

# HBFD04-6412-V

Intel® Elkhart Lake SoC processor, DDR4 up to 32GB, 2\* HDMI, 12~24V DC-in

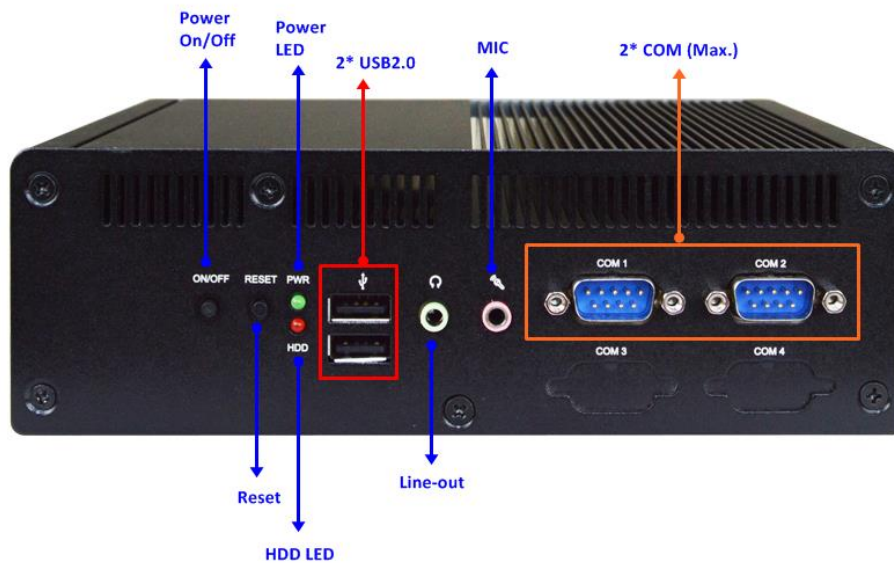
## Features

1. Intel® Elkhart Lake SoC Processor (Default: J6412)
2. Support 2 \* SO-DIMM DDR4-3200MHz up to 32GB
3. All-aluminum body, produced by casting process
4. 8\*USB , 2\*HDMI , 2\*LAN , 2\*COM , 1\*MIC , 1\*Line out
5. MB support DC12~24V input
6. TPM2.0 (option)

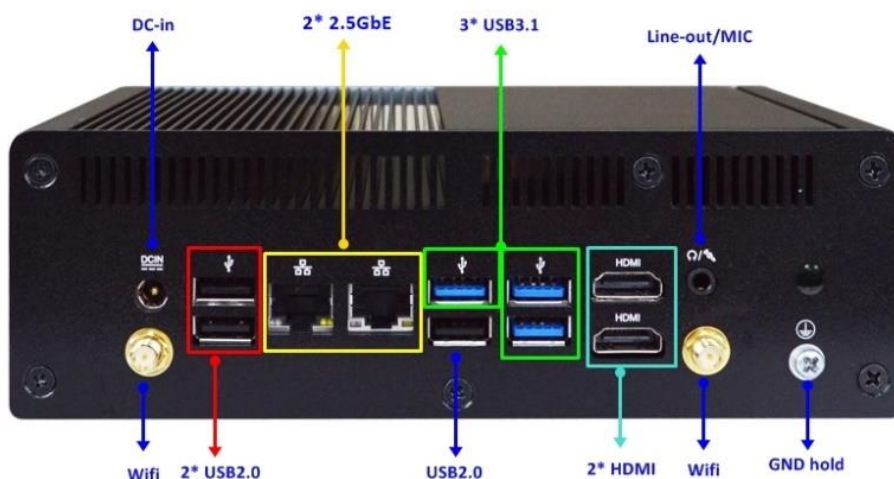


intel. FC CE RoHS  
COMPLIANT

## Front I/O



## Rear I/O



## Specifications

### Model

- HBFDF04-6412-V (Default)
- HBFDF04I-6412-V (Wifi)
- HBFDF04-6412-VT (TPM2.0)
- HBFDF04I-6412-VT (Wifi, TPM2.0)

### BIOS

- AMI Flash ROM

### Network

- 2\* Intel® i225V 2.5GbE

### Storage

- 1 \* 2.5" SATAIII Device (support 2.5" HDD with a height ≤ 10mm)
- 64GB onboard eMMC (Default)
- 1\* M.2 M-key (2242/2280) PCIe Gen.3 x2/SATA interface Support NVME

### Rear Panel I/O

- 3\* USB3.1 (Gen2)
- 3\* USB2.0
- 2\* HDMI
- 2\* RJ45
- Line-out/MIC combo jack
- 1\* DC Jack

### Internal Connector

- 1\* SIM card slot

### Compliance

CE, FCC, LVD, RoHS, ErP Ready

### Temperature

- Operating Temperature: 0 ~ 50° C
- Storage Temperature: -40 ~ 85° C
- Humidity : Between 10% and 95% @40° C, non-condensing

### OS Support

Win10 & 11, Linux.

### Warranty

2 Years limited warranty

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

### CPU / Chipset

Intel® Elkhart Lake SoC Processor (Default: J6412, TDP 10W)

### Memory

- 2\* SO-DIMM slots DDR4-3200MHz up to 32GB

### Graphics

- Intel® HD Graphics, shared memory
- 2\* HDMI (Max Resolution: 4096x2160@60Hz)
- Support Dual Displays

### Expansion

- 1\* M.2 B-key (3042) Support USB3.1/USB2.0 interface
- 1\* M.2 E-key (2230) Support USB2.0/PCIe Gen.3 x1 interface

### Front Panel I/O

- 1\* Power SW, 1\* Reset
- 1\* Power LED, 1\* HDD LED
- 1\* MIC
- 1\* Line-out
- 2\* COM (COM1 support RS485)
- 2\* USB2.0

### Power Source

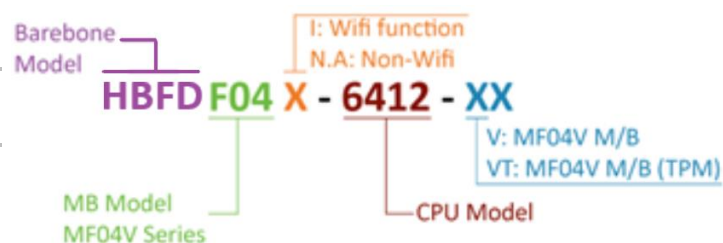
- MB : DC-in 12~24V
- Adapter : AC\_90~240V / DC\_12V / 60W

### Dimensions

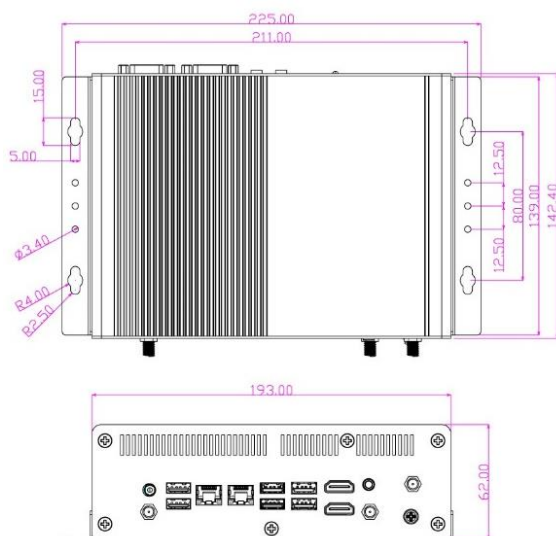
System: 193 (W) x 142.4 (D) x 62 (H) mm

Box: 250 (W) x 118 (D) x 295 (H) mm

## Part Number Rules



## Mechanical Drawings (Unit=mm)



## Standard Accessories

Part Number	Description
-----	HBFD04V Series Barebone
L01AS053-F	Adapter 12V-60W
Change according to shipping area	Power cord
LCSCBFDXXX-F	Screw Pack
HCS3XXDINRAILPS-F	DIN RAIL Kits
HCSFDMWM01B-F	WALL MOUNT
J05-ANT-GX57245-F	Antenna 2G4/5G (Wifi only)
HNSCOMWFCB375NF-F	M.2 ac WiFi card(WIFI only)