# USR-EV908J(RK3576)

Catalogue

# 1. Product Overview

The USR-EV908J-3576 motherboard features the Rockchip RK3576J high-performance processor, supporting operating systems including Ubuntu, Android 14.0, and Debian. Built on an 8-core 64-bit architecture combining four Cortex-A72 and four Cortex-A53 cores, it employs 8nm manufacturing technology with a clock speed up to 2.2GHz, delivering exceptional general-purpose computing capabilities. Integrated with a quad-core Mali-G52 MC3 GPU for efficient graphics processing and built-in Neural Processing Unit (NPU) supporting INT4/INT8/INT16 mixed-precision operations, it achieves 6.0TOPS AI computing power while maintaining compatibility with mainstream AI development tools and interfaces. The motherboard supports dual-screen display configurations with multiple output options including LVDS (1080P), eDP, MIPI, and HDMI (4K). Network connectivity includes dual Gigabit Ethernet ports, 4G/5G support, Wi-Fi, and Power over Ethernet (POE) power supply. Extensive expansion ports encompass USB, CAN, RS232, RS485, GPIO, I²C, MIPI camera interfaces, infrared remote controls, and motion sensors, enabling flexible peripheral integration. Leveraging its platform-based hardware architecture and Android-powered intelligence, this motherboard finds extensive applications in AI servers, facial recognition payment terminals, security surveillance systems, medical equipment, smart transportation solutions, financial terminals, industrial control systems, smart education platforms, and intelligent retail environments, effectively supporting diverse human-machine interaction scenarios and network device connectivity.
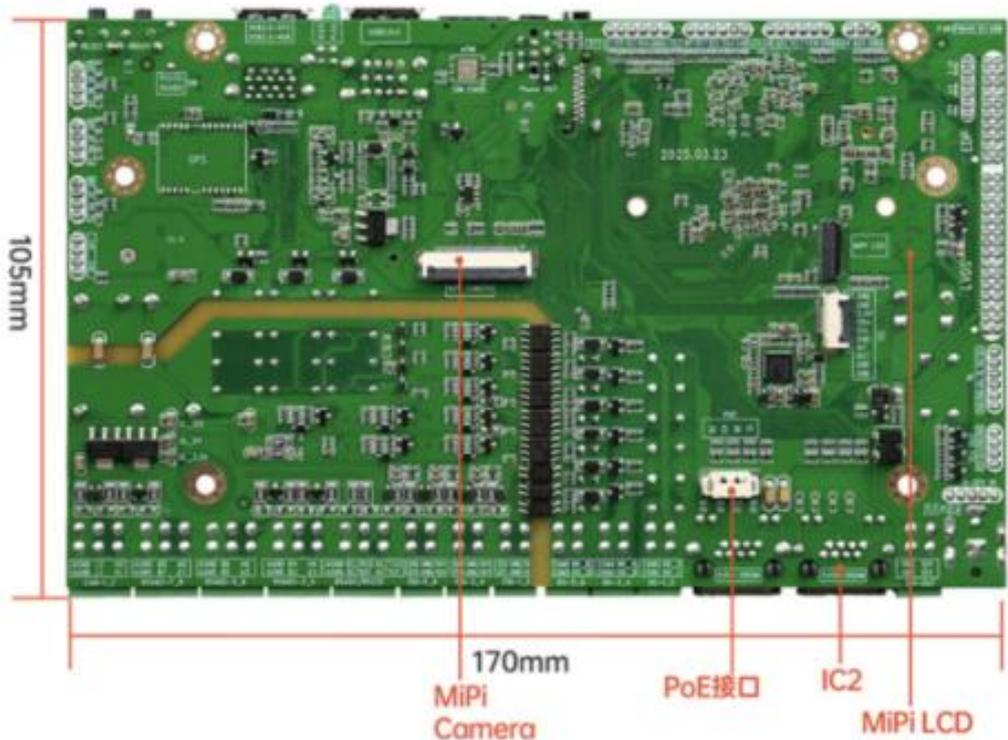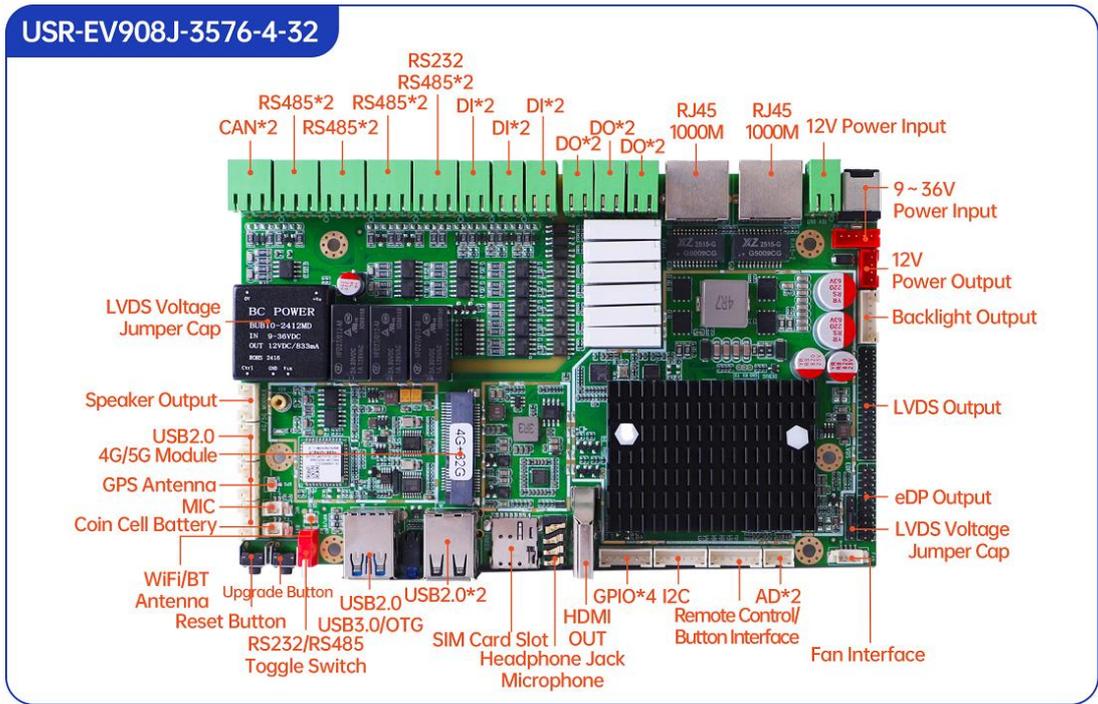
# 2. Characteristic

- High Performance: The RK3576J is an industrial-grade wide-temperature processor operating within a temperature range of-40℃ to +85℃. Built on an eight-core 64-bit architecture combining four Cortex-A72 cores and four Cortex-A53 cores, it achieves a maximum clock speed of 2.2GHz with exceptional general-purpose computing capabilities. Integrated with a quad-core Mali-G52MC3 GPU for efficient graphics and display processing, this processor features a built-in AI Neural Network Processor (NPU) supporting INT4/INT8/INT16 mixed-precision operations, delivering up to 6.0 TOPS AI computing power. The NPU is compatible with mainstream AI development tools and frameworks, enabling direct conversion of general-purpose models like TensorFlow, Caffe, and MXNet. Comprehensive development support includes Android APIs, RKNN cross-platform APIs, and TensorFlow development interfaces, facilitating rapid deployment and optimization of AI applications.

- High Stability: The RK3576J AI motherboard incorporates proprietary technologies in both hardware and software to ensure product stability, enabling the final product to operate 24/7 without human intervention.

- High Integration: The RK3576J AI motherboard utilizes industrial-grade TG170-8-layer ultra-high-density PCB, integrating dual Ethernet, WiFi, 18W power amplifier, IR remote control, MiPi, microphone, and gravity sensing functions, significantly simplifying overall device design. The

ultra-thin motherboard design enhances the aesthetic appeal of the entire system.

- High expandability: Featuring seven USB ports, two CAN ports, one I2C port, two AD ports, six RS485 ports, two RS232/RS485 ports, six DI ports, six DO ports, and one POE port, enabling seamless expansion of peripheral devices.

# 3. Product interface



USR-EV908J-3576-4-32

# 3.1.Hardware specifications

| operating system | Ubuntu22.04/Android14.0/Debian11 |
|---|---|
| processor CPU | RK3576J, an 8-core CPU with 64-bit ARM architecture featuring dual-core Cortex-A72 and dual-core Cortex-A53 cores, with a maximum clock speed of 2.2GHz. |
| graphics processing unit GPU | Quad-core Mali-G52 MC3<br>Supports OpenGL ES 1.1/2.0/3.2, OpenCL 2.0, and Vulkan 1.1, with built-in high-performance 2D acceleration hardware. |
| Neural Network Processor (NPU) | Equipped with a 6.0TOPS neural processing unit (NPU), supporting INT8/INT16/FP16 arithmetic operations<br>Supports models such as Caffe, Mxnet, TensorFlow, TF Lite, ONNX, and Darknet<br>Provide AI development tools: Enable rapid model conversion |
| internal storage | LPDDR4 4GB (available in 4G,8G, or 16G configurations) |
| memory | eMMC 32GB (available in 32 GB, 64 GB, 128 GB, or 256 GB options) |
| network | Supports dual Ethernet ports with speeds of 10Mbps, 100Mbps, and 1000Mbps |
| | Supports 2.4GHz frequency band and WiFi 6 802.11b/n/g/ax protocols. (5GHz dual-band option available) |
| | Supports Bluetooth, 2.1+ EDR/3.0/4.x/5.2 |
| | Supports 4G/5G functionality |
| GPS navigation | Board-mounted GPS/BD module (optional) |
| picture orientation | Supports manual rotation at 0°,90°,180°, and 270°, and gravity-sensing auto-screen rotation (optional) |
| Display interface | 1*eDP (eDP1.3 5.4Gbps, 4K@60Hz output), powered by 3.3V/5V supply<br>1 LVDS (dual-channel, 6/8-bit), 1080P@60Hz output, 3.3V/5V/12V power supply<br>1*HDMI OUT 2.0, 4K @60Hz<br>1*MiPi, 2560*1600@60Hz output<br>Choose between eDP and HDMI, or MiPi and LVDS. |
| audio frequency | 1*Speaker output (2*18W 4R)<br>1* Earpiece output (with earpiece)<br>1*Microphone input |
| touch screen | 1* I²C interface (supports multi-point resistive touch and multi-point capacitive touch)<br>Supports USB multi-point infrared touch, capacitive touch, nano-film touch, acoustic touch, optical touch, and more |
| camera | 1* MIPI 4-Lane camera input with 5MP/13MP resolution (optional) |

| | |
|---|---|
| | Supports USB camera (optional) |
| I²C | 1* I²C interface |
| RTC | External real-time clock power battery with on/off timer support |
| USB | 6*USB-2.0 HUB , 1*USB3.0/OTG |
| PCIe | 1*Mini PCIe (for 4G/5G LTE) |
| SIM | 1*SIM card slot for Mini PCIe expansion of 4G/5G LTE modules |
| infrared | 1* Infrared receiver base, supporting infrared remote control function |
| LED | 1* Power status LED (blue), 1* System LED (green, default flashing) |
| key | 1*Reset button, 1*Power button, 1*Upgrade button |
| DO | 6*DO interface (supporting 30V/2A) |
| DI | 6*DI interface (supporting 12V/24V) |
| gorge line | 6 RS485 interfaces and 2 RS232/RS485 interfaces (supporting 4000V isolation) |
| AD | 2*AD port |
| POE | 1*POE interface |
| power input | DC9V~36V,5A (requires surge voltage below 50V and ripple voltage below 100mV), supports automatic startup upon power-up or manual activation via power button |
| working temperature | -40℃~85℃ |
| Storage temperature | -40℃~85℃ |
| Storage humidity | 10%~80% |
| Mainboard size | 170mm*105mm*22mm |
| multi-media | Supports 4K@60fps and H.265/H.264/AV1/VP9/AVS2 video decoding<br>Supports 1080P 60fps with H.265/H.264 video encoding<br>Supports 8M ISP and HDR |
| linguistic support | Multilingual |
| system management | The native Ubuntu system with root access for custom product development |
| | Real-time remote monitoring, system crash self-recovery, 7*24-hour unattended operation |
| system watchdog | Support software watchdog |

## 3.2.structure size
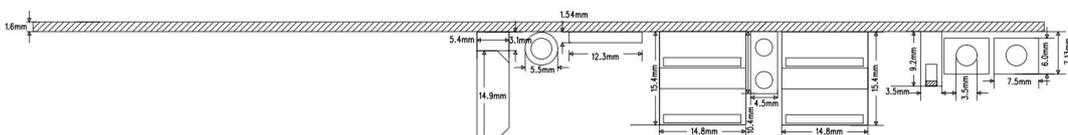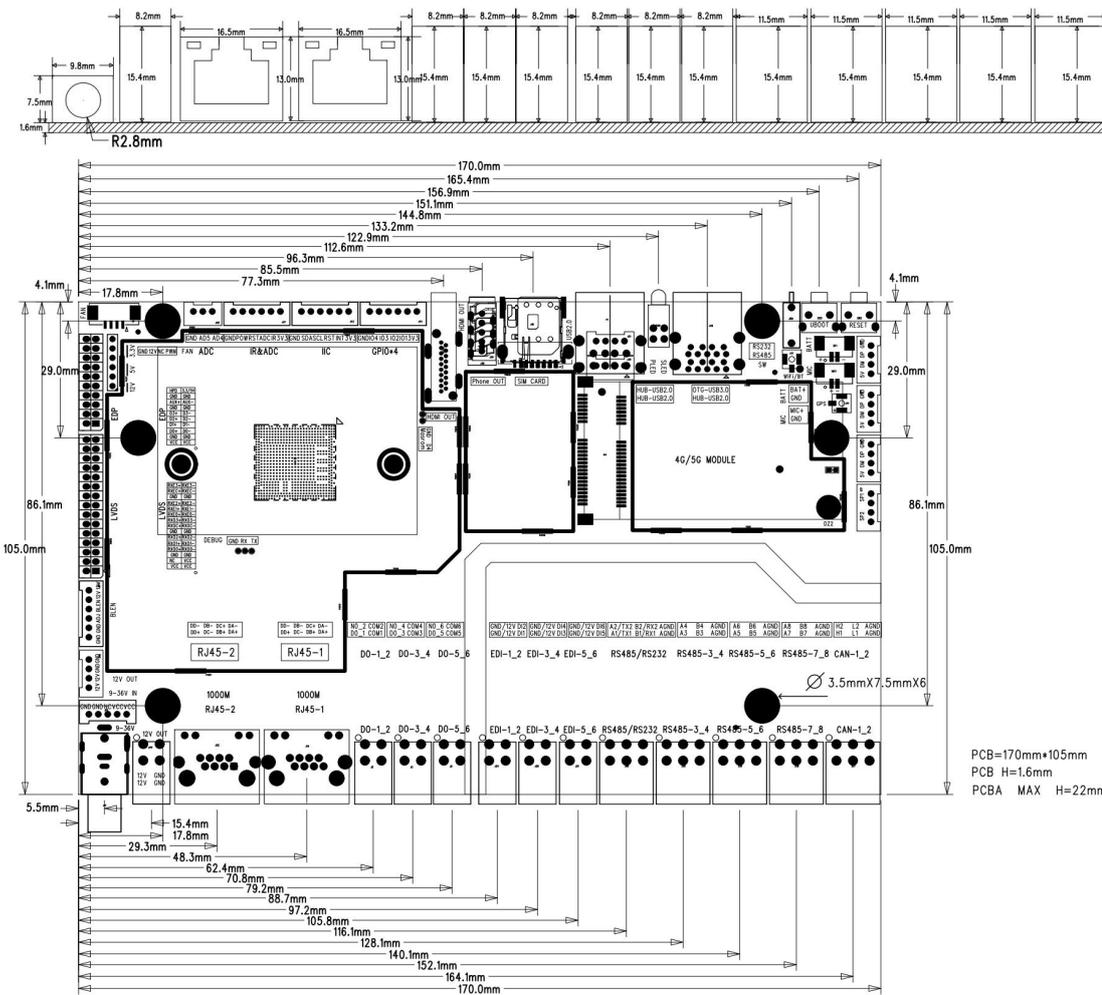
## 3.3.source

The power output interface (12V OUT JACK) features a socket spacing of 2×3.5mm with built-in isolation.
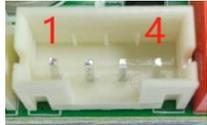
| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | 12V_OUT | output | 12V power supply output | |
| 2 | GND | earth wire | earth wire | |
| 3 | 12V_OUT | output | 12V power supply output | |
| 4 | GND | earth wire | earth wire | |

Power input interface (9V~36V IN JACK) with 2.0mm socket spacing

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | GND | earth wire | earth wire | |
| 2 | GND | earth wire | earth wire | |
| 3 | NC | NC | NC | |
| 4 | 9V~36V_IN | import | 9V~36V power supply input | |

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 5 | 9V~36V_IN | import | 9V~36V power supply input | |

The 12V OUT JACK socket has a 2.0mm spacing between its terminals.

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | GND | earth wire | earth wire | |
| 2 | GND | earth wire | earth wire | |
| 3 | 12V_OUT | output | 12V power supply output | |
| 4 | 12V_OUT | output | 12V power supply output | |

## 3.4.Screen backlight

The backlight interface (LCD BL JACK) socket spacing is 2.0mm.

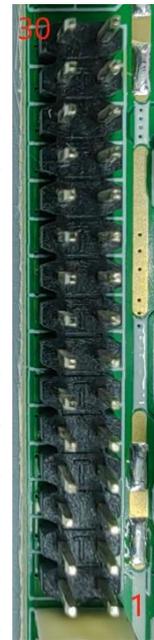| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | 12V | output | 12V output | |
| 2 | 12V | output | 12V output | |
| 3 | LCD-BLON | output | Backlight control | |
| 4 | LCD-ADJ | output | Backlight adjustment | |
| 5 | GND | earth wire | earth wire | |
| 6 | GND | earth wire | earth wire | |

## 3.5.LVDS

LVDS LCD JP JACK interface with 2.0mm socket spacing

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | 3.3V | output | 3.3V output | |
| 2 | LCD-VDD-IN | import | LCD voltage input | |
| 3 | 5V | output | 5V output | |
| 4 | LCD-VDD-IN | import | LCD voltage input | |
| 5 | 12V | output | 12V output | |
| 6 | LCD-VDD-IN | import | LCD voltage input | |

The LVDS jack socket has a spacing of 2.0mm.

| order number | definition | attribute | description |
|---|---|---|---|
| 1 | POWER | | 3.3V/5V/12V |
| 2 | POWER | output | power supply |
| 3 | POWER | | output |
| 4 | GND | | |
| 5 | GND | earth wire | earth wire |
| 6 | GND | | |
| 7 | TA1- | output | data |
| 8 | TA1+ | output | data |
| 9 | TB1- | output | data |
| 10 | TB1+ | output | data |
| 11 | TC1- | output | data |
| 12 | TC1+ | output | data |
| 13 | GND | earth wire | earth wire |
| 14 | GND | | |
| 15 | TCLK1- | output | clock |
| 16 | TCLK1+ | output | clock |
| 17 | TD1- | output | data |
| 18 | TD1+ | output | data |
| 19 | TA2- | output | data |
| 20 | TA2+ | output | data |
| 21 | TB2- | output | data |
| 22 | TB2+ | output | data |
| 23 | TC2- | output | data |
| 24 | TC2+ | output | data |
| 25 | GND | earth wire | earth wire |
| 26 | GND | | |
| 27 | TCLK2- | output | clock |
| 28 | TCLK2+ | output | clock |
| 29 | TD2- | output | data |
| 30 | TD2+ | output | data |

## 3.6.eDP

The eDP LCD interface jack has a socket spacing of 2.0mm.

| order number | definition | attribute | description |
|---|---|---|---|
| 1 | VCC | output | 3.3V/5V power |

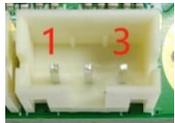| 2 | VCC | output | supply output | |
|---|-----|--------|---------------|---|
| 3 | GND | earth wire | earth wire | |
| 4 | GND | earth wire | earth wire | |
| 5 | D0- | output | data | |
| 6 | D0+ | output | data | |
| 7 | D1- | output | data | |
| 8 | D1+ | output | data | |
| 9 | D2- | output | data | |
| 10 | D2+ | output | data | |
| 11 | D3- | output | data | |
| 12 | D3+ | output | data | |
| 13 | GND | earth wire | earth wire | |
| 14 | GND | earth wire | earth wire | |
| 15 | AUX- | output | data | |
| 16 | AUX+ | output | data | |
| 17 | GND | earth wire | earth wire | |
| 18 | GND | earth wire | earth wire | |
| 19 | 3V3 | output | 3.3V power supply output | |
| 20 | HPD | import | HPD test foot | |

## 3.7.electric fan

The spacing between fan jack sockets is 1.25mm.

| order number | definition | attribute | description | |
|--------------|------------|-----------|-------------|---|
| 1 | PWM | output | PWM | |
| 2 | NC | barefoot | barefoot | |
| 3 | 12V | output | 12V/5V | |
| 4 | GND | earth wire | earth wire | |

## 3.8.AD joggle

The AD jack socket spacing is 2.0mm.

| order number | definition | attribute | description | |
|--------------|------------|-----------|-------------|---|
| 1 | AD4 (1.8V level) | import | AD check | |
| 2 | AD5 (1.8V level) | import | AD check | |
| 3 | GND | earth wire | earth wire | |

# 3.9.Button/Remote Control

Key/Remote Control Interface (LED/IR IN JACK) with 2.0mm socket spacing

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | 3.3V | output | 3.3V voltage output |  |
| 2 | IR | import | receive | |
| 3 | ADC (1.8V level) | import | AD check | |
| 4 | RST | output | RESET Reset button | |
| 5 | PWR | output | POWER power button | |
| 6 | GND | earth wire | earth wire | |

# 3.10. I2C

The I2C interface (I2C JACK) socket spacing is 2.0mm.

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | 3.3 V | output | 3.3V voltage output |  |
| 2 | INT (3.3V level) | import | external device interrupt | |
| 3 | RST (3.3V level) | output | Redeploy external devices | |
| 4 | SCL (3.3V level) | output | clock | |
| 5 | SDA (3.3V level) | output | data | |
| 6 | GND | earth wire | earth wire | |

# 3.11. GPIO

The spacing between GPIO jack sockets is 2.0mm.

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | 3.3V | output | 3.3V voltage output |  |
| 2 | IO1 (3.3V level) | import | Default high level | |
| 3 | IO2 (3.3V level) | import | Default high level | |

| 4 | IO3 (3.3V level) | import | Default low level | |
|---|---|---|---|---|
| 5 | IO4 (3.3V level) | import | Default low level | |
| 6 | GND | earth wire | earth wire | |

## 3.12. RTC

3V button battery socket (BAT JACK) with 1.25mm spacing

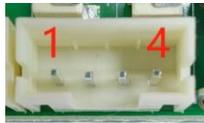| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | GND | import | earth wire |  |
| 2 | BAT+ | import | 3V input | |

## 3.13. MIC

The microphone jack socket spacing is 1.25mm.

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | GND | import | earth wire |  |
| 2 | MIC+ | import | MIC positive input | |

## 3.14. USB

The USB2.0-HOST interface jack features a socket spacing of 2.0mm.

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | 5V | output | 5V voltage output |  |
| 2 | DM | import | DM- | |
| 3 | DP | import | DP+ | |
| 4 | GND | earth wire | earth wire | |

## 3.15. suona

The speaker output jack socket spacing is 2.0mm.

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | LP | output | Positive output on the left channel |  |
| 2 | LN | output | Left channel | |

| | | | output negative electrode | |
|---|---|---|---|---|
| 3 | RP | output | Right channel output positive pole | |
| 4 | RN | output | Right channel output negative electrode | |

## 3.16. CAN

The CAN interface jack features a socket spacing of 2×3.5mm with built-in isolation.

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | CANH1 | data | Data (H1) CAN0 | |
| 2 | CANL1 | data | Data (L1) CAN0 | |
| 3 | AGND | simulated ground | simulated ground | |
| 4 | CANH2 | data | Data (H2) CAN1 | |
| 5 | CANL2 | data | Data (L2) CAN1 | |
| 6 | AGND | simulated ground | simulated ground | |

## 3.17. RS485

RS485 interface (RS485 JACK) with socket spacing of 2×3.5mm (interface equipped with isolation)

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | RS485-A7 | data | Data (ttyS8) | |
| 2 | RS485-B7 | data | Data (ttyS8) | |
| 3 | AGND | simulated ground | simulated ground | |
| 4 | RS485-A8 | data | Data (ttyS9) | |
| 5 | RS485-B8 | data | Data (ttyS9) | |
| 6 | AGND | simulated ground | simulated ground | |

RS485 interface (RS485 JACK) with socket spacing of 2×3.5mm (interface equipped with isolation)

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | RS485-A5 | data | Data (ttyS6) | |

| 2 | RS485-B5 | data | Data (ttyS6) | |
|---|---|---|---|---|
| 3 | AGND | simulated ground | simulated ground | |
| 4 | RS485-A6 | data | Data (ttyS7) | |
| 5 | RS485-B6 | data | Data (ttyS7) | |
| 6 | AGND | simulated ground | simulated ground | |

RS485 interface (RS485 JACK) with socket spacing of 2×3.5mm (interface equipped with isolation)

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | RS485-A3 | data | Data (ttyS3) | |
| 2 | RS485-B3 | data | Data (ttyS3) |  |
| 3 | AGND | simulated ground | simulated ground | |
| 4 | RS485-A4 | data | Data (ttyS5) | |
| 5 | RS485-B4 | data | Data (ttyS5) | |
| 6 | AGND | simulated ground | simulated ground | |

## 3.18. RS485/RS232

RS485/RS232 interface (RS485/RS232 jack) with 2×3.5mm pin spacing (interface with isolation)

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | RS485-A1/TX1 | data | Data (ttyS1) | |
| 2 | RS485-B1/RX1 | data | Data (ttyS1) |  |
| 3 | AGND | simulated ground | simulated ground | |
| 4 | RS485-A2/TX2 | data | Data (ttyS2) | |
| 5 | RS485-B2/RX2 | data | Data (ttyS2) | |
| 6 | AGND | simulated ground | simulated ground | |

## 3.19. DI

DI-5_6 interface (DI JACK) socket spacing: 2×3.5mm (interface with isolation)

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | 12V/GND | Output/Analog Ground | 12V output/analog |  |

| order number | definition | attribute | description | |
|---|---|---|---|---|
| | | | ground | |
| 2 | DI5 | data | Data (GPIO15) | |
| 3 | 12V/GND | Output/Analog Ground | 12V output/analog ground | |
| 4 | DI6 | data | Data (GPIO16) | |

DI-3_4 jack socket with spacing of 2×3.5mm (interface equipped with isolation)

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | 12V/GND | Output/Analog Ground | 12V output/analog ground | |
| 2 | DI3 | data | Data (GPIO13) | |
| 3 | 12V/GND | Output/Analog Ground | 12V output/analog ground | |
| 4 | DI4 | data | Data (GPIO14) | |

DI-1_2 interface (DI JACK) socket spacing: 2×3.5mm (interface with isolation)

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | 12V/GND | Output/Analog Ground | 12V output/analog ground | |
| 2 | DI1 | data | Data (GPIO11) | |
| 3 | 12V/GND | Output/Analog Ground | 12V output/analog ground | |
| 4 | DI2 | data | Data (GPIO12) | |

## 3.20. DO

DO5-6 jack socket with 2×3.5mm spacing (interface with isolation)

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | DO-5 | data | Data (GPIO45) | |
| 2 | COM5 | data | data | |
| 3 | DO-6 | data | Data (GPIO46) | |
| 4 | COM6 | data | data | |

DO3-4 jack socket with spacing of 2×3.5mm (interface equipped with isolation)

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | DO-3 | data | Data (GPIO43) |  |
| 2 | COM3 | data | data | |
| 3 | DO-4 | data | Data (GPIO44) | |
| 4 | COM4 | data | data | |

The DO1-2 interface (DO1-2 JACK) features a socket spacing of 2×3.5mm (with isolation included).
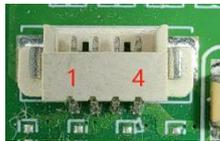
| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | DO-1 | data | Data (GPIO41) |  |
| 2 | COM1 | data | data | |
| 3 | DO-2 | data | Data (GPIO42) | |
| 4 | COM2 | data | data | |

## 3.21. POE

The POE interface (POE JACK) socket spacing is 1.25mm (bottom layer).

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | POE7-8 | import | Input 7-8 |  |
| 2 | POE4-5 | import | 4-5 inputs | |
| 3 | POE3-6 | import | Input 3-6 | |
| 4 | POE1-2 | import | Input 1-2 | |

## 3.22. MiPi Camera

The MiPi Camera interface (MiPi Camera JACK) socket spacing is 0.5mm (bottom layer)

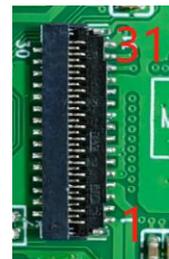| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | NC | barefoot | barefoot |  |
| 2 | VDD28 | source | 2.8V output | |
| 3 | VDD13 | source | 1.3V output | |
| 4 | VDD18 | source | 1.8V output | |
| 5 | NC | barefoot | barefoot | |
| 6 | GND | earth wire | earth wire | |
| 7 | VDD28 | source | 2.8V output | |
| 8 | GND | earth wire | earth wire | |

| 9 | SDA | output | data | |
|----|------|------------|------------|--|
| 10 | SCL | output | clock | |
| 11 | RST | output | reset | |
| 12 | PWDN | earth wire | enable bit | |
| 13 | GND | earth wire | earth wire | |
| 14 | MLCK | output | clock | |
| 15 | GND | earth wire | earth wire | |
| 16 | DP3 | output | data | |
| 17 | DN3 | output | data | |
| 18 | GND | earth wire | earth wire | |
| 19 | DP2 | output | data | |
| 20 | DN2 | output | data | |
| 21 | GN1 | earth wire | earth wire | |
| 22 | DP2 | output | data | |
| 23 | DN1 | output | data | |
| 24 | GND | earth wire | earth wire | |
| 25 | CLKP | output | clock | |
| 26 | CLKN | output | clock | |
| 27 | GND | earth wire | earth wire | |
| 28 | DP0 | output | data | |
| 29 | DN0 | output | data | |
| 30 | GND | earth wire | earth wire | |

## 3.23. MiPi LCD

MiPi LCD jack (FPC MiPi LCD JACK) with 0.3mm spacing between sockets (bottom layer)

| order number | definition | attribute | description | |
|----|--------|------------|------------------|--|
| 1 | LED+ | output | backlight anode | |
| 2 | LED+ | output | backlight anode | |
| 3 | LED+ | output | backlight anode | |
| 4 | GND | earth wire | earth wire | |
| 5 | LED- | output | Backlight anode | |
| 6 | LED- | output | Backlight anode |  |
| 7 | LED- | output | Backlight anode | |
| 8 | LED- | output | Backlight anode | |
| 9 | GND | earth wire | earth wire | |
| 10 | GND | | | |
| 11 | MiPi2+ | output | data | |
| 12 | MiPi 2- | output | data | |

| 13 | GND | earth wire | earth wire | |
|---|---|---|---|---|
| 14 | MiPi 1+ | output | data | |
| 15 | MiPi 1- | output | data | |
| 16 | GND | earth wire | earth wire | |
| 17 | MiPi CLK+ | output | clock | |
| 18 | MiPi CLK- | output | clock | |
| 19 | GND | earth wire | earth wire | |
| 20 | MiPi 0+ | output | data | |
| 21 | MiPi 0- | output | data | |
| 22 | GND | earth wire | earth wire | |
| 23 | MiPi 3+ | output | data | |
| 24 | MiPi 3- | output | data | |
| 25 | GND | earth wire | earth wire | |
| 26 | NC | barefoot | barefoot | |
| 27 | RESET | output | reset | |
| 28 | NC | barefoot | barefoot | |
| 29 | VDDIO1.8V | output | VDD1.8V | |
| 30 | VDD3.3V | output | VDD3.3V | |
| 31 | VDD3.3V | output | VDD3.3V | |

## 3.24. I2C

The FPC I2C interface jack has a socket spacing of 0.5mm (bottom layer).

| order number | definition | attribute | description | |
|---|---|---|---|---|
| 1 | GND | earth wire | earth wire | |
| 2 | GND | earth wire | earth wire | |
| 3 | 3.3V | output | 3.3V voltage output | |
| 4 | SDA (3.3V level) | output | data |  |
| 5 | SCL (3.3V level) | output | clock | |
| 6 | GND | earth wire | earth wire | |
| 7 | INT (3.3V level) | import | external device interrupt | |
| 8 | RST (3.3V level) | output | Redeploy external devices | |
| 9 | GND | earth wire | earth wire | |
| 10 | GND | earth wire | earth wire | |