

## Chapter One Specification

Models	QM7900H UA, QM7900H UA	
Form Factor	Thin Mini-ITX; 170mm(L)x170mm(W)x22mm(D)	
Cooling System	With fan	
Option	QM8600H-UA:	
Processors	Support 6th Generation Skylake Celeron 3855U, 3955U, Core i3-6100U, i5-6200U, i7-6500U, etc.	
Processors	QM7900H-UA:	
	Support 7th Generation Kaby Lake Celeron 3865U, 3965U, Core i3-7100U, i5-7200U, i7-7500U, etc.	
Chipset	Skylake/KabyLake express Chipset	
Memory	2xSODIMM 1600MHz 1.35V DDR3 Memory slots, up to 32GB RAM.	
Power Supply	1xDC_IN	<ul style="list-style-type: none"> <li>◇ Support DC 12V or 19V ; DC jack size: 5.5x2.5mm;</li> <li>◇ Power consumption: 40W(CPU TDP:15W);</li> </ul>
	1xDC_ATX	<ul style="list-style-type: none"> <li>◇ Power consumption: 60W(CPU TDP:28W);</li> <li>◇ Recommend 12V 7A and above power adapter;</li> <li>◇ Recommend 19V 5A and above power adapter.</li> </ul>
CPU Graphics	Integrated Intel® HD Graphics: 510/520/540/550/610/620/640/650 in CPU.	
Display Function	Support single display, dual/triple display copy, dual/triple display expansion, single display under DOS.	
	1xVGA_DBI5 interface	Support resolution 1920x1080@60Hz
	1xVGA_OUT pin	Support resolution 1920x1080@60Hz (12Pin,1x12Pin,2.0mm)
	1xHDMI 1.4 interface	Support 4K resolution 4096x3840@2160@30Hz
	1xHDMI_CON pin	Support 4K resolution 4096x3840@2160@30Hz (16Pin,2x8Pin,2.0mm)
	1xEPP pin	Support 4K resolution 4096x3840@2160@60Hz (30Pin,2x15Pin,2.0mm)
	1xLVDS pin	Support resolution 1920x1080@60Hz (30Pin,2x15Pin,2.0mm)
	<b>The LVDS,EDP pins cannot exist at the same time. By default, LVDS works, EDP doesn't work; Option EDP.</b>	
	1xLVDS_PWR pin	LVDS/EDP voltage control pin (6Pin,2x3Pin,2.54mm)
	1xBKLT_CONN pin	LVDS/EDP backlight switch control pin (6Pin,1x6Pin,2.0mm)
	1xBKLT_CTRL pin	LVDS Backlight brightness adjustment pin (4Pin,1x4Pin,2.0mm)
	Ethernet	Support Wake-on-LAN and PXE function
1xRJ45 LAN(Default)		Integrated Realtek 8111H GbE LAN chip
Expansion	2xRJ45 LAN(Optional)	Integrated Realtek 8111H GbE LAN chip+Intel® I219-LM V GbE LAN chip
	1xMini-PCIE interface	Support WIFI, Option 3G+4G+Bluetooth+GPS, etc.
Storage (Hard Disk)	1xMSATA interface	Standard Mini SATA3.0 hard disk interface; Its maximum transfer speed is 6.0 Gbps.
	1xSATA interface	Standard SATA3.0 hard disk interface; Its maximum transfer speed is 6.0 Gbps.
	1xSATA2 interface	Standard SATA3.0 hard disk interface; Its maximum transfer speed is 6.0 Gbps.
	◇ When the motherboard has Celeron 3855U/3955U/3865U/3965U CPU, the SATA2 interface does not work(No signal).	
	◇ When the motherboard has Core i3/i5/i7 CPU, the SATA1/SATA2 interfaces work(Have signal).	
	1xSATA_PWR1 pin	This hard disk power supply pin can take 5V/12V electricity. (4Pin,1x4Pin,2.54mm)
1xSATA_PWR2 pin	This hard disk power supply pin can take 5V/12V electricity. (4Pin,1x4Pin,2.54mm)	
Integrated Cmedia HS-100B USB HD Audio chip(Default);		
Sound Function (HD Audio)	<b>Not support F_Audio pin, Stereo Mix function, Windows Embedded series operating system.</b>	
	Option Realtek ALC660/680/890/897 HD Audio chip.	
	1xLINE_OUT interface	Support Audio output(Green color)
	1xMIC_IN interface	Support Microphone input(Red color)
	1xINT_SPK pin	This amplifier pin supports 8 Ω 5W speaker dual channel output. (4Pin,1x4Pin,2.0mm)
USB Function	1xF_AUDIO pin	Standard Audio pin (9Pin,2x5Pin,2.54mm)
	<b>(Unavailable)</b>	
	◇ Cmedia HS-100B Audio chip: The F_Audio pin doesn't work.	
	◇ Realtek Audio chip: The F_Audio pin works.	
	<b>If you need F_Audio pin, please inform us in advance.</b>	
1xSPDIF pin	Digital audio pin (3Pin,1x3Pin,2.54mm)	
2xUSB3.0 interfaces	Rear standard USB3.0 interfaces	
2xUSB2.0 interfaces	Rear standard USB2.0 interfaces	
1xF_USB1 pin	Front USB2.0 pin; One group has 2xUSB2.0 (9Pin,2x5Pin,2.54mm)	
1xF_USB2 pin	Front USB2.0 pin; One group has 2xUSB2.0 (9Pin,2x5Pin,2.54mm)	
1xF_USB3_A pin	Front USB3.0 pin; One group has 1xUSB3.0 (19Pin,2x10Pin,2.0mm)	
<b>If you need F_USB3_A pin to support 2xUSB3.0, please inform us in advance.</b>		
Switch	1xF_PANEL pin	Switch, power supply LED, hard disk LED, reset pin. (9Pin,2x5Pin,2.54mm)
Power On	1xAUTO_SW jumper	Option(BIOS setting or AUTO_SW jumper setting). (3Pin,1x3Pin,2.0mm)
	1xCOM1 pin	Standard RS232 (9Pin,2x5Pin,2.54mm)
Serial Port	1xCOM2 pin	Standard RS232(Default); Option RS232/RS422/RS485 by JF3/JF4/JF5 jumper setting. (9Pin,2x5Pin,2.54mm)
	COM3-COM6 pin	Standard RS232 (39Pin,2x20Pin,2.0mm)
	1xJCOM1 jumper	Control the 9th pin of the COM1 to output 0V/5V/12V by JCOM1 jumper. (6Pin,2x3Pin,2.0mm)
	1xJCOM2 jumper	Control the 9th pin of the COM2 to output 0V/5V/12V by JCOM2 jumper. (6Pin,2x3Pin,2.0mm)
	JF3/JF4/JF5 jumper	The COM2's RS232/422/485 signal by JF3/JF4/JF5 jumper setting. (6Pin,2x3Pin,2.0mm)
3G/4G-GPS	1xSIM_CARD slot	Support SIM card. A SIM card is required when using 3G/4G-GPS function.
Other Functions	1xJ_GPIO pin	GPIO control pin (10Pin,2x5Pin,2.0mm)
	<b>(Unavailable)</b>	
	If you need the GPIO pin, please inform us in advance.	
1xCLR_CMOS pin	Motherboard discharger, clear pin (2Pin,1x2Pin,2.54mm)	
1xSYS_FAN pin	This system Fan pin supports full speed and does not support temperature control. (3Pin,1x3Pin,2.54mm)	
1xCPU_FAN pin	This CPU Fan pin supports temperature control. (3Pin,1x3Pin,2.54mm)	
CMOS Battery	CR2032 3V(Detachable)	
Operating Environment	Operating temperature: 10°C-60°C; Working humidity: 5%-95% Relative humidity, no condensation.	
BIOS	AMI BIOS; Support power on timing switch, remote switch, intelligently identify devices.	
Watch Dog	Watchdog programming; Support hardware reset function (256 levels, 0-255 seconds).	
Operating System	Compatible with Windows 11, Windows 10, Windows 8, Windows 7, Linux, etc;	
Options	<b>If you want to install Windows 11 or Ubuntu OS, please inform us in advance.</b>	
Options	Option customized boot logo in OS. Option Mini PC case.	