



## HBFDF13-6412-B Series

### 4 LAN Ports Fanless Network Appliance with *Intel® Elkhart Lake SoC processor*



### Overview

The JETWAY MF13 Series adopts the Intel® Elkhart Lake SoC processor. The system memory features one DDR4 3200MHz SODIMM Up to 16 GB. 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.

### Features

1. Intel® Elkhart Lake SoC Processor, Default: J6412
2. 1\* 260-pin Dual-channel DDR4 3200MHz SODIMM Up to 16 GB
3. 2\* COM (RS232/422/485), 1 \* USB3.1 Gen.2, 3\* Internal USB2.0
4. 4\* Intel® i225V 2.5GbE
5. 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

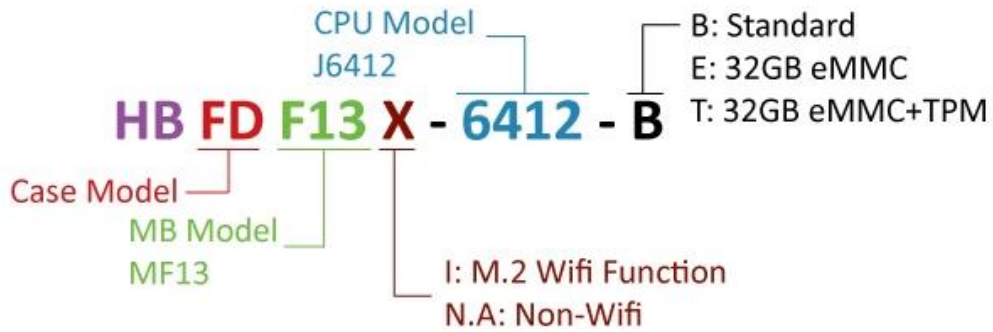
## Specifications

<b>MB Model</b>	<ul style="list-style-type: none"> <li>● MF13-00 (J6412)</li> <li>● MF13-03 (J6412+32GB EMMC)</li> <li>● MF13-07 (J6412+32GB EMMC+TPM)</li> </ul>	
<b>Part No</b>	<b>Non-Wifi</b>	<b>M.2 ac Wifi card</b>
	<ul style="list-style-type: none"> <li>● HBFDF13-6412-B (Default)</li> <li>● HBFDF13-6412-E (EMMC)</li> <li>● HBFDF13-6412-T (EMMC+TPM)</li> </ul>	<ul style="list-style-type: none"> <li>● HBFDF13I-6412-B (Default)</li> <li>● HBFDF13I-6412-E (EMMC)</li> <li>● HBFDF13I-6412-T (EMMC+TPM)</li> </ul>
<b>Processor</b>	Intel® Elkhart Lake SoC Processor / Default: J6412	
<b>Memory</b>	● 1 * SO-DIMM DDR4-3200MHz up to 16GB	
<b>Storage</b>	<ul style="list-style-type: none"> <li>● 1 * 2.5" SATA3 6Gb/s internal drive bay (only support 2.5" HDD with a height ≤ 10mm)</li> <li>● 1 * M.2 M-KEY(2242/2280,SATA/PCIe Gen.3x2) support NVME</li> </ul>	
<b>Network</b>	● 4 * Intel® i225V 2.5GbE	
<b>Expansion slot</b>	<ul style="list-style-type: none"> <li>● 1 * M.2 E-KEY(2230,USB2.0/PCIe Gen.3x1)</li> <li>● 1 * M.2 B-KEY(3042/3052, USB3.1)</li> </ul>	
<b>Front Panel I/O</b>	<ul style="list-style-type: none"> <li>● 1 * Power button, 1 * Reset button</li> <li>● 1 * Power LED, 1 * HDD LED</li> <li>● 2 * USB2.0</li> <li>● 4 * NIC LED</li> <li>● 1 * COM &amp; 1 * GPIO (option)</li> </ul>	
<b>Rear Panel I/O</b>	<ul style="list-style-type: none"> <li>● 4 * RJ45</li> <li>● 1 * USB3.1, 1* USB2.0</li> <li>● 1 * HDMI (Reserve, Max. resolution:4096 x 2304@24Hz)</li> <li>● 1 * COM (RS232/422/485)</li> <li>● 1 * DC-in jack Lock type</li> </ul>	
<b>Other Features</b>	<ul style="list-style-type: none"> <li>● TPM2.0 (On board option)</li> <li>● 32GB EMMC (On board option)</li> <li>● 0~255 segments by software programmable</li> </ul>	
<b>Power Source</b>	<ul style="list-style-type: none"> <li>● Adapter : AC 90~240V input / DC12V-60W output</li> <li>● MB : DC12V input</li> </ul>	
<b>Safety</b>	● CE, FCC, LVD, RoHS	
<b>Temperature</b>	<ul style="list-style-type: none"> <li>● Operating Temperature: -20 ~ 60° C (Under the condition of using mSATA or SSD)</li> <li>● Operating Temperature: 0 ~ 60° C (Under the condition of using 2.5" SATA HDD) (The test environment is closed and windless)</li> <li>● Storage Temperature: -20 ~ 70° C</li> <li>● Humidity: Between 40% and 60%, non-condensing</li> </ul>	
<b>Dimensions</b>	● 193 (W) x 142.4 (D) x 62 (H) mm	

<b>Packing</b>	<ul style="list-style-type: none"> <li>● Net Weight: 2.2KG</li> <li>● Gross Weight: 3.2KG</li> <li>● Color Box dimension: 250 (W) * 118 (D) * 295 (H) mm</li> </ul>
<b>OS Support</b>	Windows 11, Linux
<b>Warranty</b>	2 Year limited warranty

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

## Part Number Rule

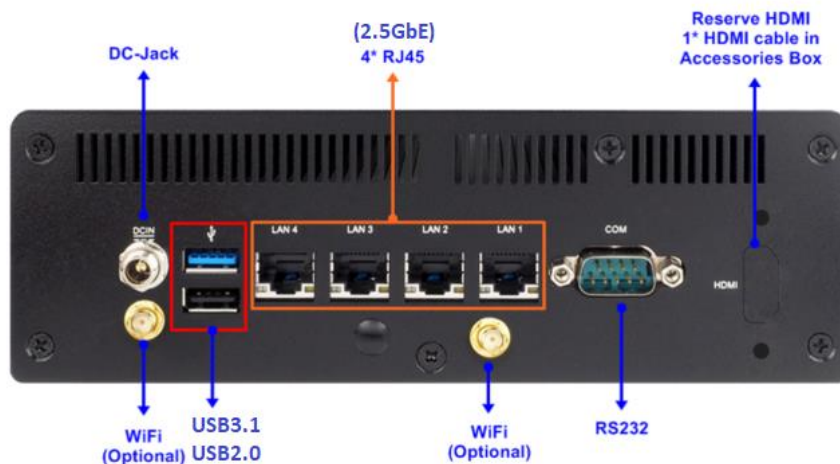


## External I/O

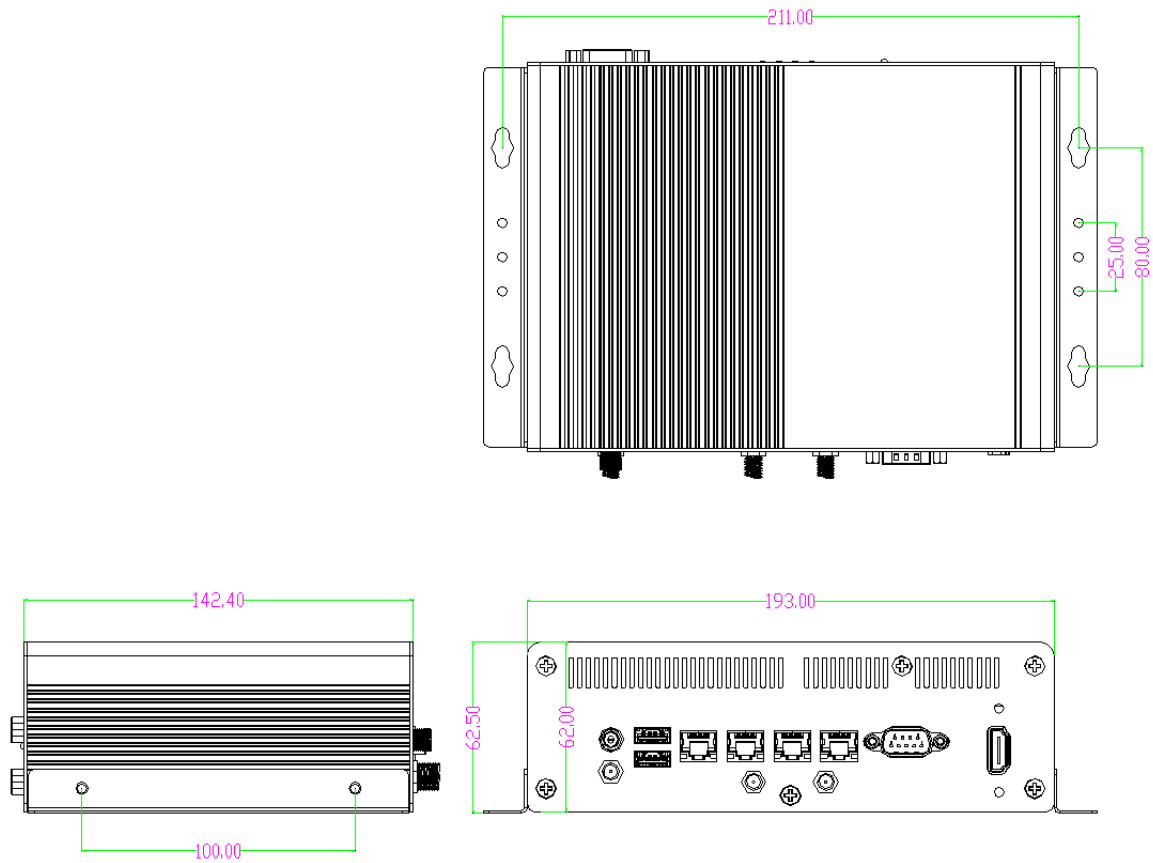
### Front



### Rear



## Mechanical Drawings (Unit = mm)



## Standard Accessories

Parts Number	Description
	HBDF13 Series
L01AS052-F	Lockable Adapter 12V/60W
Change according to shipping area	Power cord
LCSCBFDXXX-F	HBFX_Series Barebone Screw Pack
HCSFDMWM01B-F	FD Series Wall mount
HNSCOMWFAWCB161HF	Mini PCIe ac Wifi card (Wifi model only)
J05-ANT-GX57245-F	Antenna2G4/5G 2.8dBi GX572450001SM (Wifi model only)
G01-COM-H2M20-1F	COM Cable
G01-2X10A-HDMI-1F	HDMI Cable