

CPU information

| CPU specifications | CPU brand     | CPU model | main frequency | turbo frequency | CPU power consumption (W) | Full load power consumption approx. |
|--------------------|---------------|-----------|----------------|-----------------|---------------------------|-------------------------------------|
|                    | Intel Pentium | 3825U     | Dual-core 1.9G |                 | 10                        | 30                                  |
| 4th generation I3  | Intel core    | 4005U     | Dual core 1.7G |                 | 15                        | 40                                  |
|                    |               | 4010U     | Dual core 1.7G |                 | 15                        | 40                                  |
|                    |               | 4025U     | Dual-core 1.9G |                 | 15                        | 40                                  |
|                    |               | 4030U     | Dual-core 1.9G |                 | 15                        | 40                                  |
|                    |               | 4100U     | Dual core 1.8G |                 | 15                        | 40                                  |
| 4th generation I5  | Intel core    | 4200U     | Dual core 1.6G | 2.6G            | 15                        | 40                                  |
|                    |               | 4210U     | Dual core 1.7G | 2.7G            | 15                        | 40                                  |
|                    |               | 4250U     | Dual core 1.3G | 2.6G            | 15                        | 40                                  |
|                    |               | 4278U     | Dual-core 2.6G | 3.1G            | 28                        | 50                                  |
|                    |               | 4300U     | Dual-core 1.9G | 2.9G            | 15                        | 40                                  |
|                    |               | 4308U     | Dual-core 2.8G | 3.3G            | 28                        | 50                                  |
|                    |               | 4310U     | Dual-core 2.0G | 3.0G            | 15                        | 40                                  |
| 4th generation I7  | Intel core    | 4500U     | Dual core 1.8G | 3.0G            | 15                        | 40                                  |
|                    |               | 4510U     | Dual-core 2.0G | 3.1G            | 15                        | 40                                  |
|                    |               | 4550U     | Dual-core 1.5G | 3.0G            | 15                        | 40                                  |
|                    |               | 4558U     | Dual-core 2.8G | 3.3G            | 15                        | 40                                  |
|                    |               | 4578U     | Dual-core 3.0G | 3.5G            | 28                        | 50                                  |
|                    |               | 4600U     | Dual-core 2.1G | 3.3G            | 15                        | 35                                  |
|                    |               | 4650U     | Dual core 1.7G | 3.0G            | 15                        | 40                                  |

|                   |            |       |                |      |    |    |
|-------------------|------------|-------|----------------|------|----|----|
| 5th generation I3 | Intel core | 5005U | Dual-core 2.0G |      | 15 | 40 |
|                   |            | 5010U | Dual-core 2.1G |      | 15 | 40 |
|                   |            | 5015U | Dual-core 2.1G |      | 15 | 40 |
|                   |            | 5020U | Dual-core 2.2G |      | 15 | 40 |
| 5th generation I5 | Intel core | 5200U | Dual-core 2.2G | 2.7G | 15 | 40 |
|                   |            | 5250U | Dual core 1.6G | 2.7G | 15 | 40 |
|                   |            | 5257U | Dual-core 2.7G | 3.1G | 15 | 40 |
|                   |            | 5287U | Dual-core 2.9G | 3.3G | 28 | 50 |
|                   |            | 5300U | Dual-core 2.3G | 2.9G | 15 | 40 |
|                   |            | 5350U | Dual core 1.8G | 2.9G | 15 | 40 |
| 5th generation I7 | Intel core | 5500U | Dual-core 2.4G | 3.0G | 15 | 40 |
|                   |            | 5550U | Dual-core 2.0G | 3.0G | 15 | 40 |
|                   |            | 5557U | Dual-core 3.1G | 3.4G | 28 | 50 |
|                   |            | 5600U | Dual-core 2.6G | 3.2G | 15 | 40 |
|                   |            | 5650U | Dual-core 2.2G | 3.1G | 15 | 40 |

# Product Specifications

|                    |                                                                                                                                                                                           |                                                                                                                                                                                                                                       |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motherboard size   | 170mm(L)*170mm(W)*20mm(H)                                                                                                                                                                 |                                                                                                                                                                                                                                       |
| CPU processor      | QM9400H supports 4th generations of CPU: I3-4010U, I5-4200U, I7-4500U, etc.                                                                                                               |                                                                                                                                                                                                                                       |
|                    | QM9500H supports 5th generations of CPU: I3-5010U, I5-5200U, I7-5500U, etc.                                                                                                               |                                                                                                                                                                                                                                       |
| Chipset            | Haswell-U, Broadwell-U high-speed chipset                                                                                                                                                 |                                                                                                                                                                                                                                       |
| Memory support     | 1*DDR3 SODIMM memory slot, support 1600MHz memory, low voltage 1.35V, maximum support 8GB                                                                                                 |                                                                                                                                                                                                                                       |
| Power supply       | 1*DC_IN                                                                                                                                                                                   | The motherboard supports 12V/19V, and the inner diameter of the DC head is 2.5MM<br><br>The power consumption of the motherboard is about 40W under full load.<br>It is recommended to use a power supply above 12V5A or 19V4A        |
|                    | 1*DC_ATX                                                                                                                                                                                  |                                                                                                                                                                                                                                       |
| Display function   | 4th generation integrated Intel® HD 4400 graphics controller, supports single display, dual display /triple display copy, dual display/triple display expansion, single display under DOS |                                                                                                                                                                                                                                       |
|                    | 5th generation integrated Intel® HD 5500 graphics controller, supports single display, dual display /triple display copy, dual display/triple display expansion, single display under DOS |                                                                                                                                                                                                                                       |
|                    | 1*VGA DB15 interface                                                                                                                                                                      | Support resolution 1920*1080@60Hz                                                                                                                                                                                                     |
|                    | 1*VGA_OUT pin                                                                                                                                                                             | Support resolution 1920*1080@60Hz (12Pin, 1*12Pin, 2.0mm)                                                                                                                                                                             |
|                    | 1*HDMI 1.4 interface                                                                                                                                                                      | Support resolution 4096/3840*2160@30Hz                                                                                                                                                                                                |
|                    | 1*HDMI_CON pin                                                                                                                                                                            | Support resolution 4096/3840*2160@30Hz (16Pin, 2*8Pin, 2.0mm)                                                                                                                                                                         |
|                    | 1*LVDS/EDP pin                                                                                                                                                                            | Support resolution 1920*1080@60Hz (30Pin, 2*15Pin, 2.0mm)                                                                                                                                                                             |
|                    | LVDS and EDP share pins, the default LVDS signal can be changed to EDP signal                                                                                                             |                                                                                                                                                                                                                                       |
|                    | 1*VCC_SEL pin                                                                                                                                                                             | LVDS/EDP voltage control pin (6Pin, 2*3Pin, 2.0mm)                                                                                                                                                                                    |
|                    | 1*INVERT pin                                                                                                                                                                              | LVDS/EDP backlight switch control pin (6Pin, 1*6Pin, 2.0mm)                                                                                                                                                                           |
|                    | 1*BKLT_CTRL pin                                                                                                                                                                           | LVDS backlight brightness adjustment pin (4Pin, 1*4Pin, 2.0mm)                                                                                                                                                                        |
| Internet function  | 1/2*RJ45 LAN interface                                                                                                                                                                    | 100M network card and Gigabit network card are optional, support wake-up on network and PXE diskless boot function (Gigabit: single network 8111H, dual network 8111H+8111H ) (100M: single network 8106E, dual network 8106E+8106E ) |
|                    | 1*Mini-PCIE interface                                                                                                                                                                     | Support WIFI/3G/4G/Bluetooth module, etc.                                                                                                                                                                                             |
| Hard disk function | 1*MSATA interface                                                                                                                                                                         | Support MSATA disk or USB signal WIFI module                                                                                                                                                                                          |
|                    | 2*SATA interface                                                                                                                                                                          | Standard SATA3.0 hard disk interface, the maximum transmission speed is 6.0 Gbps                                                                                                                                                      |
|                    | 2*SATA_PWR pin                                                                                                                                                                            | The hard disk power supply pin can be powered by 5V or 12V.<br>(4Pin, 1*4Pin, 2.54mm)                                                                                                                                                 |
| Sound function     | Integrated Realtek ALC662/897 HD digital audio decoder, 6-channel high-fidelity audio controller                                                                                          |                                                                                                                                                                                                                                       |
|                    | 1*LIN_OUT interface                                                                                                                                                                       | Support audio output (green)                                                                                                                                                                                                          |
|                    | 1*MIC_IN interface                                                                                                                                                                        | Support microphone input (red)                                                                                                                                                                                                        |
|                    | 1*INT_SPK pin                                                                                                                                                                             | Power amplifier supports 8 ohm 5 watt speaker dual channel output<br>(4Pin, 1*4Pin, 2.0mm)                                                                                                                                            |
|                    | 1*F AUDIO pin                                                                                                                                                                             | Standard audio pin (9Pin, 2*5Pin, 2.54mm)                                                                                                                                                                                             |

|                       |                                                                                                                            |                                                                                         |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| USB function          | 2*USB3.0 interface                                                                                                         | Rear standard USB3.0 interface                                                          |
|                       | 2*USB2.0 interface                                                                                                         | Rear standard USB2.0 interface                                                          |
|                       | 1*F_USB2 pin                                                                                                               | Front USB2.0 pins, one set has 2*USB2.0 (9Pin, 2*5Pin, 2.54mm)                          |
|                       | 1*F_USB3 pin                                                                                                               | Front USB2.0 pins, one set has 2*USB2.0 (9Pin, 2*5Pin, 2.54mm)                          |
| Switch function       | 1*F_PANEL pin                                                                                                              | Switch, power light, hard disk light, reset pin (9Pin, 2*5Pin, 2.54mm)                  |
|                       | 1*AUTO_SW pin                                                                                                              | Hardware control power-on pin (3Pin, 1*3Pin, 2.0mm)                                     |
| Other I/O             | 1*COM1 pin                                                                                                                 | Serial port, only supports RS232 (9Pin, 2*5Pin, 2.54mm)                                 |
|                       | 1*COM2 pin                                                                                                                 | Serial port, COM2 supports RS232/RS422/RS485 optional (9Pin, 2*5Pin, 2.54mm)            |
|                       | COM3~COM6 pins                                                                                                             | Serial port, support standard RS232 (39Pin, 2*20Pin, 2.0mm)                             |
|                       | 1*JCOM1 pin                                                                                                                | Control COM1 pin 9 voltage 0V/5V/12V optional (6Pin, 2*3Pin, 2.0mm)                     |
|                       | 1*JCOM2 pin                                                                                                                | Control COM2 pin 9 voltage 0V/5V/12V optional (6Pin, 2*3Pin, 2.0mm)                     |
|                       | JP9/JP10/JP11 Pin                                                                                                          | COM2 supports RS422 and RS485 signal jumper settings (6Pin, 2*3Pin, 2.0mm)              |
|                       | 1*SIM_CARD card slot                                                                                                       | Support SIM card, need SIM card when using 3G/4G                                        |
|                       | 1*CLR_CMOS pin                                                                                                             | Motherboard reset and discharge pin (2Pin, 1*2Pin, 2.54mm)                              |
|                       | 1*J_GPIO pin (optional )                                                                                                   | GPIO control pin (10Pin, 2*5Pin, 2.0mm )                                                |
|                       | 1*SYS_FAN pin                                                                                                              | System fan pin, full speed, does not support temperature control (3Pin, 1*3Pin, 2.54mm) |
|                       | 1*CPU_FAN pin                                                                                                              | CPU fan pin, support temperature control (3Pin, 1*3Pin, 2.54mm)                         |
| Operating environment | Working temperature: -10°C~60°C;<br>Working humidity: 5%~95% relative humidity, non-condensing                             |                                                                                         |
| BIOS                  | AMI BIOS, support power-on and start-up, scheduled start-up, remote switch machine intelligent identification of equipment |                                                                                         |
| Watch dog             | Watchdog programming, support hardware reset function (256 levels, 0~255 seconds)                                          |                                                                                         |
| Operating system      | Support Windows 10, Windows 8, Windows 7, Linux, etc.                                                                      |                                                                                         |