



Product Brief

ED-IOTGATWAY REV1.0

RASPBERRY PI COMPUTE MODULE BASED IOT GATEWAY SOLUTION

2019-5-6

EDA TECHNOLOGY CO.,LTD

Product Brief of ED-IOTGATEWAY1.0

Introduction:

ED-IOTGATEWAY1.0 is based on Raspberry Pi Compute Module, supports CM3+/CM3/CM1 full series solution, specially designed for IoT application, it provides rich wireless communication capability including WiFi, Bluetooth, 4G Module(Optional) & LoRa(Optional), this solution also supports various wired communication capability such as 10/100M Ethernet, USB2.0, UART and RS485. On board 2Kb EEPROM and 32Mb Serial Flash can be used to store the system data and user data.

This system can build an IoT network through WiFi, Bluetooth & LoRa technology, manage all of the nodes through the powerful computing capability of Raspberry Pi Compute Module, and link to the cloud through 10/100M Ethernet or 4G/LTE wireless Module.

CSI interface supports high resolution cameras, DSI interface supports Raspberry Pi official display, the powerful video CODEC capability supports all kinds of multimedia applications.

On board RTC, temperature sensor and low voltage detector circuit will monitor the operating condition of the system, allow the system to store the important user data and system data, and ensure the system operating reliably.

The users can add more functions on the board through Raspberry Pi Standard 40 Pins Connector, Mini PCI-e and 24 Pins DIP connector, and fully utilize its powerful computing & communication capability to satisfy all kinds of requirement in IoT application.

Key Features & Specification:

Raspberry Pi Compatibility:

- [Raspberry Pi Compute Module 1](#)
- [Raspberry Pi Compute Module 3](#)
- [Raspberry Pi Compute Module 3 Lite](#)
- [Raspberry Pi Compute Module 3+ 8 GB / 16 GB / 32 GB eMMC flash](#)
- [Raspberry Pi Compute Module 3+ Lite](#)

Camera & Display:

- 1 x CSI supports the standard CSI cameras
- 1 x HDMI
- 1 x DSI supports Raspberry Pi Official Display

Connectivity:

- 1 x 10/100M Ethernet
- 2 x USB2.0
- 1 x USB Slave for system programming
- 3 x UARTs(TTL Signal)
- 1 x RS485 with Lightning Protection

Wireless:

- 1 x WiFi complies with IEEE802.11b/g/n Standard
- 1 x Bluetooth 4.1
- 4G /LTE Module by Mini PCI-e connector (Optional)
- LoRa Concentrator Gateway Module by 24pins DIP connector (Optional)

Storage:

- 1 x microSD card slot
- On Board 2Kb EEPROM
- On Board 32Mb serial Flash

System Monitoring:

- On Board RTC
- On Board Low Voltage Detector(LVD)
- 1x high precision temperature sensor

User Interface:

- 1 x Red & 1 x Green LED Indicator
- 1 x System Reset Button
- 1 x Custom User Button
- 1 x Buzzer

Expansion Interface:

- 1 x USB Interface by Mini PCI-e Socket
- 1 x USB Interface by a 4pins DIP connector
- 1 x High Speed SPI by 24pins DIP connector
- 1 x Raspberry Pi Standard 40Pins Connector

Power Supply:

- 12~24V DC Input by Phenix Connector

Dimensions:

- 160 mm(L) x 120 mm(W) x 20mm(H)

Software:

- Raspberry Pi Raspbian OS

System Diagram:

