



ED-IPC2000

Datasheet

by EDA Technology Co., Ltd

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ED-IPC2000 Series

Industrial Computer Based on Raspberry Pi CM4

- Broadcom BCM2711, quad core Arm Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
- Up to 8GB LPDDR4 RAM and 32GB eMMC storage
- Lan supports up to 1Gbps
- 2.4GHz&5GHz dual-band Wi-Fi and Bluetooth
- Support Micro SD Card; integrated RTC, EEPROM and encryption chip
- Wide voltage power input range of DC 9V~28V with reverse polarity protection, overvoltage protection and overcurrent protection
- Metal case, compatible with DIN-rail installation



Specifications

System	
CPU	Broadcom BCM2711, quad core Arm Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz
VPU	H.265 (HEVC), up to 4Kp60 decode H.264, up to 1080p60 decode, 1080p30 encode
GPU	OpenGL ES 3.1 & Vulkan 1.0
Memory	Options for 1GB, 2GB, 4GB, 8GB LPDDR4-3200 SDRAM
Storage	Options for 8GB, 16GB, 32GB eMMC storage Micro SD card (user storage expansion)

Software	
Operating System	Raspberry Pi OS (Desktop) 32-bit Raspberry Pi OS (Lite) 32-bit Raspberry Pi OS (Desktop) 64-bit Raspberry Pi OS (Lite) 64-bit

Front I/O	
Power	1 x DC IN, DC Jack connector, supporting 9V~28V input.
HDMI	x HDMI port, type A connector. It is compatible with HDMI 2.0 and supports 4K 60Hz.
Audio	1 x Audio In/Stereo Out, 3.5mm audio jack connector. It can be used as MIC IN and Audio OUT. <ul style="list-style-type: none"> • When a headphone is connected, the audio output switches to the headphone. • When no headphone is connected, the audio output switches to the speaker. Note : Only ED-IPC2020 contains this interface.
1000M Ethernet	1 x adaptive 10/100/1000M ethernet port, RJ45 connector. It can be used to access the network.

Rear I/O	
SD Card Slot	1 x Micro SD card slot, using to install SD card for storing user data.

Side I/O	
USB 2.0	1 x USB 2.0 port, type A connector, which supports up to 480Mbps transmission rate.
USB 3.0	2 x USB 3.0 ports, type A connector, which support up to 5Gbps transmission rate.
Antenna	1 x SMA port, using to connect Wi-Fi/BT antenna.

Buttons and Indicators	
RESET	1 x Reset button, which can reset the device.
PROGRAM	1 x PROGRAMMING button, which is used to flash to eMMC for the system.
PWR	1 x red power indicator, which is used to check the status of device power-on and power-off.
ACT	1 x green system indicator, which is used to check the working status of device.

Expansion Functions	
EEPROM	Supports 4K byte storage and improves the ease of use of device.
Crypto Authentication	It can be matched to realize the required upper layer application and improves the security of device.
RTC	Integrated RTC battery base, users can purchase the CR1220 battery as RTC backup power supply
Buzzer	A tip or an abnormality can be configured according to actual application, which realizes the alarm function.

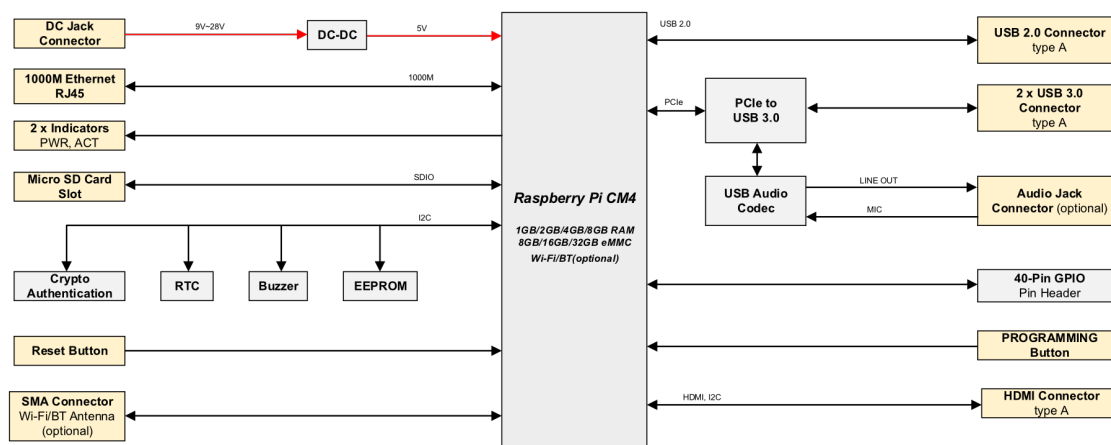
Electrical Characteristics	
Input Voltage	9V ~ 28V DC
Power Consumption	20W (Max)

Mechanical Characteristics	
Dimensions	102.8mm x 80.5mm x 32mm (WxDxH, DIN-rail bracket and antenna are not included.)
Weight	About 500g
Installation	DIN-rail installation

Wireless	
Wi-Fi/Bluetooth (optional)	2.4GHz & 5GHz dual-band Wi-Fi and Bluetooth with antenna. <ul style="list-style-type: none"> • 2.4GHz Wi-Fi: Compatible with IEEE 802.11 b/g/n • 5GHz Wi-Fi: Compatible with IEEE 802.11 a/n/ac • The Bluetooth supports 2402MHz ~ 2480MHz frequency

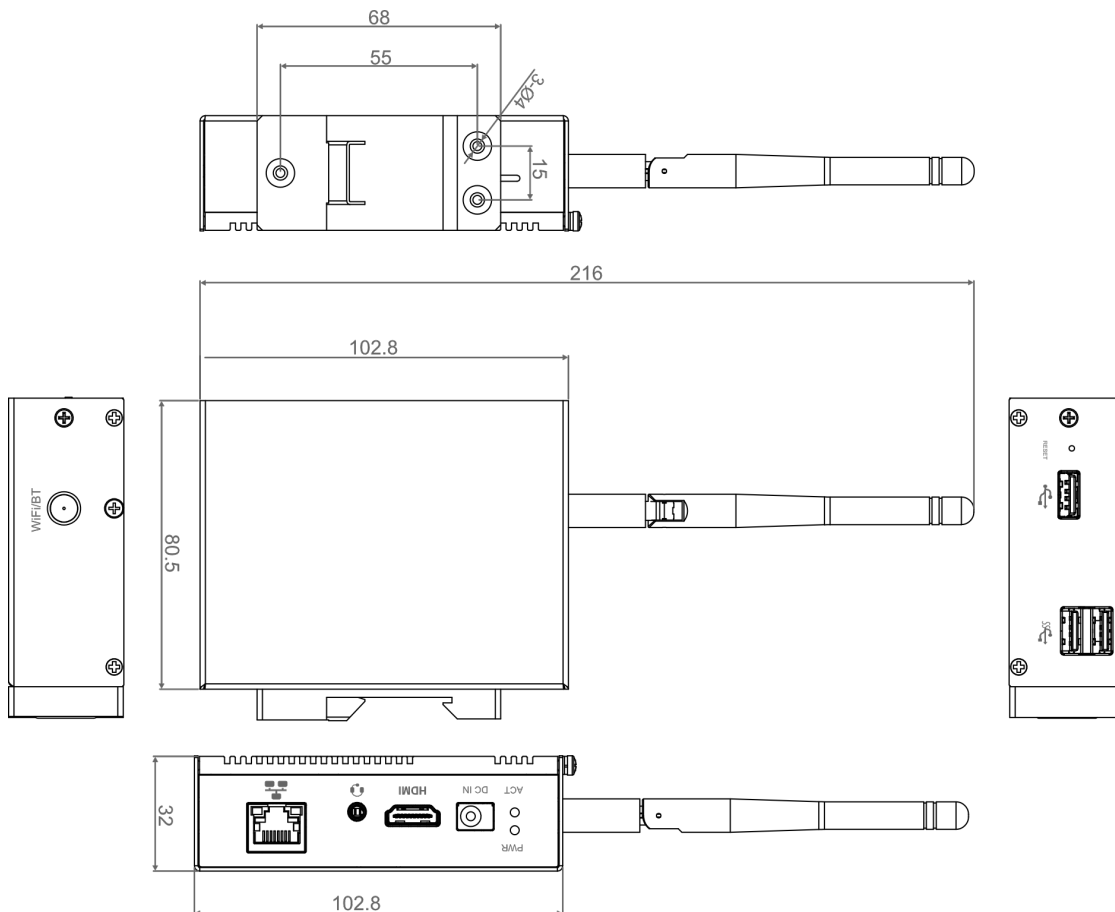
Environmental & Regulatory	
Operating Temperature	-25°C ~ 60°C
Storage Temperature	-25°C ~ 60°C
Ambient Humidity	5% ~ 95% (non-condensing)
Certifications	FCC FCC 47 CFR Part 15 Subpart B CE EN IEC 62368-1/EN IEC 62311/EN IEC 61000-3-2/EN IEC 61000-3-3 EN 55032/EN 55035 EN 301 489-1/EN 301 489-3/EN 301 489-17/EN 301 489-52 EN 301 328/EN 301 440/EN 301 511/EN 301 908-1/EN 301 908-2

System Diagram

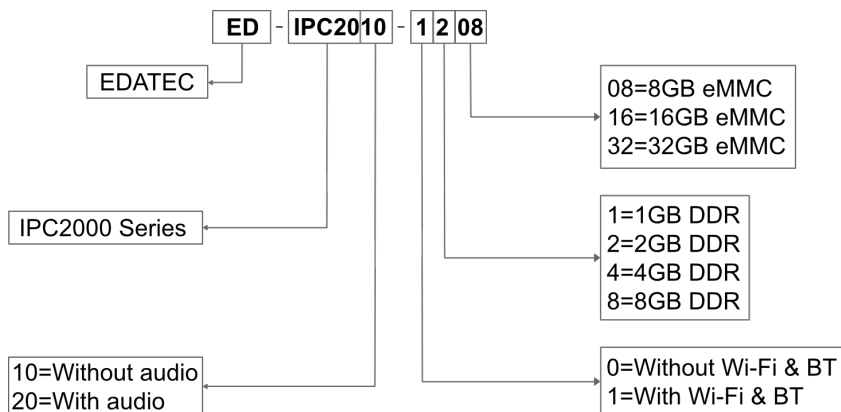


Dimensions

Unit: mm



Ordering Code



Example
 P/N: **ED-IPC2010-1208**
 Configuration: Industrial Computer Based on Raspberry Pi CM4, with Wi-Fi & Bluetooth, 2GB DDR and 8GB eMMC.

Optional Accessory

You can choose a power adapter according to actual needs.

Model	Description	Picture
ED-PSU1202-UK		

Model	Description	Picture
	100~240VAC to 12VDC/2A Adapter, with UK AC plug, 5.5mm DC plug	
ED-PSU1202-US	100~240VAC to 12VDC/2A Adapter, with US AC plug, 5.5mm DC plug	
ED-PSU1202-AU	100~240VAC to 12VDC/2A Adapter, with AU AC plug, 5.5mm DC plug	
ED-PSU1202-EU	100~240VAC to 12VDC/2A Adapter, with EU AC plug, 5.5mm DC plug	

NOTE: Each model contains only one of the UK, US, AU and EU plugs.

Packing List

- 1 x ED-IPC2000 Unit
- [Wi-Fi/BT Version - optional] 1 x 2.4GHz&5GHz Wi-Fi/BT Antenna