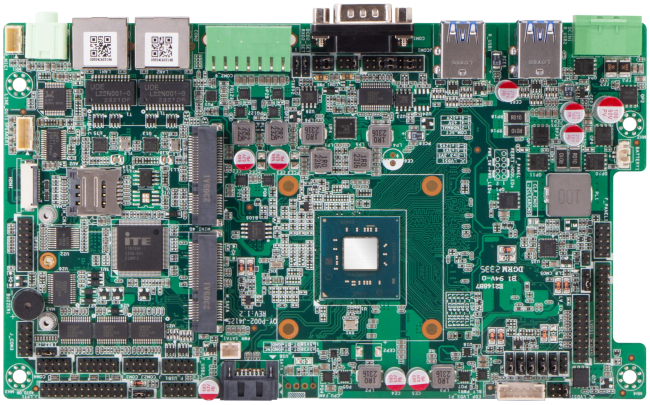
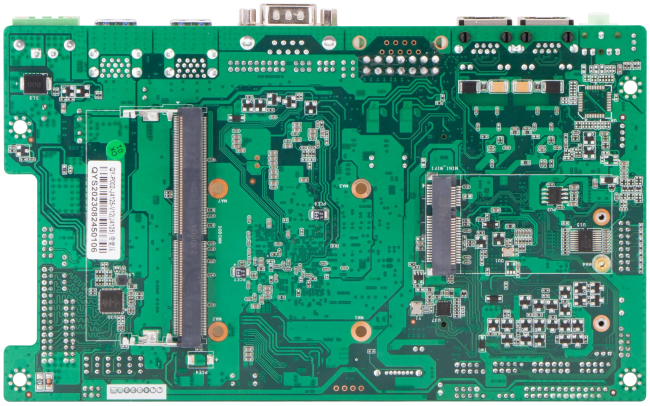
QY-J4125-V12-6COM

- Intel Celeron™ J4125 CPU
- 6*COM, 4*USB3.0, 4*USB2.0, 2*Gigabit LAN
- 1*LVDS/eDP, 1*HDMI,
  (Support triplet display
  simultaneously)
- 2*Mini-PCIe (4G/Wifi/BT)
- 1*M-SATA
- Mini-ITX, DC 9-36V Power Input

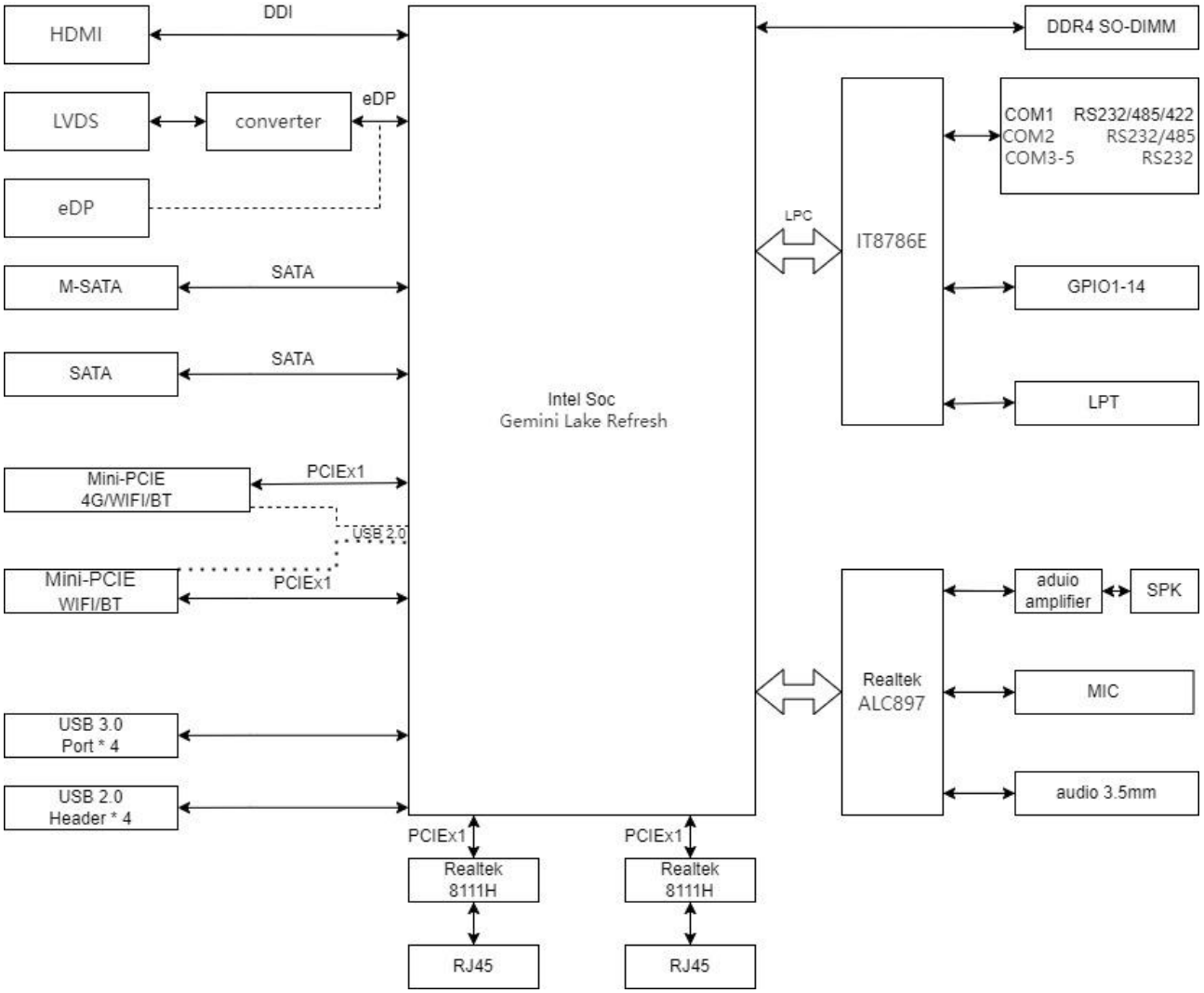




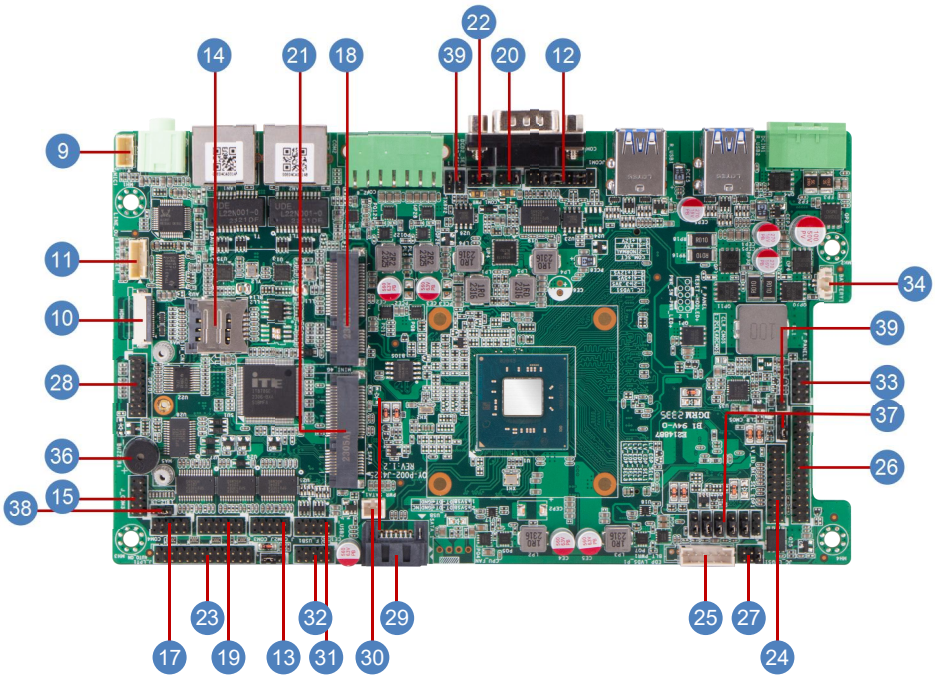
1. Specification

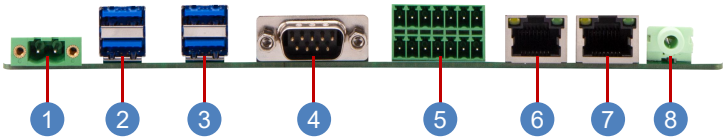
Model	QY-J4125-V12
CPU	Intel® Celeron™ J4125, up to 2.70G, Duad-core
Display	Support quad display simultaneously: 1* HDMI: resolution up to 2560* 1440@60Hz 1 * LVDS/eDP: LVDS, resolution up to 1920 * 1080@60Hz 1 * eDP: resolution up to 1920 * 1200@60Hz
Memory	DDR4-2400,1 * SO-DIMM, up to 8GB *Note:Due to the limitation of Windows 32-bit operating system, if more than 4 GB of memory is installed, it is actually.The memory capacity displayed on will be less than 4 GB.
Storage	1 * SATA3.0 7P Connector 1 * Mini-SATA
Expansion Interface	2 * Mini-PCIe (Wifi supported with 4G/BT selectable)
Ethernet	2 * Realtek® 1Gbps PCIe Ethernet Controller, RJ45
Audio	Realtek® HDA Codec, with MIC/Line-out and Amplifier 1 * MIC 1 * Line-Out 1 * SPK
COM	4 * RS232 Header 1 * RS232/RS485/RS422 Header 1 * RS232/RS485 Header
USB	4 * USB3.0 (Rear I/O, TYPE-A) 4 * USB2.0 (Internal, Header)
Other Ports	1 * LPT Header 1 * Micro SIM Card Slot 1 * CPU FAN Header 1 * Front Panel Header 1 * GPIO Header 1 * CMOS Clear Jumper
System	Windows 10/11, Linux
Temperature	Storage: -30~75℃ Operating: -20° ~60℃
BIOS	AMI UEFI BIOS
Power Input	DC 9-36V
Factor	196mm * 115mm

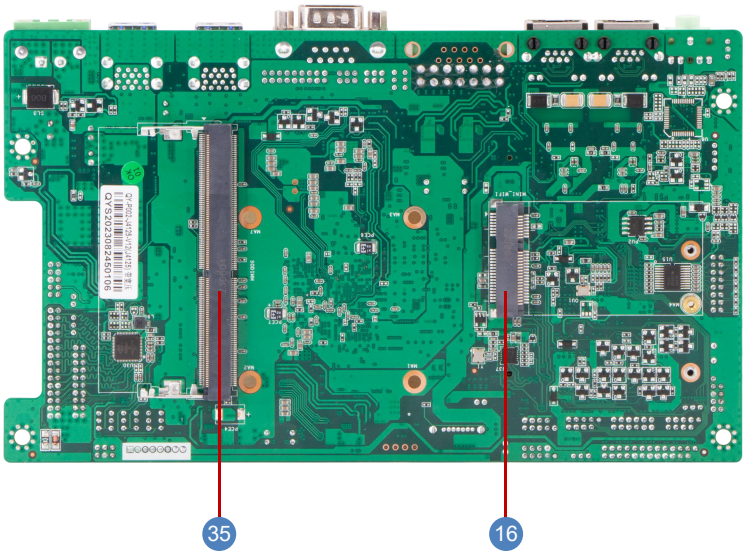
2. Data Flow


HDMI
DDI
LVDS
converter
eDP
eDP
M-SATA
SATA
SATA
SATA
Mini-PCIE
4G/WIFI/BT
PCIEx1
USB 2.0
Mini-PCIE
WIFI/BT
PCIEx1
USB 3.0
Port * 4
USB 2.0
Header * 4
Intel Soc
Gemini Lake Refresh
PCIEx1
PCIEx1
Realtek
8111H
Realtek
8111H
RJ45
RJ45
DDR4 SO-DIMM
LPC
IT8786E
COM1 RS232/485/422
COM2 RS232/485
COM3-5 RS232
GPIO1-14
LPT
Realtek
ALC897
aduio
amplifier
SPK
MIC
audio 3.5mm

3. Marking instruction







Connector&Header

1	DC12V Power Input Connector
2	USB3.0 Connectors
3	USB3.0 Connectors
4	COM1 Connectors
5	COM2-6 Pin Headers
6	LAN Connectors
7	LAN Connectors
8	Line-out Connector
9	MIC Pin Header
10	HDMI Pin Header
11	Amplifier Pin Header
12	COM1 Select Jumper
13	COM2 Pin Headers
14	SIM Card Slot
15	COM3 Pin Headers
16	Mini PCI-WIFI Slot (WIFI/BT)
17	COM4 Pin Headers
18	Mini PCI-4G_CAN Slot (WIFI/4G/BT)
19	COM3-6 Pin Headers
20	COM1 PWR Select Jumper
21	M-SATA Connector
22	COM2 Select Jumper
23	Parallel Port Pin Header
24	eDP Signal Pin Header
25	eDP/LVDS Backlight Control Pin Header
26	LVDS Signal Pin Header
27	eDP/LVDS VDD Select Jumper
28	GPIO Pin Header
29	SATA 3.0 Connector
30	SATA Power Pin Header
31	USB Pin Headers
32	USB Pin Headers
33	Front Panel Pin Header
34	CMOS battery Holder
35	DDR4 SO-DIMM Slot
36	buzzer
37	eDP/LVDS Signal Select Jumpers
38	COM2 Mode RS232/485 jumper
39	COM2 RS232/485 jumper

4. Definition

[1] DC12V Power Input Header(1*2 5.0mm spacing)

Power input interface, supporting 9-36V。

[2] USB3.0 Connectors

Two USB3.0 Type-A™ interfaces are on the rear panel, supporting 5Gbps. And can be compatible with USB 2.0 specification. You can connect USB devices to this interface.

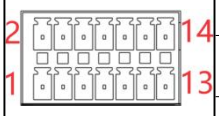
[3] USB3.0 Connectors

Two USB3.0 Type-A™ interfaces are on the rear panel, supporting 5Gbps. And can be compatible with USB 2.0 specification. You can connect USB devices to this interface.

[4] COM1 Connectors

No.	Location	Pin	Definition	Pin	Definition
4	COM1 	1	DCD	2	RXD
		3	TXD	4	DTR
		5	GND	6	DSR
		7	RTS	8	CTS
		9	COM1_RI		

[5] COM2-6 Pin Headers(2*8Pin 3.81mm spacing)

No.	Location	Pin	Definition	Pin	Definition
5	COM2-6 	1	COM2_TX/COM2_485_A	2	COM2_RX/COM2_485_B
		3	COM3_TX	4	COM5_TX
		5	COM3_RX	6	COM5_RX
		7	GND	8	GND
		9	COM4_TX	10	COM6_TX
		11	COM4_RX	12	COM6_RX
		13	GND	14	GND

[6] LAN Connectors

This network cable interface is an ultra-high-speed Ethernet, which provides connection to the Internet with the highest transmission rate per second.Up to 1 GB (1 Gbps)

[7] LAN Connectors

This network cable interface is an ultra-high-speed Ethernet, which provides connection to the Internet with the highest transmission rate per second.Up to 1 GB (1 Gbps).

[8] Line-out Connector(green)

This jack is an audio output hole and supports audio amplification function. It is recommended to connect headphones and speakers to this jack for better performance.Output audio (the actual effect may vary depending on the device you use)

[9] MIC Pin Header(1*3 Pin 2.0mm)

No.	Location	Pin	Definition	Pin	Definition
9	J_MIC1	1	MIC_L	2	GND
		3	MIC_R		

[10] HDMI Pin Header (1*20 Pin 1.0mm)

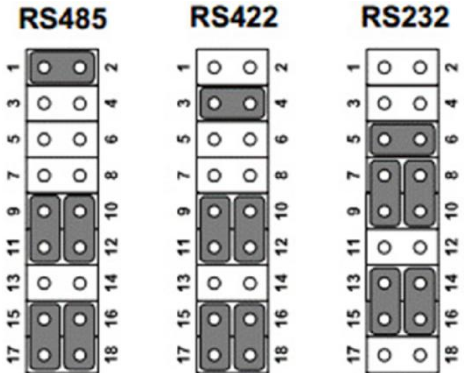
No.	Location	Pin	Definition	Pin	Definition
10	HDMI	1	N/C	2	TX2_DP
		3	TX2_DN	4	GND
		5	TX1_DP	6	TX1_DN
		7	GND	8	TX0_DP
		9	TX0_DN	10	GND
		11	CLK_DP	12	CLK_DN
		13	N/C	14	GND
		15	N/C	16	DDC_SCL
		17	DDC_SDA	18	HPD
		19	N/C	20	+V5S

[11] Amplifier Pin Header (1*4 Pin 2.00mm Wafer Header)

No.	Location	Pin	Definition	Pin	Definition
11	SPEAKER1	1	SPKR+	2	SPKR-
		3	SPKL-	4	SPKL+

[12] COM1 Select Jumper (2*9 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
12	JCOM1	1	COM1_IN	2	RX_485IN
		3	COM1_IN	4	RX_422IN
		5	COM1_IN	6	RX_232IN(Default)
		7	COM1_DCD	8	COM1_RX
		9	COM1_PIN1(Default)	10	COM1_PIN2(Default)
		11	COM1_422_T+/485_A	12	COM1_422_T-/485_B
		13	COM1_TX(Default)	14	COM1_DTR(Default)
		15	COM1_PIN3	16	COM1_PIN4
		17	COM1_422_R+	18	COM1_422_R-



[13] COM2 Pin Headers (2*5 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
13	J_COM2	1	DCD	2	RXD
		3	TXD	4	DTR
		5	GND	6	DSR
		7	RTS	8	CTS
		9	RI		

[14] SIM Card Slot (Micro SIM)

[15] COM3 Pin Header (2*5 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
15	J_COM3	1	DCD	2	RXD
		3	TXD	4	DTR
		5	GND	6	DSR
		7	RTS	8	CTS
		9	RI		

[16] Mini PCI-WIFI Slot(WIFI/BT)

[17] COM4 Pin Header (2*5 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
17	J_COM4	1	DCD	2	RXD
		3	TXD	4	DTR
		5	GND	6	DSR
		7	RTS	8	CTS
		9	RI		

[18] Mini PCI-4G_CAN Slot (WIFI/4G/BT)

[19] COM3-6 Pin Headers (2*6 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
19	J_COM3-6	1	COM3_TX	2	COM5_TX
		3	COM3_RX	4	COM5_RX
		5	GND	6	DSR
		7	COM4_TX	8	COM6_TX
		9	COM4_RX	10	COM6_RX
		11	GND	12	GND

[20] COM1 PWR Select Jumper (2*3 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
20	COM1 PWR	1	COM1-RI-PW(Default)-	2	RI
		3	COM1-RI-PW-	4	+ 5VS
		5	COM1-RI-PW-	6	+ 12VS

Note:

[1] Pin9 of COM1 also can be 0/5/12V(COM1 PWR Select Select Jumper)

[21] M-SATA Connector

[22] COM2 Select Jumper (2*3 Pin 2.0mm)

No.	Location	Pin	Definition	Pin	Definition
22	TXRX2	1	COM2_TX(Default)	2	COM2_RX(Default)
		3	COM2_TX/COM2_485_A	4	COM2_RX/COM2_485_B
		5	COM2_485_A	6	COM2_485_B

[23] Parallel Port Pin Header (2*13 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
23	J_LPT1	1	STB	2	AFD
		3	D0	4	ERR
		5	D1	6	INIT
		7	D2	8	SLINT
		9	D3	10	GND
		11	D4	12	GND
		13	D5	14	GND
		15	D6	16	GND
		17	D7	18	GND
		19	ACK	20	GND
		21	BUSY	22	GND
		23	PE	24	GND
		25	SLCT		

[24] eDP Signal Pin Header (2*10 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
24	eDP1	1	LCD_VDD	2	LCD_VDD
		3	GND	4	GND
		5	AUX_CH_N	6	AUX_CH_P
		7	GND	8	GND
		9	N/C	10	N/C
		11	N/C	12	N/C
		13	LANE1_N	14	LANE1_P
		15	LANE0_N	16	LANE0_P
		17	GND	18	GND
		19	N/C	20	HPD

Note:

[1] LV_EDP_SEL is the function switching jumper of EDP or LVDS. And only one of them can be used simultaneously. See [37]eDP/LVDS Signal.

[25] eDP/LVDS Backlight Control Pin wafer Header (1*6 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
25	BLT_PWR1	1	INVT_PWR	2	INVT_PWR
		3	BLK_EN	4	BLK_PWM
		5	GND	6	GND

[26] LVDS Signal Pin Header (2*15 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
26	LVDS1	1	LCD_VDD	2	LCD_VDD
		3	LCD_VDD	4	N/C
		5	GND	6	GND
		7	TA0N-	8	TA0P+
		9	TA1N-	10	TA1P+
		11	TA2N-	12	TA2P+
		13	GND	14	GND
		15	CLK_TAN-	16	CLK_TAP+
		17	TA3N-	18	TA3P+
		19	TB0N-	20	TB0P+
		21	TB1N-	22	TB1P+
		23	TB2N-	24	TB2P+
		25	GND	26	N/C
		27	CLK_TBN-	28	CLK_TBP+
		29	TB3N-	30	TB3P+

Note:

[1] LV_EDP_SEL is the function switching jumper of EDP or LVDS. And only one of them can be used simultaneously. See [37]eDP/LVDS Signal.

[27] eDP/LVDS VDD Select Jumper (2*3 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
27	JC_LVDS1	1	LCD_VDD(Default)	2	+V3.3S
		3	LCD_VDD	4	+V5S
		5	LCD_VDD	6	+V12S

[28] GPIO Pin Header (2*8 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
28	GPIO1	1	+5VS	2	GND
		3	IN_GP37 (A02.bit7)	4	OUT _GP46 (A03,bit6)
		5	IN_GP36 (A02.bit6)	6	OUT _GP40 (A03,bit0)
		7	IN_GP23 (A01.bit3)	8	OUT _GP10 (A00,bit0)
		9	IN_GP41 (A03,bit1)	10	OUT _GP47 (A03,bit7)
		11	IN_GP65 (A05,bit5)	12	OUT _GP50 (A04,bit0)
		13	IN_GP64 (A05,bit4)	14	OUT _GP33 (A02,bit3)
		15	IN_GP11 (A00,bit1)	16	OUT _GP67 (A05,bit7)

[29] SATA 3.0 Connector

[30] SATA Power Pin wafer Header (1*4 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
30	HHD_PWR1	1	GND	2	+ 5V

[31] USB Pin Headers (2*5 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
31	F_USB1	1	+5VS	2	+5VS
		3	Data0-	4	Data1+
		5	Data0+	6	Data1+
		7	GND	8	GND
				10	N/C

[32] USB Pin Headers (2*5 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
32	F_USB2	1	+5VS	2	+5VS
		3	Data0-	4	Data1+
		5	Data0+	6	Data1+
		7	GND	8	GND
				10	N/C

[33] Front Panel Pin Header (2*5 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
33	F_PANEL	1	HDD_LED+	2	PWR_LED+
		3	HDD_LED-	4	GND
		5	GND	6	PWE_SW
		7	RESET	8	GND
		9	+5VS	10	+VDC

[34] CMOS battery Holder

[35] DDR4 SO-DIMM Slot

[36] Buzzer

[37] eDP/LVDS Signal Select Jumpers (1*3 Pin 2.00mm*7 pairs)

Jump 1-2pin for LVDS signal output, and jump 2-3pin for eDP signal output. Default 1-2pin LVDS signal output.

[38] COM2 Mode RS232/485 jumper (1*3 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
38	RX2_IN	1	COM2_232 (Default)	2	COM2_RX
		3	COM2_485		

[39] COM2 RS232/485 jumper (2*3 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
30	DCD2/RXD2_SET	1	COM2_DCD(Default)	2	COM2_RX(Default)
		3	COM2_PIN1	4	COM2_PIN2
		5	COM2_485-_B	6	COM2_485+_A

【END】

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安全提示

1. 产品使用前，务必请仔细阅读安全手册，并妥善保管以便日后参考。
2. 当您给设备供电前，请确认电源电压是否符合设备要求。
3. 为避免人体被电击或产品被损坏，用洗板水或电路板专用电路板清洁剂前，请从插座上拔下电源线
4. 请不要使用液体或去污喷雾剂去清洗设备。
5. 请不要让任何液体流入或溅入到设备内部，以免引起短路或者火灾。
6. 对于使用电源线的设备，设备周围必须有容易接触到的电源插座。
7. 请不要在潮湿环境中使用设备。
8. 请在安装前确保设备放置在可靠的平面上，意外跌落或翻倒可能会导致设备故障或损坏。
9. 当需连接或拔除任何信号线前，须确定所有的电源线事先已被拔掉。
10. 为避免频繁开关机对产品造成不必要的损伤，关机后，应至少等待30秒后再开机。
11. 如果长时间不使用设备，请断开电源线，避免设备被瞬间电压损坏。
12. 如果要进行升级或拆装等动作，须在静电放电工作台上完成所有操作，因为有些精密器件对静电放电（ESD）很敏感。
13. 保证系统良好的散热与通风。
14. 请不要自行拆卸设备，为了安全起见，此设备只能交由专业维修人员。