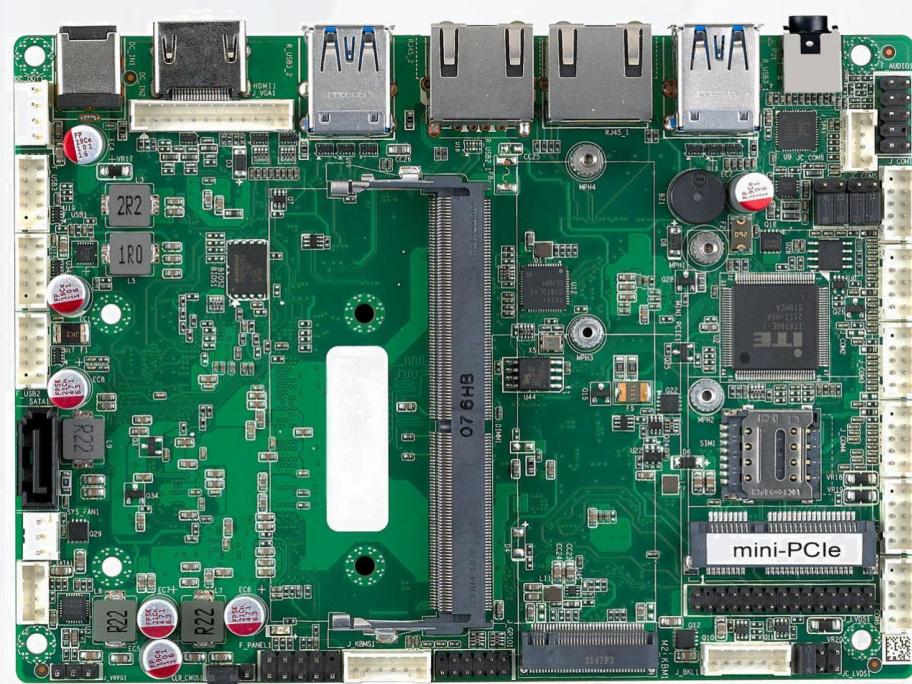


QY-MB-1155G7-3.5 inch

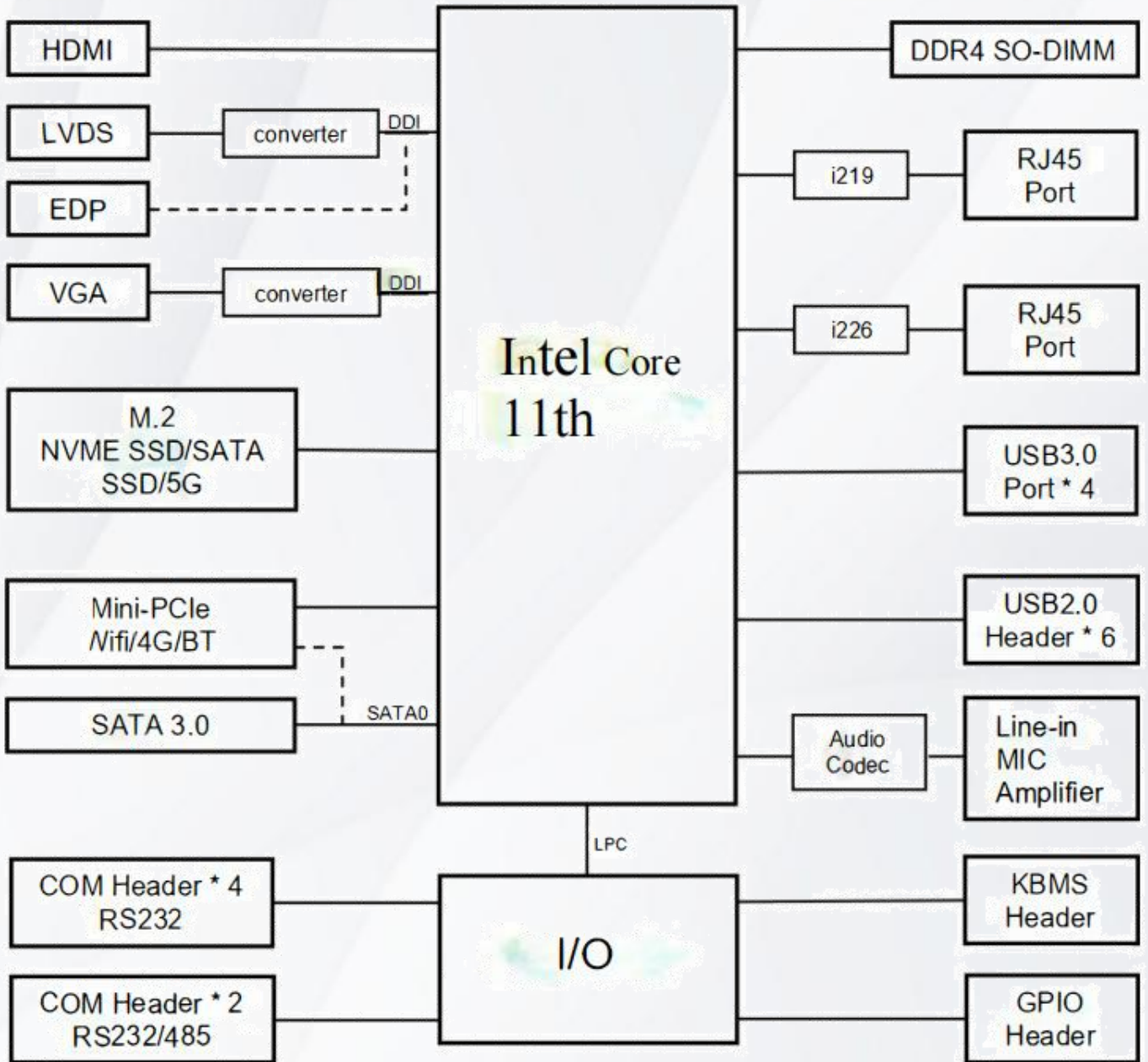
- Intel Tiger Lake 11th Core i5 CPU
- 1*1G+1*2.5G Intel LAN
- 6*USB 2.0, 4*USB 3.0
- 6*COM
- 1*VGA, 1*LVDS/eDP, 1*HDMI
- (Support triple display simultaneously)
- 1*M.2(SATA SSD/NVMe SSD/5G)
- 1*Mini-PCIe(WIFI/BT/4G)
- DC 12V power input
- 146*105mm



1. Specification:

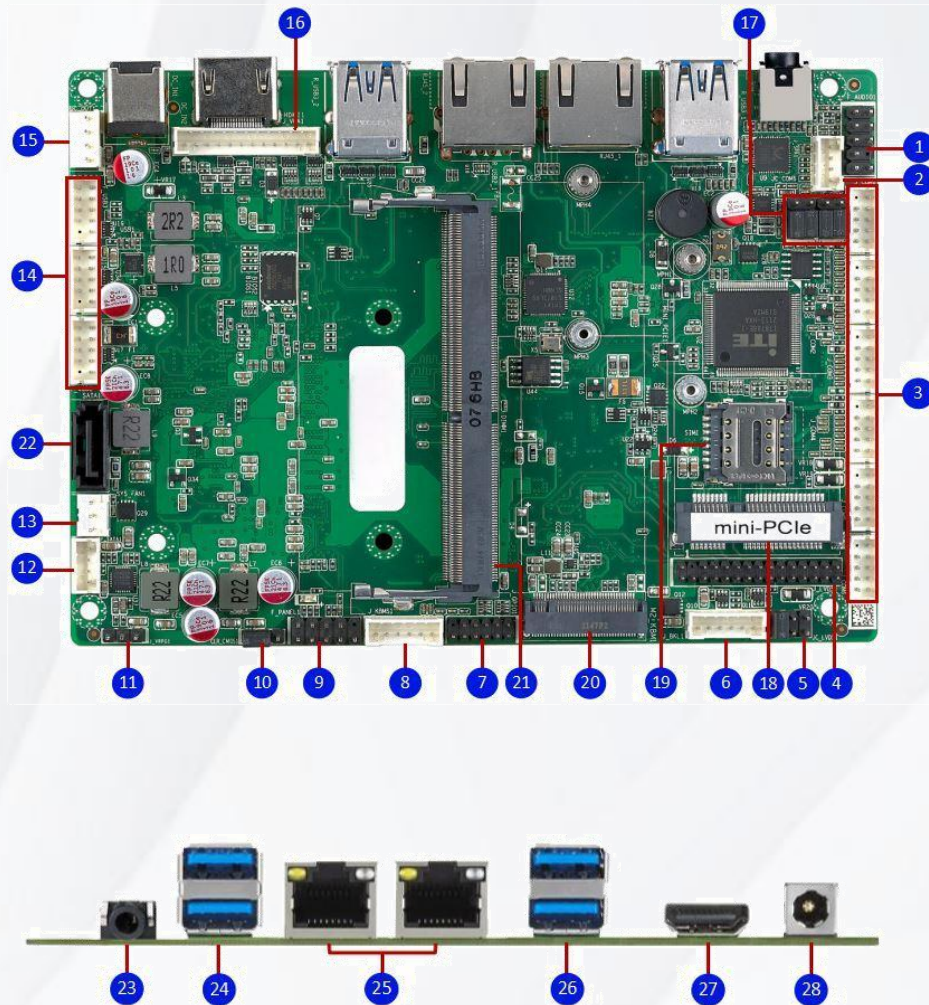
Model	QY-MB-1155G7-3.5 inch	
CPU	Intel Core i5-1155G7, up to 4.50G, quad-core	
Display	1 * HDMI; 1 * LVDS/eDP; 1 * VGA	1 * HDMI; 1 * eDP; 1 * VGA
	1 * HDMI: resolution up to 4096 * 2160@24Hz	
	1 * LVDS/eDP: LVDS, resolution up to 1920 * 1200@60Hz eDP, resolution up to 1920 * 1200@60Hz	
	1 * VGA: max 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/5G)	
Expansion	1 * M.2(SATA SSD/NVMe SSD/5G)	
	1 * Mini-PCIe (WIFI/BT/4G)	
Ethernet	1 * 1Gbps+1 * 2.5Gbps Intel PCIe Ethernet Controller(i219+i226), RJ45	
USB	4 * USB3.0 (Rear I/O, TYPE-A)	
	6 * USB2.0 (Internal, Header)	
COM	4 * RS232+2* RS232/RS485	
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 * VGA Header	
	1 * Micro SIM Card Slot	
	1 * System FAN Header	
	1 * Front Panel Header	
	1 * GPIO Header	
	1 * CMOS Clear Jumper	
	1 * Keyboard&Mouse Header	
System	Windows 10/ 11, Linux	
Temperature	Storage: -20°C ~ 75°C	
	Operating: -15°C ~ 60°C	
Power Input	DC 12V	

2. Date Flow



3. Marking Instruction

Connector&Header



1	Front Audio Pin Header
2	Amplifier Pin Header
3	COM1/2/3/4/5/6 Pin Headers
4	LVDS Signal Pin Header
5	LVDS VDD Select Jumper
6	LVDS Backlight Control Pin Header
7	GPIO Pin Header
8	Keyboard&Mouse Pin Header
9	Front Panel Pin Header
10	CMOS Clear Jumper
11	VRM Power PROGRAM I/F
12	SATA Power Pin Header
13	System FAN Header
14	Front USB Pin Headers
15	DC12V/5V Power Output Header
16	VGA Pin Header
17	COM5/6 RS232/RS485 Select Jumpers
18	Mini PCI-E1 Slot(WIFI/4G/BT)
19	SIM Card Slot
20	M.2 Slot(SATA SSD/NVMe SSD/5G)
21	DDR4 SO-DIMM Slot
22	SATA 3.0 Connector
23	Mic/Line-out Connector
24	USB3.0 Connectors
25	LAN Connectors
26	USB3.0 Connectors
27	HDMI Connector
28	DC12V Power Input 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)COM1 Pin Header (5*2 Pin 2.00mm)

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

	J-COM3	1	DCD[3]	2	RXD
		3	TXD	4	DTR#
		5	GND	6	DSR#
		7	RTS#	8	CTS#
		9	RI#[4]		
	J-COM4	1	DCD	2	RXD
		3	TXD	4	DTR#
		5	GND	6	DSR#
		7	RTS#	8	CTS#
		9	RI#[4]		
	J-COM5	1	DCD/RS485-[5]	2	RXD/RS485+[5]
		3	TXD	4	DTR#
		5	GND	6	DSR#
		7	RTS#	8	CTS#
		9	RI#		
J-COM6	1	DCD/RS485-[5]	2	RXD/RS485+[5]	
	3	TXD	4	DTR#	
	5	GND	6	DSR#	
	7	RTS#	8	CTS#	
	9	RI#			

Note:

- [1] Pin9 of J-COM1/2 also can be 5V(BIOS selectable).
- [2] Pin1 of J-COM2 also can be 5V(resistor selectable).
- [3] Pin1 of J-COM3 also can be 12V(resistor selectable).
- [4] Pin9 of J-COM3/4 also can be 12V(BIOS selectable).
- [5] J-COM5/6 support RS232 by default, it also can support RS485 selected by Jumper(JC-COM5/6, Location17).

(4) LVDS Signal Pin Header (15*2 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
4	J-LVDS1	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+

Note:

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

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

(5) LVDS VDD Select Jumper (3*2 Pin 2.54mm)

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

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

No.	Location	Pin	Definition	Pin	Definition
6	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
7	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

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

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

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

No.	Location	Pin	Definition	Pin	Definition
9	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		

(10) CMOS Clear Jumper (3*1 Pin 2.54mm)

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

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

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

(12) SATA Power Pin Headers (4*1 Pin 2.00mm)

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

(13) System FAN Header (3*1 Pin 2.54mm)

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

(14) Front USB Pin Headers (5*2 Pin 2.00mm)

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

F-USB3	5	USB+	6	USB+
	7	GND	8	GND
			10	GND

Notes:

[1] This pair of F-USB2 will be invaluable if M.2 support 5G.

[2] This pair of F-USB2 will be invaluable if Mini-PCIE1 support 4G/BT.

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

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

(16)VGA Pin Header (12*1 Pin 2.00mm)

No.	Location	Pin	Definition	Pin	Definition
16	J-VGA1	1	GND	2	VSYNC
		3	HSYNC	4	GND
		5	RED	6	GND
		7	GREEN	8	GND
		9	BLUE	10	GND
		11	DDC data	12	DDC clock

(17) COM5/6 RS232/RS485 Select Jumpers (3*2 Pin 2.54mm)

No.	Location	Settings	Function
17	JC-COM5	1-3、 2-4(Default)	RS232
		3-5、 4-6	RS485
	JC-COM6	1-3、 2-4(Default)	RS232
		3-5、 4-6	RS485

[END]