

MF13 Series

4* 2.5GbE LAN Ports Networking Appliance Motherboard with Intel® Elkhart Lake SoC Processor

Features

1. Intel® Elkhart Lake J6412 Soc Processor
2. 1* DDR4 3200MHz SODIMM memory up to 16GB
3. 2* COM (RS232/422/485)
4. 1* External USB3.1 Gen.2, 1* External USB2.0, 2* Internal USB2.0
5. 4* Intel® i225V 2.5GbE
6. 1* SATAIII (6Gb/s), 1* M.2 M-key, 2242/2280 (SATA/PCIe Gen.3 x2) support NVMe, 1*M.2 E-key, 2230 (USB2.0/PCIe Gen.3 x1), 1* M.2 B-key, 3042/3052 (USB3.1), 1* SIM card slot
7. Lockable +12V DC-in PWR jack



intel. FC CE RoHS
COMPLIANT

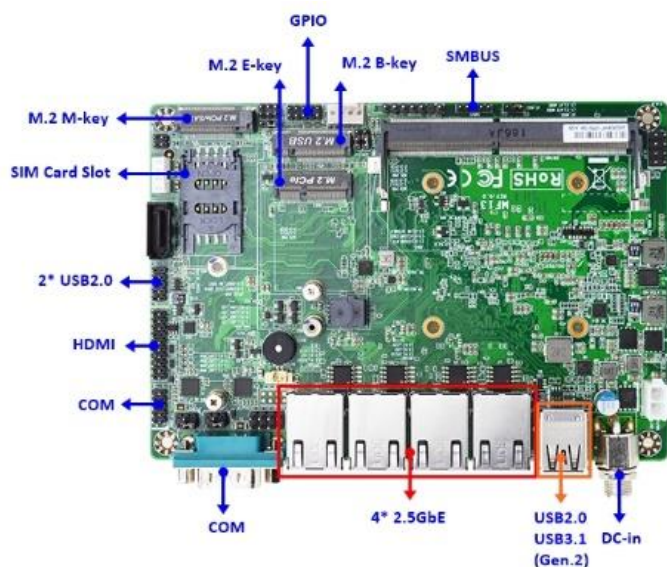
Overview

The JETWAY MF13 Series adopts the Intel® Elkhart Lake SoC processor. The system memory features one DDR4 3200MHz SODIMM up to 16GB. It equipped with four 2.5 Gigabit Ethernet LAN ports and suitable for networking environment. In addition, it offers flexible expansion with network products and features one M.2 M-key (2242/2280, SATA/PCIe Gen.3x2 interface) support NVMe, one USB 3.1 Gen.2 port, three USB 2.0 port and two RS232/422/485 port. Expansion opportunities are available with one M.2 E-key (2230, USB2.0/PCIe Gen.3x1), one M.2 B-key (3042/3052, USB3.1 interface) and one SIM card holder enabling the addition of Wi-Fi, 3G, 4G, 5G LTE for multiple connectivity. In addition, an internal SATAIII connector for a 2.5" device provides storage selection. All of these designs provide for a more user-friendly solution.

Application

Firewall / Load Balancing / Bandwidth Manager / Network Access Control

I/O Diagram



Mechanical Drawings (Unit=mm)

Specifications

Model

- MF13-00 (J6412)
- MF13-03 (J6412, 32GB eMMC)

Processor System

- Intel® Elkhart Lake SoC Processor
- AMI Flash ROM BIOS

Storage

- 1* SATAIII (6 Gb/s)
- 1* M.2 M-key (2242/2280, SATA/PCIe Gen.3x2 interface) support NVMe
- 32GB eMMC on board (MF13-03)

Ethernet

4* Intel i225V 2.5GbE

Internal I/O

- 2* USB2.0
- 1* SATAIII
- 1* COM support RS232/422/485
- 1* HDMI header
- 1* 32GB eMMC (MU11-03)

(If use Win 10 OS, we recommend the eMMC is use for OS boot up purpose.)

- 1* GPIO
- 1* PS/2
- 1* Chassis intrusion
- 1* SMBUS
- 1* AT mode

Power

12V DC-in PWR

- AT: Directly PWR on as Power input ready

- ATX: Press Button to PWR on after Power input ready

Temperature

- Operating Temperature: -10 ~ 60° C
- Storage Temperature: -20 ~ 60° C
- Humidity: 10% ~ 90% RH @40°C (non-condensing)

Warranty

- 2 Years limited warranty

Form Factor

3.5" (5.8-in * 4.0-in, 148 * 102mm)

Memory

1* DDR4 3200MHz SO-DIMM up to 16GB

Expansion

- 1* M.2 E-key (2230, USB2.0/PCIe Gen.3x1 interface)
- 1* M.2 B-key (3042/3052, USB3.1 interface)
- 1* SIM card holder

Graphics

- Intel® HD Graphics, shared memory
- 1* HDMI 1.4b (Max Resolution: 3840x2160@30Hz)
- Support Single Display

External I/O

- 1* USB3.1 Gen.2
- 1* USB2.0
- 1* COM support RS232/422/485
- 4* RJ45
- 12V lockable DC-in

Watchdog Timer

- From Super I/O to drag RESETCON#
- 256 segments (10sec ~ 255min)

Compliance

CE, FCC, LVD, RoHS, REACH

OS Support

UEFI Win10 64-bit, Win 10 IoT Enterprise 64-bit LTSC 2019, CentOS (Version 9), Debian (Version 11.3), Fedora-LXDE (Version 36-1.5), Fedora Workstation (Version 36-1.5), Fedora Server (Version 36-1.5), Open SUSE (Version 15.4), Ubuntu Standard / LTS (Version 22.04), Ubuntu Server (Version 22.04), pfSense (Version 2.6.0), TrueNAS (FreeNAS) (Version 13.0), RedHat Enterprise (Version 9.0), OPNSense (Version 22.1.2)

* Specifications subject to change without notice, not responsible for typographical errors. Does not include HDD or OS.

Standard Accessories

Part Number	Description
MF13 Series	MF13 Series M/B
J2NF533FP10R10	LAN LED card module
G01-2X4-18K0-F	
G01-USB2X5A-28-F	
G01-COM-H2M22-1F	COM cable
G01-SATA-BK-B-2F	SATA cable
G01-PW4PS-2S-323F	SATA Power cable