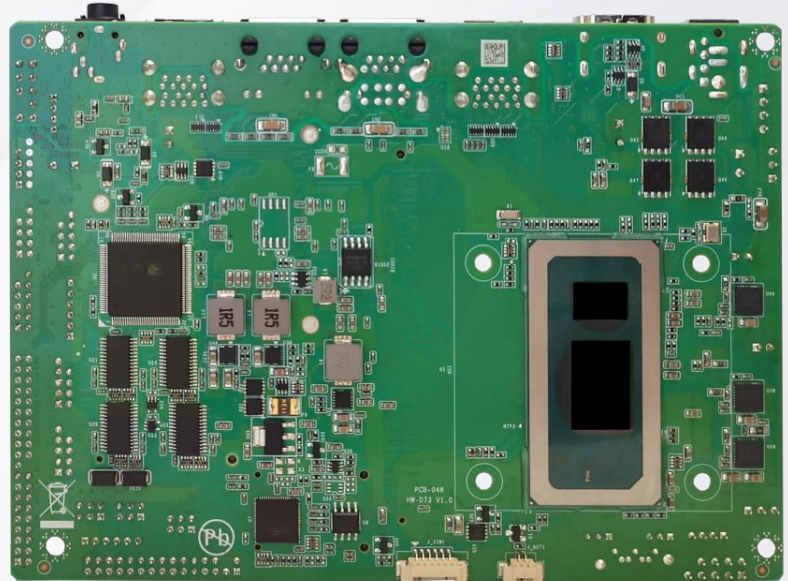
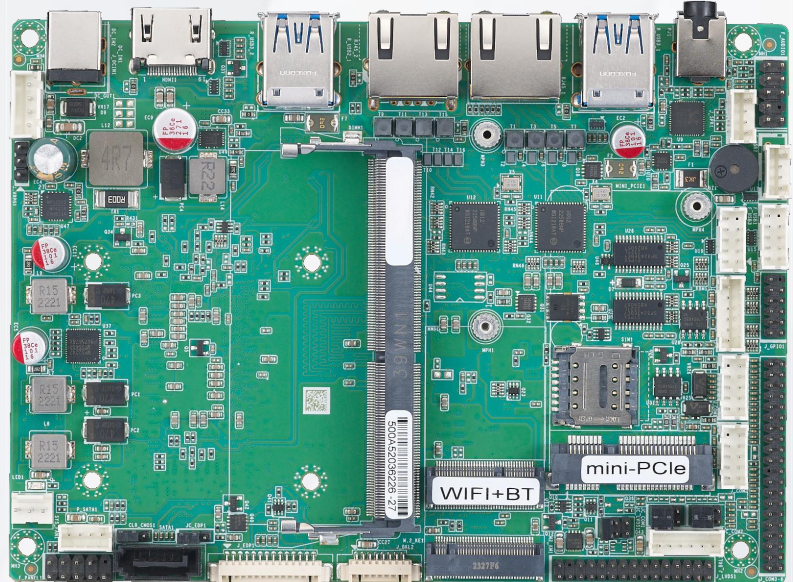


QY-MB-1235U-3.5 inch

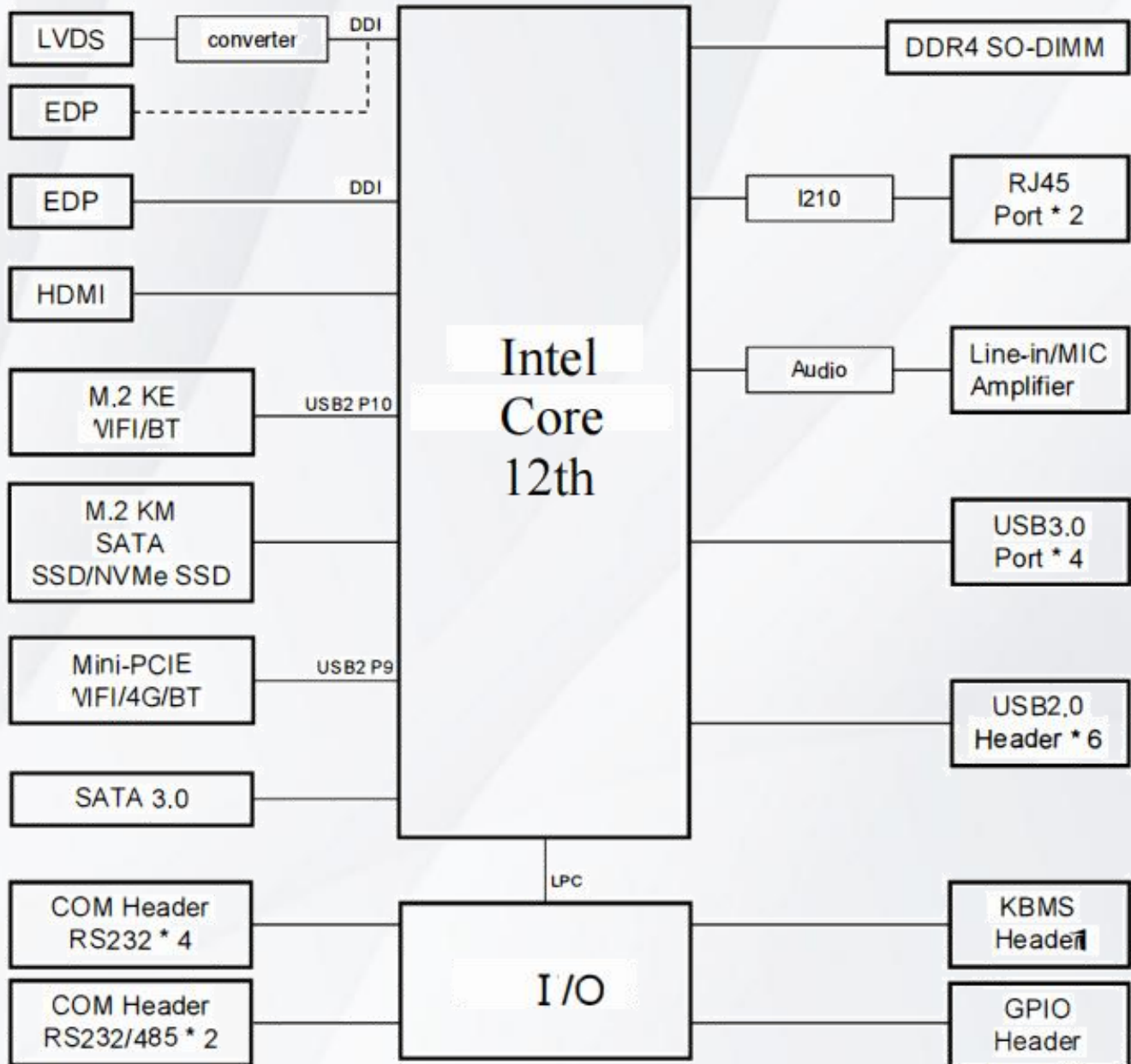
- Intel 12th Gen Core i5 CPU
- 2*Intel 1G LAN
- 6*USB 2.0, 4*USB 3.0
- 6*COM
- 1*LVDS/eDP, 1*HDMI,1*eDP
(Support triple display simultaneously)
- 1*M.2, support WIFI/BT
- 1*M.2, support SATA SSD/NVMe SSD
- 1*Mini-pcie, support WIFI/4G/BT
- 9 ~36V Power Input
- 146*105mm



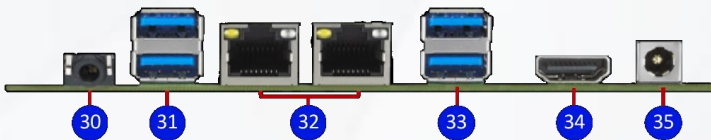
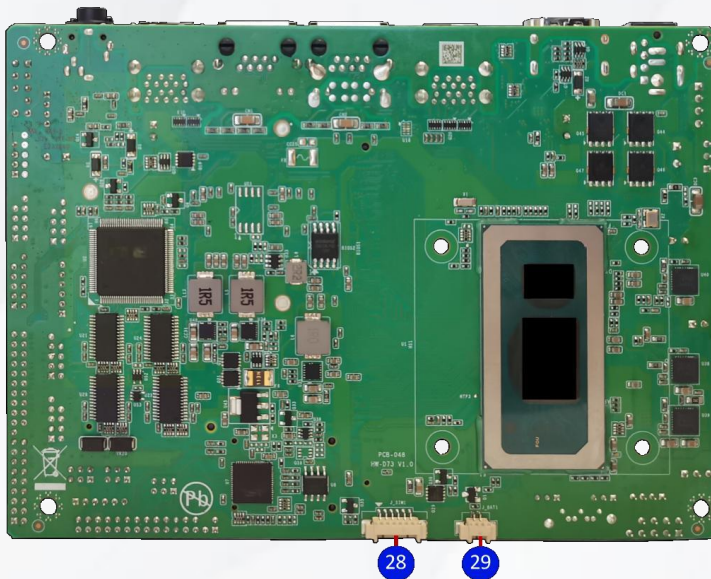
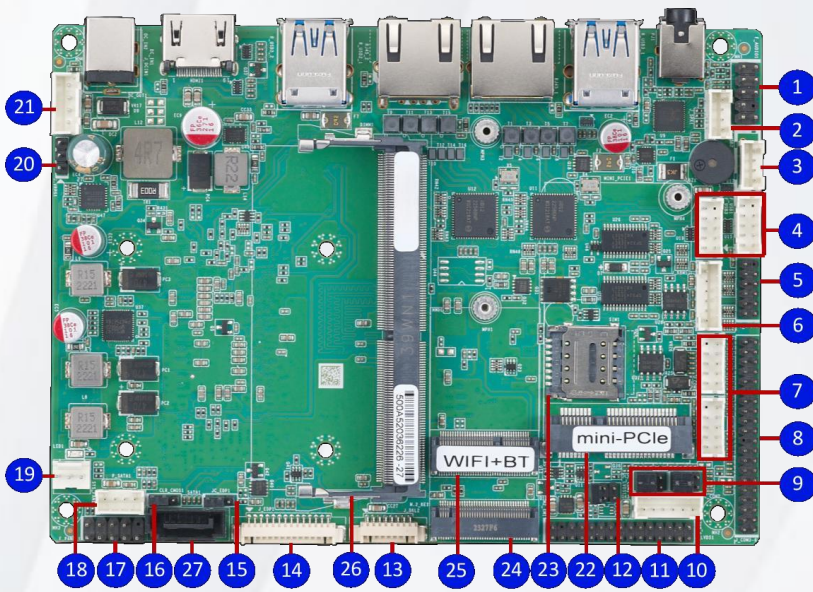
1. Specification:

Model	QY-MB-1235U-3.5 inch
CPU	Intel Core i5-1235U, up to 4.40G, Deca-core, TDP-up 55W
Display	Support triple display simultaneously: 1 * eDP: max resolution up to 1920 * 1200@60Hz 1 * HDMI: resolution up to 4096 * 2304@60Hz 1 * LVDS/eDP: LVDS, resolution up to 1920 * 1200@60Hz eDP, resolution up to 1920 * 1200@60Hz
Memory	DDR4-3200, 1 * SO-DIMM slot, up to 64GB
Storage	1 * SATA3.0 7P Connector 1 * M.2 (SATA SSD/NVMe SSD)
Expansion	1 * M.2, (WIFI/BT) 1 * M.2, (SATA SSD/NVMe SSD) 1 * Mini-pcie, (WIFI/4G/BT)
Ethernet	2 * Intel 1Gbps PCIe Ethernet Controller, RJ45
USB	4 * USB3.0 (Rear I/O, TYPE-A) 6 * USB2.0 (Internal, Header)
COM	4 * RS232(Header) 2* RS232/RS485(Header)
Audio	Realtek HDA Codec, with MIC / Line-out and Amplifier 1* Front Audio Header (Line-Out + MIC) 1 * Line-Out/MIC 2 in1 Phone Jack
Other Ports	1 * Micro SIM Card Slot 1 * SYS FAN Header 1 * Front Panel Header 1 * Keyboard&Mouse Header 1 * GPIO Header 1 * CMOS Clear Jumper 1 * Battery Socket
System	Windows 10/ 11, Linux
Temperature	Storage: -20°C ~ 75°C Operating: -15°C ~ 60°C
Power Input	DC 9-36V

2. Date Flow



3. Marking Instruction



31	USB3.0 Connectors
32	LAN Connectors
33	USB3.0 Connectors
34	HDMI Connector
35	9~36V Power Input Connector

Connector&Header

1	Front Audio Pin Header
2	Amplifier Pin Header
3	Front USB2 Pin Header
4	Front USB1/3 Pin Headers
5	GPIO Pin Header
6	Keyboard&Mouse Pin Header
7	COM1/2 Pin Headers
8	COM3/4/5/6 Pin Header
9	COM1/2 RS232/RS485 Signal Select Jumpers
10	LVDS Backlight Control Pin Header
11	LVDS Signal Pin Header
12	LVDS VDD Select Jumper
13	EDP Backlight Control Pin Header
14	EDP Signal Pin Header
15	EDP VDD Select Jumper
16	CMOS Clear Jumper
17	Front Panel Pin Header
18	SATA Power Pin Header
19	System Fan Header
20	VRM Power PROGRAM I/F Header
21	DC12V/5V Power Output Header
22	Mini PCI-E Slot(WIFI/4G/BT)
23	SIM Card Slot
24	M.2 Connector(Key-M,SATA SSD/NVMe SSD)
25	M.2 Connector (Key-E,WIFI/BT)
26	DDR4 SO-DIMM Slot
27	SATA 3.0 Connector
28	SIM Card Pin Header
29	Battery Socket
30	Mic-in/Line-out Connector

4. Definition

(1) Front Audio Pin Header (5*2 Pin 2.54mm)

No.	Location	Pin	Definition	Pin	Definition
1	F-AUDIO1	1	FP-MIC-L	2	GND
		3	FP-MIC-R	4	+ 3.3V
		5	FP-OUT-R	6	MIC-Detect
		7	GND		
		9	FP-OUT-L	10	LINE-Detect

(2) Amplifier Pin Header (4*1 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
2	J-SPK1	1	SPK-L-	2	SPK-L+
		3	SPK-R-	4	SPK-R+

(3) Front USB2 Pin Header (5*2 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
3	F-USB2	1	+ 5 V	2	+ 5 V
		3	USB-[1]	4	USB-[2]
		5	USB+[1]	6	USB+[2]
		7	GND	8	GND
				10	GND

Note:

[1] The signal of F-USB2 will be invaluable if Mini-PCIE support WI FI/4G/BT.

[2] The signal of F-USB2 will be invaluable if M.2 KE support WI FI/BT.

(4) Front USB1/3 Pin Headers (5*2 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
4	F-USB1	1	+ 5 V	2	+ 5 V
		3	USB-	4	USB-
		5	USB+	6	USB+
		7	GND	8	GND
				10	GND
	F-USB3	1	+ 5 V	2	+ 5 V
		3	USB-	4	USB-
		5	USB+	6	USB+
		7	GND	8	GND
				10	GND

(5) GPIO Pin Header (6*2 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
5	J-GPIO1	1	SIO-GPI80 (0xA07 Bit0)	2	SIO-GPI81 (0xA07 Bit1)
		3	SIO-GPI82 (0xA07 Bit2)	4	SIO-GPI83 (0xA07 Bit3)
		5	GND	6	SIO-GPO84 (0xA07 Bit4)
		7	SIO-GPO85 (0xA07 Bit5)	8	SIO-GPO86 (0xA07 Bit6)
		9	SIO-GPO87 (0xA07 Bit7)	10	+ 3.3V
				12	N/C

(6) Keyboard&Mouse Pin Header (6*1 Pin 2.0mm)

No.	Location	Pin	Definition	Pin	Definition
6	J-KBMS1	1	KB-CLK	2	KB-DAT
		3	MS-CLK	4	GND
		5	+ 5V	6	MS-DAT

(7)COM1/2 Pin Headers (5*2 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
7	J-COM1	1	DCD#-/RS485-[1]	2	RXD#+/RS485+[1]
		3	TXD	4	DTR#
		5	GND	6	DSR#
		7	RTS#	8	CTS#
		9	RI#[2]		
	J-COM2	1	DCD#-/RS485-[1]	2	RXD#+/RS485+[1]
		3	TXD	4	DTR#
		5	GND	6	DSR#
		7	RTS#	8	CTS#
		9	RI#[3]		

Note:

[1] :COM1/2 is support RS232 by default, it also can support RS485 selected by Jumper (JC-COM1/2, Location 9).

[2] :Pin9 of J-COM1 also can be 5V(BIOS selectable).

[3] :Pin9 of J-COM2 also can be 12V(BIOS selectable).

(8) COM3/4/5/6 Pin Header (20*2 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
8	J-COM3-6	1	DCD	2	RXD
		3	TXD	4	DTR#
		5	GND	6	DSR#
		7	RTS#	8	CTS#
		9	RI#[1]	10	GND
		11	DCD	12	RXD
		13	TXD	14	DTR#
		15	GND	16	DSR#
		17	RTS#	18	CTS#
		19	RI#[2]		
		21	DCD	22	RXD
		23	TXD	24	DTR#
		25	GND	26	DSR#
		27	RTS#	28	CTS#

		29	RI#	30	GND
		31	DCD	32	RXD
		33	TXD	34	DTR#
		35	GND	36	DSR#
		37	RTS#	38	CTS#
		39	RI#	40	GND

Note:

[1] Pin9 of J-COM3 also can be 5V(BIOS selectable).

[2] Pin9 of J-COM4 also can be 12V(BIOS selectable).

(9)COM1/2 RS232/RS485 Signal Select Jumpers (3*1 Pin 2.00mm)

No.	Location	Setting	Function
9	JC-COM1/2	1-2(Default)	RS232
		2-3	RS485

(10)LVDS Backlight Control Pin Header (6*1 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
10	J-BKL1	1	GND	2	GND
		3	LVDS-BKL-CTL	4	LVDS-BKL-EN
		5	+ 12V	6	+ 12V

(7)GPIO Pin Header (6*2 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
11	J-LVDS1[2]	1	VDD [1]	2	VDD [1]
		3	VDD [1]		
		5	LVDS-Detect#/ EDP-HPD#	6	LVDS-Detect#/ EDP-HPD#
		7	LVDS-A-DATA0-	8	LVDS-A-DATA0+
		9	LVDS-A-DATA1-	10	LVDS-A-DATA1+
		11	LVDS-A-DATA2-	12	LVDS-A-DATA2+
		13	GND	14	GND
		15	LVDS-A-CLK-	16	LVDS-A-CLK+
		17	LVDS-A-DATA3-	18	LVDS-A-DATA3+

		19	LVDS-B-DATA0-/ EDP-TX0-	20	LVDS-B-DATA0+/ EDP-TX0+
		21	LVDS-B-DATA1-/ EDP-TX1-	22	LVDS-B-DATA1+/ EDP-TX1+
		23	LVDS-B-DATA2-	24	LVDS-B-DATA2+
		25	GND	26	GND
		27	LVDS-B-CLK-	28	LVDS-B-CLK+
		29	LVDS-B-DATA3-/ EDP-AUX-	30	LVDS-B-DATA3+/ EDP-AUX+

Notes:

[1]: Panel Power VDD is 3.3V by default, 5V or 12V is selectable by " LVDS VDD Select Jumper " (JC-LVDS1, Location 12).

[2]: It also can support eDP if specified(resistor selectable).

(12) LVDS VDD Select Jumper (3*2 Pin 2.00mm)

No.	Location	Settings	Function
12	JC-LVDS1	1-2(Default)	+ 3.3V
		3-4	+ 5V
		5-6	+ 12V

(13) EDP Backlight Control Pin Header (8*1 Pin 1.25mm)

No.	Location	Pin	Definition	Pin	Definition
13	J-BKL2	1	+ 12V	2	+ 12V
		3	+ 12V	4	EDP-BKL-CTL
		5	EDP-BKL-EN	6	GND
		7	GND	8	GND

(14) EDP Signal Pin Header (14*1 Pin 1.25mm)

No.	Location	Pin	Definition	Pin	Definition
14	J-EDP1	1	VDD [1]	2	VDD [1]
		3	VDD [1]	4	EDP-HPD#
		5	GND	6	EDP-DATA0-
		7	EDP-DATA0+	8	GND
		9	EDP-DATA1-	10	EDP-DATA1+

		11	GND	12	EDP-AUX-
		13	EDP-AUX+	14	GND

Notes:

[1]: Panel Power VDD is 3.3V by default, 5V is selectable by " EDP VDD Select Jumper " (JC-EDP1, Location 15).

(15)EDP VDD Select Jumper (3*1 Pin 2.00mm)

No.	Location	Settings	Function
15	JC-EDP1	1-2(Default)	+ 3.3V
		2-3	+ 5V

(16) CMOS Clear Jumper (3*1 Pin 2.00mm)

No.	Location	Settings	Function
16	CLR-CMOS1	1-2(Default)	Normal
		2-3	Clear CMOS

(17) Front Panel Pin Header (5*2 Pin 2.54 mm)

No.	Location	Pin	Definition	Pin	Definition
17	F-PANEL1	1	HD LED+	2	Power LED+
		3	HD LED-	4	Power LED-
		5	RESET-	6	PWR+
		7	RESET+	8	PWR-
		9	N/C		

(18)SATA Power Pin Header (4*1 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
18	P-SATA1	1	+ 12V	2	GND
		3	GND	4	+ 5V

(19)System Fan Header (1*3 Pin 2.54mm)

No.	Location	Pin	Definition	Pin	Definition
19	SYS-FAN1	1	GND	2	+ 12V
		3	FAN Speed Detection		

(20)VRM Power PROGRAM I/F Header (3*1 Pin 2.54mm)

No.	Location	Pin	Definition	Pin	Definition
20	J-VRPG1	1	VRM-SCL	2	GND
		3	VRM-SDA		

(21) DC12V/5V Power Output Header (4*1 Pin 2.54mm)

No.	Location	Pin	Definition	Pin	Definition
21	DC-OUT1	1	+ 12V	2	GND
		3	GND	4	+ 5V

(22)SIM Card Pin Header (6*1 Pin 1.25mm)

No.	Location	Pin	Definition	Pin	Definition
28	J-SIM1	1	DAT	2	CLK
		3	VPP	4	RST
		5	GND	6	PWR

Notes:

[1]: If J-SIM1 can be used, SIM Card Slot is not available.

[END]