

HBFD05 Series

Intel® Tiger Lake-UP3 Processor, support up to 4* 4K HDR Displays or 1* 8K SDR Displays, M.2 PCIE 4.0 x4 support NVMe, 4* COM, 4* USB3.2 (Gen2), 1* 2.5GbE, 1* GbE

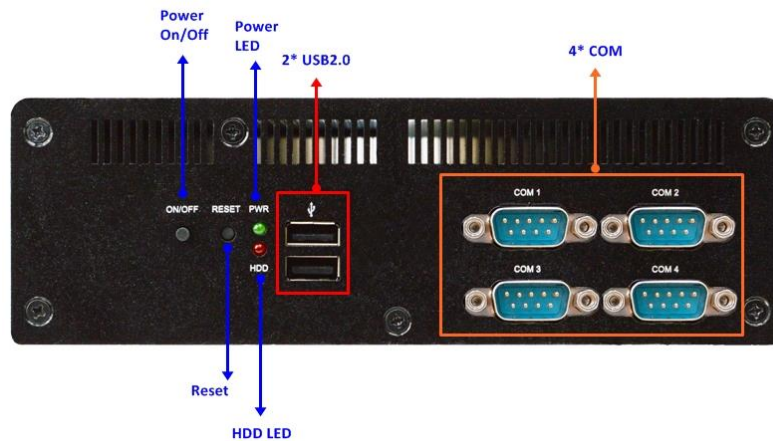
Features

1. Intel® Tiger Lake-UP3 SoC Processor (TDP 15W)
2. 2* DDR4-3200MHz SO-DIMM up to 64GB
3. 2* USB2.0, 4* USB3.2, 2* HDMI, 2* DP, 2* RJ45, 1*Audio
4. Support 4* 4K HDR Displays or 1* 8K SDR Displays
5. Onboard TPM2.0 (option)
6. DC12_90W Adapter

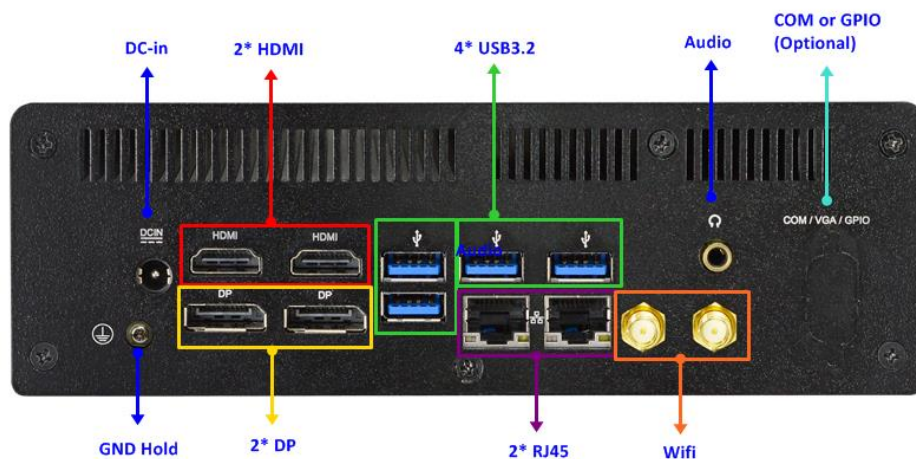


intel. FC CE RoHS COMPLIANT

Front I/O



Rear I/O



Specifications

Model

- HBFDF05-45G7-V (CPU: i5-1145G7E)
- HBFDF05-45G7-VT (CPU: i5-1145G7E, TPM)
- HBFDF05I-45G7-V (CPU: i5-1145G7E, Wifi)
- HBFDF05X-45G7-V (CPU: i5-1145G7E, Wifi)
- HBFDF05I-45G7-VT (CPU: i5-1145G7E, TPM, Wifi)
- HBFDF05X-45G7-VT (CPU: i5-1145G7E, TPM, Wifi)
- HBFDF05-35G7-V (CPU: i5-1135G7)
- HBFDF05-35G7-VT (CPU: i5-1135G7, TPM)
- HBFDF05I-35G7-V (CPU: i5-1135G7, Wifi)
- HBFDF05X-35G7-V (CPU: i5-1135G7, Wifi)
- HBFDF05I-35G7-VT (CPU: i5-1135G7, TPM, Wifi)
- HBFDF05X-35G7-VT (CPU: i5-1135G7, TPM, Wifi)

BIOS

AMI Flash ROM

Network

- 1 * Intel® i219-LM GbE
- 1 * Intel® i225V 2.5GbE

Storage

- 1 * M.2 M-key (2242/2280) Support PCIe4 (NVMe)
- 1 * 2.5" SATAIII 6Gb/s internal drive bay (Max. Height 9.5 mm)

Rear Panel I/O

- 4 * USB 3.2(Gen2)
- 2 * HDMI 2.0b
- 2 * DP1.4
- 2 * RJ45
- 1 * Line-out/MIC Combo
- 1 * DC-in
- 1 * COM or GPIO (Optional)

Internal Connector

NA

Compliance

CE, FCC, LVD Ready, RoHS

Temperature

- Operating Temperature:
 - 20 ~ 50° C (Under the condition of using M.2 interface SSD)
 - 0 ~ 50° C (Under the condition of using 2.5" SATA HDD)(The test environment is closed and windless)
- Storage Temperature: -40 ~ 85° C
- Humidity : 10% ~ 95% RH @40°C (non-condensing)

OS Support

UEFI Win10 64-bit (Version: Build 10.0.19042.631), Win 10 IoT Enterprise 64-bit LTSC 2019 (Version: Build 17763.107), UEFI Win 11 64-bit (Version: Build 22000.65), UEFI Win 11 IoT Enterprise (Version: Build 22000.65), CentOS (Version: 8.2.2004), Fedora-LXDE (Version: 33.1.2), Fedora Workstation (Version: 33.1.2), Fedora Server (Version: 33.1.2), OpenSUSE (Version: 15.2), Ubuntu Standard / LTS (Version: 20.04.1)

Warranty

2 Years limited warranty

CPU / Chipset

Intel® Tiger Lake-UP3 Processor (TDP 15W), Default: 1145G7E

Memory

2 * DDR4-3200MHz SO-DIMM up to 64GB

Graphics

- Intel® HD Graphics, shared memory
- 2 * HDMI 2.0b (Max. resolution:4096 x 2160@60Hz)
- 2 * DP1.4 (Max. resolution:4096 x 2304@60Hz)
- Support Four Display (4K HDR Displays or One 8K SDR Displays (DP))

Expansion

1 * M.2 E-key (2230) USB2.0/PCIex1 interface support CNVi

Front Panel I/O

- 1* Power button
- 1* Reset button
- 1* Power LED
- 1* HDD LED
- 2* USB 2.0
- 4* COM (2 sets of installation, 2 set of accessories box)

Power Source

- MB : DC-in 12~24V
- Adapter : AC_90~240V / DC_12V / 90W

Dimensions

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

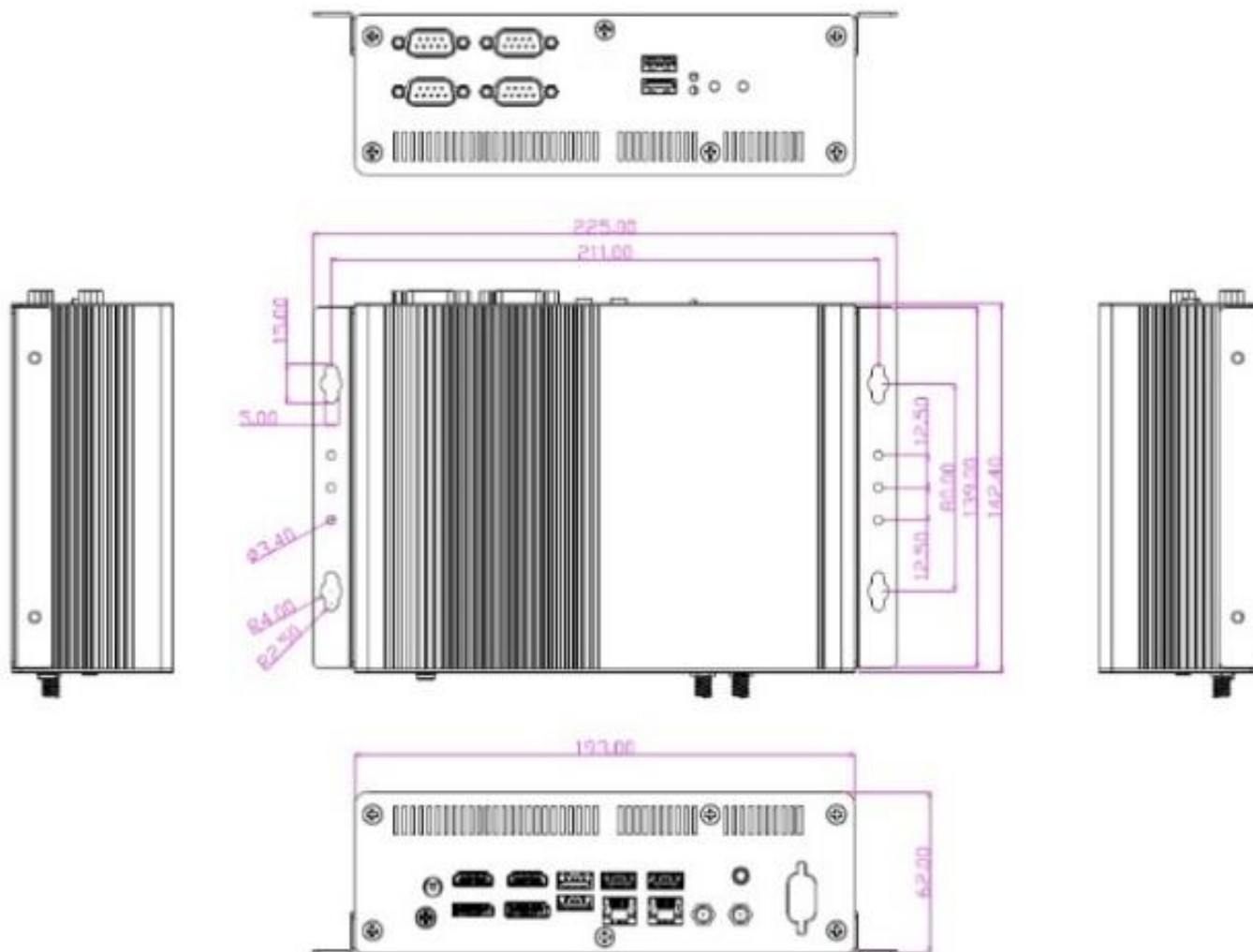
Box: 250 (W) x 118 (D) x 295 (H) mm

Part Number Rules



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

Mechanical Drawings (Unit=mm)



Standard Accessories

Part Number	Description
-----	HBDF05 Series
L01AS064-F	DC12V/90W Adapter
Change according to shipping area	Power Code
LCSCBFDXXX-F	HBFX_Series Barebone Screw Pack
HCSFDMWM01B-F	FD Series Wall mount
HCS3XXDINRAILPS-F	DIN Rail Clip
J05-ANT-GX57245-F	Antenna (WiFi only)
HNSCOMWFCB375NF-F	AW-CB375NF M.2 2230 (WiFi only)
HNSCOMWFAX200NV-1F	Intel AX200NGWG M.22230 (WiFi only)
G01-COM-H2M20-1F	COM Cable
HBDK-FD-S	HBFD SERIES DIN RAIL KITS (optional)