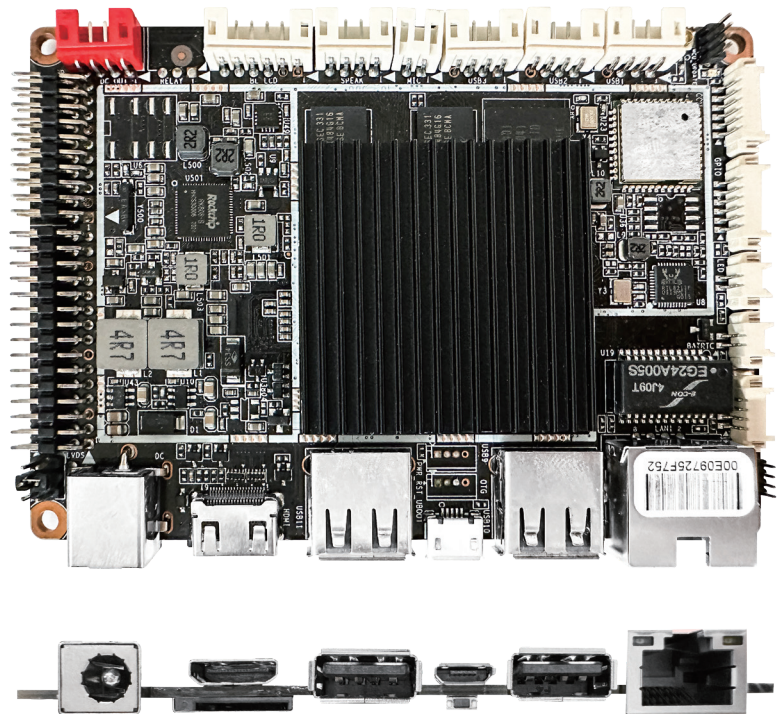# ZA-R32SIR-216 Motherboard
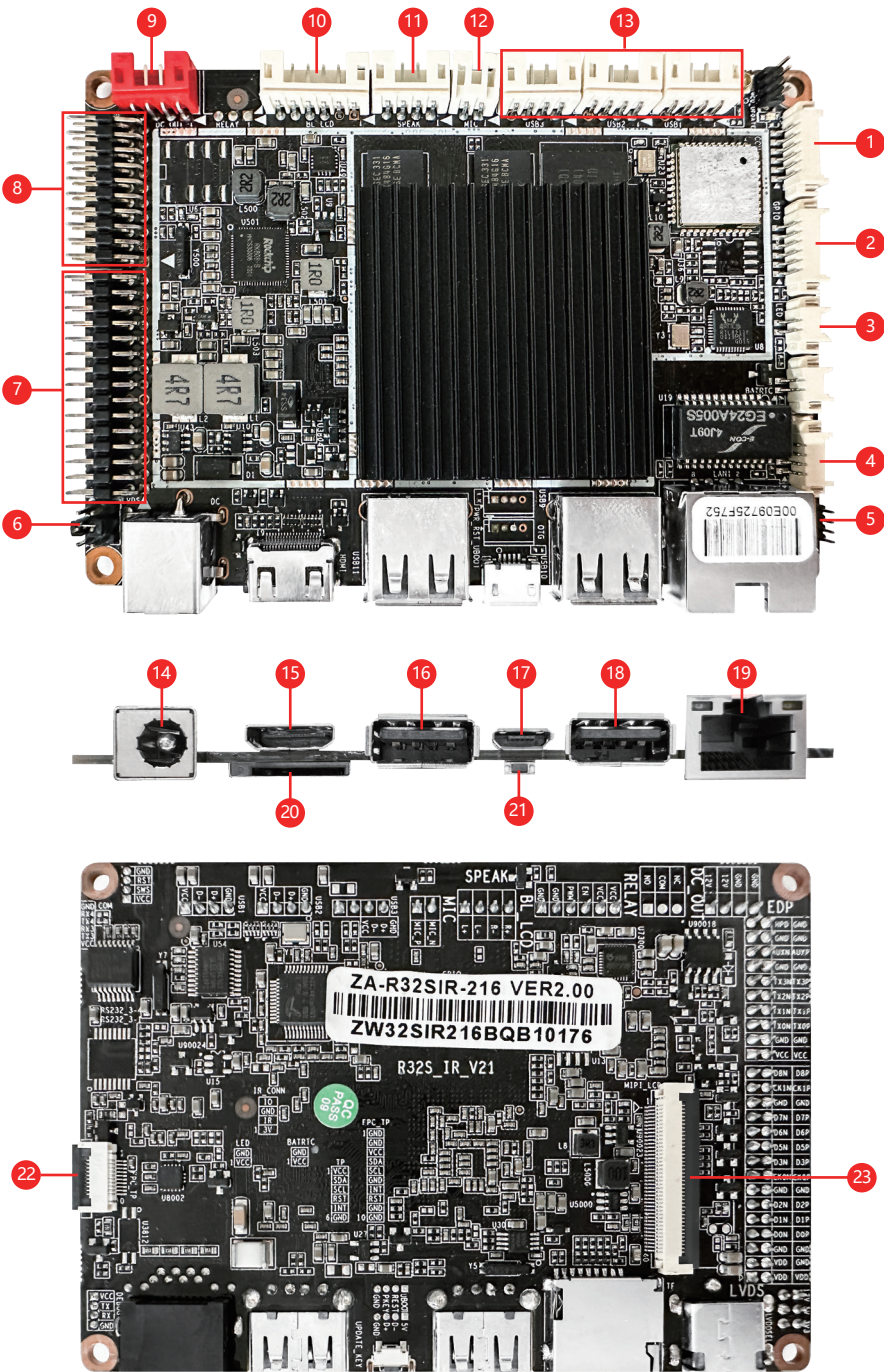
Product characteristics:

■ High-performance processing chip: The RK3288 4-core A17 is one of the most powerful quad-core chips on the market, easily handling computations in various application scenarios.

■ Powerful image processing performance: Built-in super strong display processing chip Mali-T76X GPU can easilyhandle various high-resolution, high-bitrate video playback and output, HDMI 2.0 HD output, supporting dual-screen display.

■ Rich interactive interfaces: capacitive touch, infrared touch, infrared remote control, USB keyboard and mouse, multi-point optical touch.

■ Various network transmissions: Ethernet, Wi-Fi, Bluetooth.

■ High scalability: 5*USB2.0, 3*serial ports (RS232*2, RS485 or UART*1), I2C, power output, etc.

■ Eco-friendly green: industrial-grade EMI and ESD protection.

■ Strict quality control: 7 days * 24 hours continuous aging tests, quality assurance.

■ Product applicable temperature: --25 to 85 °C

ZA-R32SIR-216 Motherboard Specifications

Size	100mm*70mm
CPU	Rockchip RK3288 Quad-core Cortex-A17 Quad-core GPU Mali-T764
operating frequency	2.2 GHz
RAM	DDR3 2G
Built-in storage capacity	EMMC 16G (optional 8G/32G)
Display screen interface	LVDS interface (single channel, 6-bit dual channel, 8-bit dual channel). Supports a maximum resolution of 1920x1080.
Onboard backlight	Supports selectable 3.3V/5V/12V
Touch screen	Provide I2C interface (supports multi-point resistive touch and multi-point capacitive touch). Supports USB multi-point infrared touch, multi-point acoustic touch, and multi-point optical touch.
Network	Equipped with RJ45 interface, supports 10/100/1000M Ethernet
	Equipped with Wifi and BT modules, supporting Wi-Fi 802.11b/g/n/ (ac optional) protocol. Supports BT4.2.
Image rotation	Support manual rotation at 0 degrees, 90 degrees, 180 degrees, and 270 degrees (gravity sensor option available)
Real-time clock	Built-in real-time clock power supply battery
Interface device	Supports USB cameras, with a maximum support of 800W pixels
	4*USB HOST、1*USB OTG
	Three sets of serial ports. Supports external serial device modules (NFC module, printer, card reader, etc.)
	TF card, maximum support of 32GB
	GPIO Expansion
	Class D amplifier: 3W*2 4 ohms
	HDMI 2.0 Output
Power adapter	Input: AC100-240V.50-60HZ, Output: DC12V 3A
Operating System	Android 7.0

1	RS232 Pin(2 Route RS232)
2	GPIO Pin(There is a UART route inside)
3	LED Pin(Controllable 5V/12V power supply)
4	IR Pin
5	DEBUG Pin
6	LVDS_VCC_SEL jumper
7	LVDS Pin
8	EDP Pin
9	DC_OUT Pin
10	BL_LCD Pin
11	SPEAKER Pin
12	MIC Pin
13	USB1/2/3 Pin
14	DC 12V/3A interface
15	HDMI interface
16	USB2.0 interface
17	Micro USB2.0 OTG interface
18	USB2.0 interface
19	LAN interface
20	TF interface
21	UPDATE_KEY Button
22	TP interface
23	MIPI LCD interface