

## NFD10

### User Manual

#### One、Brief introduction

NFD10 adopts all-aluminum alloy construction, using fanless enclosed body cooling manner, integrates Intel® 1037U dual-core 1.8GHz processor, supports VGA/HDMI display and 1080P video playback, with 6\* RS232, 6\* USB, 2\* audio interfaces, supports L256 programmable watchdog. It is ultra-low power consumption, with compact structure, is an applied to digital advertising small full HD digital multimedia advertising machine.

#### Picture



- **Mini shape, ultra low noise, body heat dissipation**

Adopt fanless design , aluminum alloy shell chassis ,small size , can be applied to various small space.



- **Onboard Intel ® 22nm processor**

Inboard Intel®1037U 1.8G dual core processor ,TDP 17W,USING Intel® HM65 Express Chipset



- **WIFI Wireless network card**

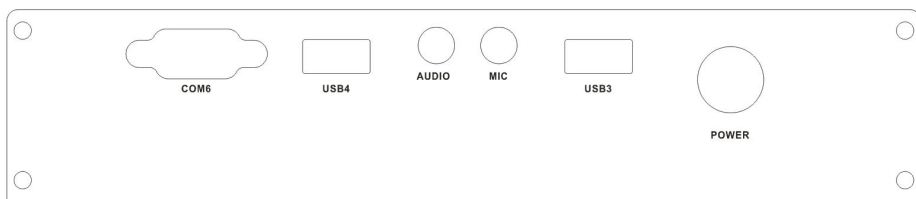
Optional

# NFD10 Based on Intel®IVY bridge architecture Computer

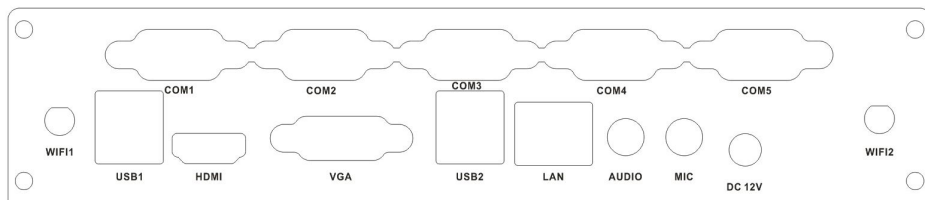
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## Two 、 Interface indicating diagram

### Front View



### Back View

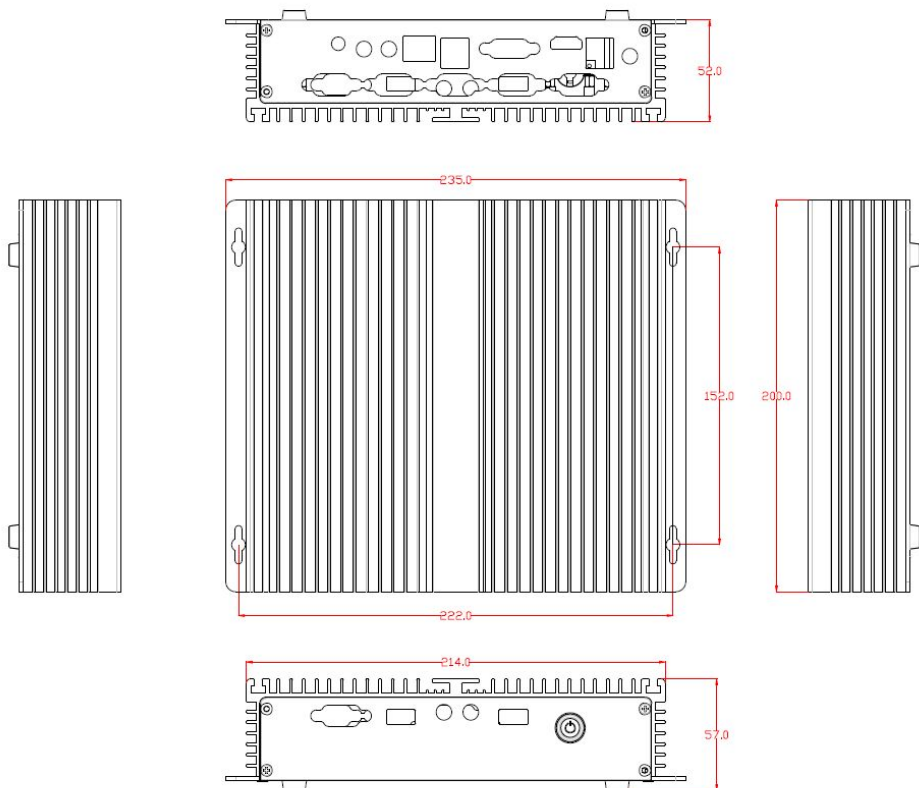


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## Three、Size Picture

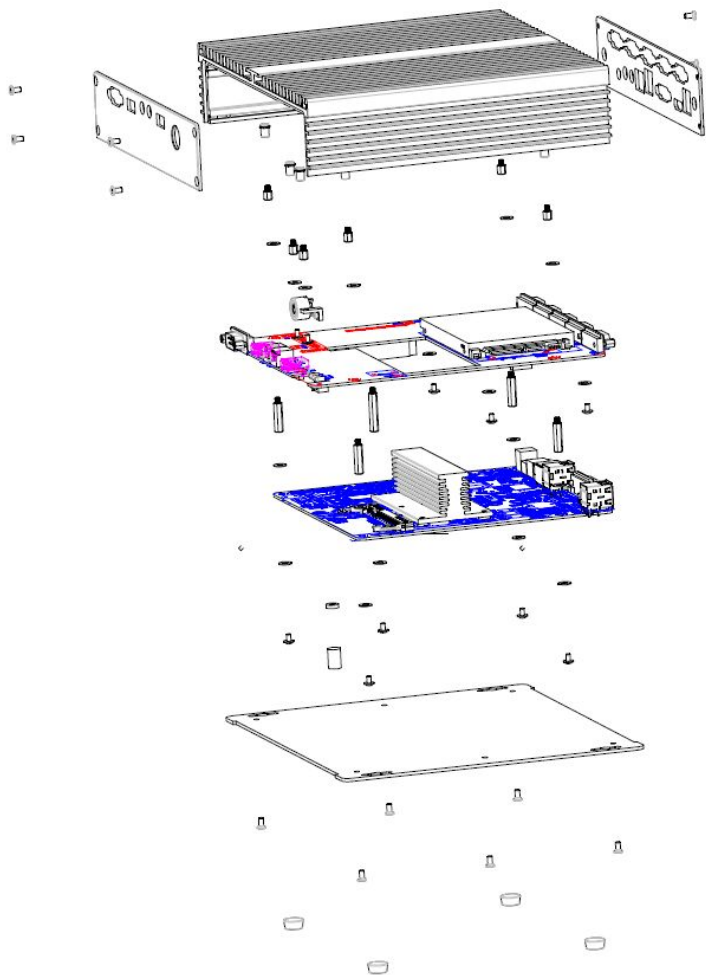
200x214x52 (L x W x H/mm)



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## Four、Installation



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## **Five、Hardware Specification**

### **System**

- CPU: Integrated Intel® 1037U 22nm 1.8G dual core processor , TDP 17W
- Chipset : Intel®NM70 chip
- BIOS: AMI 32MB Flash ROM
- System Memory : 1/204Pin DDRⅢISO-DIMM slot, support 1333/1066MHz DDRⅢ, up to 8GB

### **Display**

- Display Chip: Intel HD2000 display controller
- Memory size: dynamic sharing system memory as video memory, the MAX.UP to 1GB
- Display Port : VGA,HDMI
- VGA: standard DB15 (Rear Panel),support CRT ,the max. Resolution 2560\*1600
- HDMI: HD Media (Rear Panel) support the max.Resolution2560\*1600
- VGA+HDMI , can realize double display synchronously

### **Ethernet**

- Network Controller : REALTEK 8111E chip
- LAN Port: 1\*RJ\_45( Rear Panel )
- Speed: 1000Mbps
- Support Wake-On-LAN (WOL)
- WIFI (Optional )

### **Storage**

- 1 \*2.5' HDD Space, can install SATA II hard disk
- 1 \*MSATA slot ,support SSD

### **AUDIO**

- Chip: adopt ALC662 audio controller chip ,provides Line out and MIC IN

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- Port: 2\*Line out hole and MIC\_IN hole
- Feature: support HD 6-Channel output

## **USB**

- USB: 6 \*USB standard ,USB 2.0

## **Com**

- DB9 COM: 6 \*standard RS232 COM port ,support +5V、+12V voltage output ,COM2 supports RS422 /485 .

## **System Switch**

- POWER switch (front panel)
- RST switch (front panel)

## **Indicator light**

- Power Indicator (front panel)
- Hard Disk Indicator (front panel)

## **Cooler System**

- Fanless full-enclosed cooling system

## **Power**

- DC +12V Input

## **Watchdog**

- Support hardware reset function (L256, 0~255 seconds)

## **Environment and Physical characteristics**

- Seismic test: GB/T9813-2000
- Work Temp: 0℃~50℃
- Humidity: 5%~90% (relative humidity; non-condensing)
- Storage Temp.: -10℃~60℃
- Structure: aluminum alloy shell
- Size: 200x214x52 (L x W x H)

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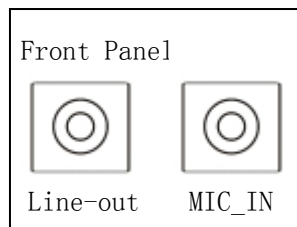
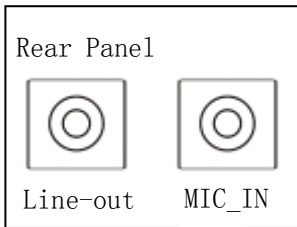
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- Installation : desktop or wall hanging installation
- Weight: 2.0Kg±0.5Kg

## **Six 、 Interface instructions**

### **1 Audio (Line-out)**

**NFD10 adopts ALC662 audio decoder chip, support 6 channel audio, on the rear panel provides the audio output jack 1 standard (Line-out).**



### **2 High definition multimedia interface (HDMI)**

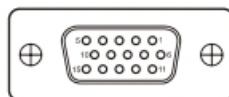
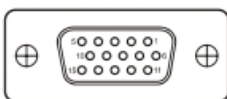
**NFD10 provides 1\*HDMI Standard Port,transfer No audio signal compression and high resolution video signal .Support 1080p video and 6 channel audio signal .**



HDMI

### **3 VGA (VGA)**

**NFD10 provides 1\*15Pin standard VGA , Can be connected to all of the standard VGA interface display.**



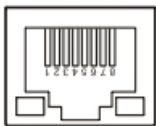
VGA

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## 4 Network Port (LAN1)

NFD10 provides 1\*RJ-45 gigabit Ethernet Ports , LILED and ACTLED are green and yellow LED at the sides of the Ethernet port . Showing LAN activity state.



LAN1

LILED(green)state		Function	ACTLED (yellow) state	Function
Bright	green ( 100Mbps )	Valid Connection	lightning	The network is connected, ongoing data transmission
	yellow ( 1000Mbps )			
Not bright		Invalid Connection or close	Not bright	No network connection and data transfer

## 5 USB (USB)

NFD10 provides 4 standard USB ports, compatible with USB2.0 specification, support plug and play in accordance with the norms of USB equipment. If you don't want to use this interface, can be set to disable the USB interface in BIOS.



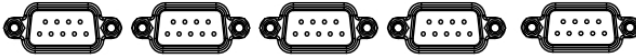
### USB Interface definition

PIN	Signal	Pin	Signal
1	VCC	2	VCC
3	USB_P -	4	USB_P -
5	USB_P +	6	USB_P +
7	GND	8	GND



## 6 COM (COM1~COM6 )

NFD10 provides 6\*DB9 standard COM Port ,support RS232, the 9<sup>th</sup> pin support +5V、+12V output voltage.



### COM Interface definition

Pin	Signal	Description
1	DCD	Carrier detection
2	RXD	Receive data
3	TXD	Transfer data
4	DTR	Data terminal ready
5	GND	System ground
6	DSR	The data ready
7	RTS	A request to send
8	CTS	Clear to send
9	RI	Ring indicator