

QY-P8185



Products Features:

1. Industrial-Grade Embedded Fanless design Panel PC
2. 18.5 inch LED Screen, 1366*768 Resolution
3. Capacitive Touch Screen
4. Intel Celeron and Core 4/6/7/8/10th-i3 / i5 / i7 CPU
5. 2*LAN, 4*USB, 6*COM, 1*HDMI
6. 1*Multifunction Daughter card slot
7. 1*Mini PCIE Expansion Slot, Support 4G and WIFI Module
8. -30°C~70°C Temperature Can Keep 24/7 Work Stably
9. DC 9-36V Power Input with Overvoltage Protection
10. Anti-Static, Anti-Pulse, Anti-Surge, Anti-Radiation

 **Windows 7**  **Windows 10**  **Windows 11**

Linux 

FC

IEC

RoHS

CE

EAC

1-1.Mother Board Specification:

| | |
|------------------------|--|
| Model | QY-P8185 |
| CPU | J1900 |
| Memory | 1*DDR III RAM Slot, Up to 8GB |
| Storage | 1*MSATA SSD Slot 1*SATA SSD Slot |
| Display ^[1] | 1*HDMI: Resolution up to 4090*2160@24Hz |
| Expansion | 1*Mini PCIE Slot, Support 4G and WIFI module |
| Ethernet | 2*Intel i210V LAN chip (10 / 100 / 1000 Mbps, RJ-45) |
| USB | 1*USB 3.0 (Type-A) 3*USB 2.0 (Type-A) |
| COM | 2*RS-485 / 422 / 232 (DB9 type) 4*RS-232 (DB9 type) |
| Audio | 1*Line-out |
| Daughter Card | Support expansion more I/O interfaces and functional slots |

Notes:

[1]: The maximum resolution that can be output by the display interface depends on the CPU, please refer to the Intel official website for detailed output resolution.

1-2.Mother Board Specification:

| | |
|------------------------|--|
| Model | QY-P8185 |
| CPU | i3: 4010U i5: 4260U i7: 4650U |
| Memory | 2*DDR III RAM Slots, Up to 16GB |
| Storage | 1*MSATA SSD Slot 1*SATA SSD Slot |
| Display ^[1] | 1*HDMI: Resolution up to 4090*2160@24Hz |
| Expansion | 1*Mini PCIE Slot, Support 4G and WIFI module |
| Ethernet | 2*Intel i210V LAN chip (10 / 100 / 1000 Mbps, RJ-45) |
| USB | 4*USB 3.0 (Type-A) |
| COM | 2*RS-485 / 422 / 232 (DB9 type) 4*RS-232 (DB9 type) |
| Audio | 1*Line-out |
| Daughter Card | Support expansion more I/O interfaces and functional slots |

Notes:

[1]: The maximum resolution that can be output by the display interface depends on the CPU, please refer to the Intel official website for detailed output resolution.

1-3.Mother Board Specification:

| | |
|------------------------|--|
| Model | QY-P8185 |
| CPU | J6412 i3: 7100U i5: 6200U / 7200U / 8260U / 10210U i7: 7500U / 10610U |
| Memory ^[1] | 2*DDR III RAM Slots, Up to 32GB |
| Storage ^[2] | 1*MSATA SSD Slot 1*SATA SSD Slot (Support RAID 1) |
| Display ^[3] | 1*HDMI: Resolution up to 4090*2160@24Hz |
| Expansion | 1*Mini PCIE Slot, Support 4G and WIFI module |
| Ethernet | 2*Intel i210V LAN chip (10 / 100 / 1000 Mbps, RJ-45) |
| USB | 4*USB 3.0 (Type-A) |
| COM | 2*RS-485 / 422 / 232 (DB9 type) 4*RS-232 (DB9 type) |
| Audio | 1*Line-out |
| Daughter Card | Support expansion more I/O interfaces and functional slots |

Notes:

[1]: The maximum resolution that can be output by the display interface depends on the CPU, please refer to the Intel official website for detailed output resolution.

[2]: It needs add a SATA SSD expansion card and CPU generation needs more than 7th if you want built RAID 1.

[3]: The maximum memory capacity and the maximum capacity per strip supported by this motherboard depend on the CPU.

2.LED Screen Specification:

| | |
|---------------------|---|
| Screen Size | 18.5 inch TFT LED Screen, 16:9 Size |
| Resolution | 1366*768 Support optional 1920*1080 resolution |
| Brightness | 350nits |
| | Support optional 500 / 700 / 1000 nits |
| Contrast | 800:1 |
| Largest Colorful | 16M |
| Touch Screen Type | Capacitive |
| Light Transmittance | More than 95% |
| Touch Life | 50 million times |
| Response Time | < 5ms |
| Touch Hardness | 7 Mohs |

3.Device Specification:

| | |
|---------------------|---|
| BIOS | AMI UEFI BIOS (Support Watch Dog Timer) |
| Watch Dog | Support |
| Power Input | DC 9-36V with overvoltage protection |
| | Support AT / ATX |
| | 2*Pin Phoenix Terminal DC Plug |
| Working Temperature | -30°C~70°C, Support 24/7 Working |
| Size | 463.5mm*287.5mm*68mm |
| Structure | Fully Enclosed Aluminum Alloy Material |
| Heat dissipation | Fanless Design, Conduction Heat Dissipation |
| Installation | Desktop / Embedded / Wall-Mounted |
| System | Windows 7 / 10 / 11 and Linux |

4. Daughter Card Specification:



| | |
|------------------------------------|--|
| COM Port-2 | 2*RS-232 / 485 (DB9 type) |
| COM Port-6 | 4*RS-232 / 485+2*RS-232 (Phoenix terminal type) |
| Ethernet Port-2 | 2*Intel i211V LAN Chip (RJ-45 type) |
| Ethernet Port-4 ^[1] | 4*Intel i211V LAN Chip, Support POE function (RJ-45type) |
| USB Port-4 ^[2] | 4*USB 3.0 (Type-A) |
| GPIO Port-14 | 14 ports GPIO, 7*GPI+7*GPO, 3.3V (Phoenix terminal type) |
| DIDO Port-16 | 16 ports DIDO, 8*DI+8*DO, 24V (Phoenix terminal type) Comes with 4*RS-485 COM ports (Phoenix terminal type) |
| Mini PCIE Slot-2 | 2*Mini PCIE slots, Support 4G and WIFI module |
| M.2 Slot-1 | 1*M.2 Key-B slot, Support 5G module |
| M.2 NVME SSD Slot-1 ^[3] | 1*M.2 NVME SSD slot |
| SATA SSD Slot-1 ^[4] | 1*SATA 3.0 SSD Slot, Support RAID 1 |
| CAN Port-2 ^[5] | 2*CAN interfaces (Phoenix terminal type) |
| UPS battery | 1.2AH or 4.8AH |

Notes:

[1]: When using POE function, it needs 24V 5A adapter to supply power.

[2]: J1900 CPU not support it.

[3]: J1900 and 4th CPU not support it.

[4]: J1900 CPU not support it. It needs CPU generation more than 7th if you want to built RAID 1.

[5]: CAN module is optionally available.

5.Ordering Information:

| Model | CPU | LAN | USB | COM | Display | RAM | Storage | Expansion | Power Input |
|----------|---------------------|-----|-----|-----|---------|---------|-------------------|-------------|-------------|
| QY-P8185 | J1900 | 2 | 4 | 6 | 1*HDMI | 1*DDR 3 | 1*MSATA 1*SATA | 1*Mini PCIE | DC 9-36V |
| | 4th | | | | | 2*DDR 3 | | | |
| | J6412 | | | | | 2*DDR 4 | | | |
| | 6th/7th 8th/10th | | | | | | | | |

6.CPU Information:

| CPU | Specification |
|-----------|--|
| J1900 | 4 core, 4 total threads, 2.00 GHz to 2.42GHz, 2 MB cache |
| J6412 | 4 core, 4 total threads, 2.00 GHz to 2.60GHz, 1.5 MB cache |
| i3-4010U | 2 core, 4 total threads, 1.70 GHz, 3 MB cache |
| i5-4260U | 2 core, 4 total threads, 1.40 GHz to 2.70GHz, 3 MB cache |
| i7-4650U | 2 core, 4 total threads, 1.70 GHz to 3.30GHz, 4 MB cache |
| i5-6200U | core, 4 total threads, 2.30 GHz to 2.80GHz, 3 MB cache |
| i3-7100U | 2 core, 4 total threads, 2.40 GHz, 3 MB cache |
| i5-7200U | 2 core, 4 total threads, 2.50 GHz to 3.10 GHz, 3 MB cache |
| i7-7500U | 2 core, 4 total threads, 2.70 GHz to 3.50 GHz, 4 MB cache |
| i5-8260U | 4 core, 8 total threads, 1.60 GHz to 3.90 GHz, 6 MB cache |
| i3-10110U | 2core, 4 total threads, 2.10 GHz to 4.10 GHz, 4 MB cache |

| | |
|-----------|---|
| i5-10210U | 4 core, 8 total threads, 1.60 GHz to 4.20 GHz, 6 MB cache |
| i7-10610U | 4 core, 8 total threads, 1.80 GHz to 4.90 GHz, 8 MB cache |

7.System Information:

| CPU | Specification |
|--------------------|---------------------------|
| J1900 | Windows 7 / 10 and Linux |
| 4th / 6th | Windows 7 / 10 and Linux |
| 7th ^[1] | Windows 7 / 10 and Linux |
| J6412 | Windows 10 / 11 and Linux |
| 8th / 10th | Windows 10 / 11 and Linux |

8.Fittings Information:

| | | |
|---------------------------|----------------------|--|
| RAM ^[2] | DDR 3 | 4GB / 8GB |
| | DDR 4 | 4GB / 8GB / 16GB |
| Storage ^[3] | MSATA | 64GB / 128GB / 256GB / 512GB / 1TB |
| | SATA | 128GB / 240GB / 256GB / 480GB / 512GB / 960GB 1TB / 2TB / 4TB |
| | M.2 NVME | 128GB / 256GB / 512GB / 1TB / 2TB / 4TB |
| GSM Module ^[4] | 4G | 4G+GPS |
| | 5G | 5G+GPS |
| WIFI Module | Intel 7260AC / AX210 | |
| CAN Module ^[5] | 2*CAN interfaces | |

9.Package List:

| | |
|----------------------------|------------------|
| Adapter ^[6] | 1*12V 5A adapter |
| Power Cable ^[7] | 1*Power Cable |

Notices:

[1]: The windows 7 system doesn' t have the USB 3.0 driver.

[2][3]: By default the industrial grade for RAM and SSD are used, and the minimum configuration is recommended to be 4+64GB.

[4]: Different countries and regions are applicable to different versions, please inform the business staff in advance when ordering.

[5]: Please inform the business staff in advance which system you are using the CAN module (it cannot be adapted to both Windows and Linux systems)

[6]: CPU low than 8th equipped 5A adapter, More than 8th equipped 7A adapter

[7]: Different countries and regions use different types of power cord plugs, please inform the business personnel in advance.

10.Dimensions:

