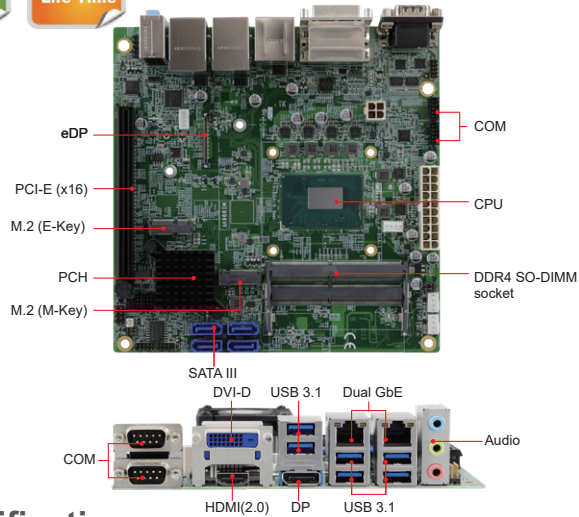


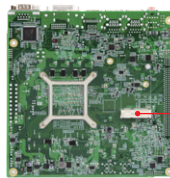


## Specifications

|                          |                                                                                                                                                                                                                           |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPU Socket               | FCBGA1440                                                                                                                                                                                                                 |
| CPU                      | 9th Gen Intel® Xeon® E / Core™ i7/i5/i3 / Celeron® processors                                                                                                                                                             |
| PCH                      | MI996VF-X28/26: Intel® CM246 PCH<br>MI996VF-9850: Intel® QM370 PCH<br>MI996EF-9100/ 4930: Intel® HM370 PCH                                                                                                                |
| Memory                   | 2x DDR4-2666 SO-DIMM socket, Max. 32GB (supports ECC by CPU SKUs)                                                                                                                                                         |
| BIOS                     | AMI                                                                                                                                                                                                                       |
| Watchdog Timer           | 256 levels                                                                                                                                                                                                                |
| H/W Monitor              | Yes                                                                                                                                                                                                                       |
| Storage Device Interface | mSATA, M.2                                                                                                                                                                                                                |
| Expansion Slots          | 1x PCI-E (x16)                                                                                                                                                                                                            |
| Mini Type Slots          | 1x Mini PCI-E<br>1x M.2 (M-key, type:2280, NVMe)<br>1x M.2 (E-Key, type:2230, CNVi)                                                                                                                                       |
| Graphics Controller      | 9th Gen Intel® Xeon® / Core™ i7/i5/i3 processor integrated                                                                                                                                                                |
| Video Output             | Supports eDP, HDMI(2.0a), DisplayPort and DVI-D                                                                                                                                                                           |
| Ethernet                 | LAN 1:<br>MI996VF-Series: Intel® I219LM Gigabit LAN PHY<br>MI996EF: Intel® I219V Gigabit LAN PHY<br>LAN 2:<br>MI996VF-X26/28: Intel® I210AT Gigabit LAN<br>MI996VF-9100/MI996EF-9100: Intel® I211AT or I210AT Gigabit LAN |
| I/O Chipset              | Fintek F81964D-I                                                                                                                                                                                                          |
| Serial Port              | 2x RS232/422/485, 2x RS232                                                                                                                                                                                                |
| USB 2.0                  | 4x USB 2.0 via pin header                                                                                                                                                                                                 |
| USB 3.X                  | 6x USB 3.1 on board                                                                                                                                                                                                       |
| Serial ATA               | MI996VF-X26/28: 4x SATA III<br>MI996VF-9850, MI996EF-9100: 2x SATA III                                                                                                                                                    |
| Audio                    | Intel® [CNL PCH-H integrated] built-in HD audio + Realtek ALC888S codec                                                                                                                                                   |
| TPM                      | TPM (2.0)                                                                                                                                                                                                                 |
| Others                   | Digital I/O (4-in/4-out); TPM 2.0, iSMART, EuP/ErP, RAID, iAMT (11.6), ATX                                                                                                                                                |
| Dimensions (L x W)       | 170mm x 170mm (6.7" x 6.7")                                                                                                                                                                                               |
| Power Consumption        | Intel® Xeon E-2176G, 3.7GHz<br>w/ 8GB DDR4-2400<br>+12V: 7.73A, +5V: 1.59A, +5VBS: 0.17A, +3.3V: 0.32A                                                                                                                    |
| Operating Temperature    | 0°C~60°C ( 32°F~140°F)                                                                                                                                                                                                    |
| Storage Temperature      | -20°C~80°C (-4°F~176°F)                                                                                                                                                                                                   |
| Relative Humidity        | 90% (non-condensing @60°C)                                                                                                                                                                                                |

## Features

- Onboard 9th Gen Intel® Xeon® E / Core™ i7/i5/i3/ Celeron® processors
- 2x DDR4 SO-DIMM sockets, Max. 32GB
- Supports eDP, HDMI(2.0a) / DVI-D and DisplayPort
- 2x Intel® Gigabit LAN
- 6x USB 3.1, 4x USB 2.0, 4x COM, 4x SATA III
- 1x PCI-E (x16), 1x Mini PCI-E, 2x M.2
- Watchdog timer, Digital I/O, iAMT (11.6), TPM(2.0), iSMART, vPRO (MI996VF series)



## Ordering Information

|              |                                                                                                                                                                                                   |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MI996VF-X28  | FCBGA1440 Intel® CM246/ Xeon® E-2276ME Mini-ITX motherboard, w/ HDMI (2.0a), DisplayPort, DVI-D and eDP, dual Gigabit LAN, TPM (2.0), RAID, vPro, iAMT (11.6), iSMART (3.8), CPU cooler on board  |
| MI996VF-9850 | FCBGA1440 Intel® QM370/ Core™ i7-9850HE Mini-ITX motherboard, w/ HDMI (2.0a), DisplayPort, DVI-D and eDP, dual Gigabit LAN, TPM (2.0), RAID, vPro, iAMT (11.6), iSMART (3.8), CPU cooler on board |
| MI996EF-9100 | FCBGA1440 Intel® HM370/ Core™ i3-9100HL Mini-ITX motherboard, w/ HDMI (2.0a), DisplayPort, DVI-D and eDP, dual Gigabit LAN, TPM (2.0), EuP/ErP, CPU cooler on board                               |
| MI996EF-4930 | FCBGA1440 Intel® HM370/ Celeron® G4930E Mini-ITX motherboard, w/ HDMI (2.0a), DisplayPort, DVI-D and eDP, dual Gigabit LAN, TPM (2.0), EuP/ErP, CPU cooler on board                               |

## Dimensions and Drawing

