ Speed | 4 x I210IT (2 support PoE, PoE output max.15.4W/port, each port supports IEEE 802.3AF PoE) 1 x I219LM (vPro support) |
| Connector | 5 x RJ45 |

Storage

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|----------------|---|
| M.2 | 1 x M.2 (Key M, 2280) with PCIe Gen3 x4 or SATA3 for SSD |
| SATA | 4 x SATA3 (6Gb/s), support RAID 0/1/5/10 4 x 2.5" HDD/SSD Tray |
| CFast (Option) | 1 x Type II socket (Shared with SATA3) |

Rear I/O

| | |
|-------------|---|
| DisplayPort | 2 |
| VGA | 1 |
| Ethernet | 5 x 1 Gigabit LAN |
| USB | 4 x USB 3.2 Gen2x1, 2 x USB2.0, 1 x USB2.0 internal connector w/ lock function |
| Audio | 1 x Mic-in, 1 x Line-out |
| COM | 4 x RS232/422/485 2 x RS232 |
| DIO | 8DIs/8DOs |

Watchdog Timer

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

Power Requirements

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|-----------|---|
| Input PWR | 9V~36V VDC with Ignition control and remote power on/off switch. 80V Surge Protection, OVP, UVP, OCP and reverse protection Ignition Power Input w/ 13-mode condition |
|-----------|---|

Environment

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|-----------------------|--|
| Operating Temperature | 35W CPU: -40°C~70°C (-40°F~158°F) 65W CPU: -40°C~50°C (-40°F~122°F) 80W CPU: -40°C~45°C (-40°F~113°F) (w/ air flow 0.5~0.8 m/s) |
| Storage Temperature | -40°C~85°C (-40°F~185°F) |
| Humidity | ~95% @ 40°C (non-condensing) |
| Shock | Operating: 50 G, half sine 11ms duration with SSD |
| Vibration | Operating: 5 Grms, 5~500 Hz, 3 axes with SSD |
| ESD | Contact +/-4kV, Air +/-8kV |
| EMC | EN61000-6-4/-2, CE & FCC Class A |
| Safety | LVD |

Mechanical

| | |
|--------------|---|
| Construction | Aluminum heatsink + Metal chassis |
| Mounting | Desk Mount |
| Dimensions | 202mm (W) x 244mm (D) x 108.7mm (H) (7.95" x 9.61" x 4.28") |
| Net Weight | 6.5kg |

Others

| | |
|------------|--------------------|
| OS Support | Windows 10 & Linux |
| TPM | TPM 2.0 |