

## QY-B5200 Rail Mounted Series



### Products Features:

1. Industrial-Grade Embedded Fanless Mini PC
2. Intel Celeron and Core 4 / 6 / 7 / 8 / 10th-i3 / i5 / i7 CPU
3. 2\*LAN, 4\*USB, 6\*COM, 1\*HDMI, 1\*VGA
4. Anti-Static, Anti-Pulse, Anti-Surge, Anti-Radiation
5. -30°C~70°C Temperature Can Keep 24/7 Work Stably
6. 1\*Mini PCIE Expansion Slot, Support 4G and WIFI Module
7. DC 9-36V Power Input with Overvoltage Protection

 Windows 7  Windows 10  Windows 11

 Linux

FC

IEC

RoHS

CE

EAC

## 1.Mother Board Specification:

| Model                 | QY-B5200                                                                          |                                                               |
|-----------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------|
| CPU                   | J1900 / i5-4260U                                                                  | i3: 7100U<br>i5: 6200U/7200U/8260U/10210U<br>i7: 7200U/10610U |
| Memory <sup>[1]</sup> | 1*DDR III RAM Slot, Up to 8GB                                                     | 1*DDR IIII RAM Slot, Up to 32GB                               |
| Storage               | 1*MSATA SSD<br>1*M.2 SATA SSD                                                     |                                                               |
| Display               | 1*HDMI: Resolution up to 4090*2160@24Hz<br>1*VGA: Resolution up to 4090*2160@60Hz |                                                               |
| Expansion             | 1*Mini PCIE Slot, Support 4G and WIFI module                                      |                                                               |
| Ethernet              | 2*Intel i210V LAN chip (10 / 100 / 1000 Mbps, RJ-45)                              |                                                               |
| USB                   | 3*USB 2.0+1*USB 3.0                                                               | 4*USB 3.0                                                     |
| COM                   | 2*RS-232 / 422 / 485 (COM1-2, DB9 type)<br>4*RS-232 (COM3-6, DB9 type)            |                                                               |
| Daughter card         | Support expansion of I/O interfaces and functional slots                          |                                                               |

### Notes:

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

## 2.Device Specification:

|                            |                                                    |
|----------------------------|----------------------------------------------------|
| <b>BIOS</b>                | <b>AMI UEFI BIOS (Support Watch Dog Timer)</b>     |
| <b>Power Input</b>         | <b>DC 9-36V, Overvoltage Protection</b>            |
|                            | <b>Support AT / ATX</b>                            |
|                            | <b>3*Pin Phoenix Terminal DC Plug</b>              |
| <b>Working Temperature</b> | <b>-30°C~70°C, Support 24/7 Working</b>            |
| <b>Size</b>                | <b>260mm*150mm*65mm</b>                            |
| <b>Structure</b>           | <b>Fully Enclosed Aluminum Alloy Material</b>      |
| <b>Heat dissipation</b>    | <b>Fanless Design, Conduction Heat Dissipation</b> |
| <b>Installation</b>        | <b>Desktop / Embedded / Wall / Rail Mounted</b>    |
| <b>System</b>              | <b>Windows 7 / 10 / 11 and Linux</b>               |

## 3.Ordering Information:

| Model    | CPU                 | LAN | USB | COM | Display         | RAM     | SSD           | Expansion   | Power Input |
|----------|---------------------|-----|-----|-----|-----------------|---------|---------------|-------------|-------------|
| QY-B5200 | J1900 / 4th         | 2   | 4   | 6   | 1*HDMI<br>1*VGA | 1*DDR 3 | 1*MSATA       | 1*Mini PCIE | DC<br>9-36V |
|          | 6th/7th<br>8th/10th |     |     |     |                 | 1*DDR 4 | 1*M.2<br>SATA |             |             |

## 4.CPU Information:

| CPU       | Specification                                             |
|-----------|-----------------------------------------------------------|
| J1900     | 4 core, 4 total threads, 2.00 GHz to 2.42GHz, 2 MB cache  |
| i5-4260U  | 4 core, 4 total threads, 2.00 GHz to 2.42GHz, 2 MB cache  |
| i5-6200U  | 2 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 |
| 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 |

## 5. Daughter Card Information<sup>[1]</sup>:



|                                        |                                                                     |
|----------------------------------------|---------------------------------------------------------------------|
| <b>Ethernet-2</b>                      | <b>2*Intel 211V LAN chip (RJ-45 Type)</b>                           |
| <b>Ethernet-4<sup>[2]</sup></b>        | <b>4*Intel 211V LAN chip (RJ-45 Type),support POE function</b>      |
| <b>COM-2</b>                           | <b>2*RS-485 / 232 (DB9 type)</b>                                    |
| <b>COM-6</b>                           | <b>2*RS-232+4*RS-485 / 232 (phoenix type)</b>                       |
| <b>GPIO-14</b>                         | <b>14 road GPIO (7*GPI,7*GPO), phoenix type ports</b>               |
| <b>DIDO-14</b>                         | <b>14 ports DIO, phoenix type ports</b>                             |
| <b>USB-4<sup>[3]</sup></b>             | <b>4*USB 3.0 (Type-A)</b>                                           |
| <b>Mini PCIE Slots-2</b>               | <b>2*Mini PCIE slots</b>                                            |
| <b>M.2 Slots</b>                       | <b>1*M.2 Key-B slot, support 5G module</b>                          |
| <b>M.2 NVME SSD slot<sup>[4]</sup></b> | <b>1*M.2 NVME slot</b>                                              |
| <b>SATA SSD Slot<sup>[5]</sup></b>     | <b>1*SATA 3.0 SSD slot, Pull-out design</b>                         |
| <b>CAN Card slot</b>                   | <b>2 ports CAN interfaces</b>                                       |
| <b>Battery module</b>                  | <b>1.2AH or 4.8AH<br/>Support timed automatic shutdown function</b> |

## Notices:

[1]: The daughter card is a proprietary design of our company and cannot be used with other PCIE interface expansion cards.

[2]: When using POE Ethernet ports card, a 24V 5A adapter is required.

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

[5]: J1900 CPU are not support.

## 6.System Information:

| CPU                | Specification             |
|--------------------|---------------------------|
| J1900              | Windows 7 / 10 and Linux  |
| 4th / 6th          | Windows 7 / 10 and Linux  |
| 7th <sup>[1]</sup> | Windows 7 / 10 and Linux  |
| 8th / 10th         | Windows 10 / 11 and Linux |

## 7.Fittings Information:

|                           |                        |                                                                  |
|---------------------------|------------------------|------------------------------------------------------------------|
| RAM <sup>[2]</sup>        | DDR 3                  | 4GB / 8GB                                                        |
|                           | DDR 4                  | 4GB / 8GB / 16GB / 32GB                                          |
| Storage <sup>[3]</sup>    | MSATA                  | 64GB / 128GB / 256GB / 512GB / 1TB                               |
|                           | SATA                   | 128GB / 240GB / 256GB / 480GB / 512GB / 960GB<br>1TB / 2TB / 4TB |
|                           | M.2 NVME               | 128GB / 256GB / 512GB / 1TB / 2TB / 4TB                          |
| GSM Module <sup>[4]</sup> | 4G                     | 4G+GPS function                                                  |
|                           | 5G                     | 5G+GPS function                                                  |
| WIFI Module               | 7260AC / AX210         |                                                                  |
| CAN module                | 2 ports CAN interfaces |                                                                  |

## 8.Package List:

|                            |                                           |
|----------------------------|-------------------------------------------|
| Adapter <sup>[5]</sup>     | 1*12V 5A adapter                          |
| Power Cable <sup>[6]</sup> | 1*Power Cable                             |
| Terminal-1                 | 1*2 Pin Phoenix terminal for Power Switch |
| Terminal-2                 | 2*8 Pin phoenix terminal for COM ports    |

### 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]: CPU low than 8th equipped 5A adapter, More than 8th equipped 7A adapter
- [6]: Different countries and regions use different types of power cord plugs, please inform the business personnel in advance.

## 9.Dimensions:

