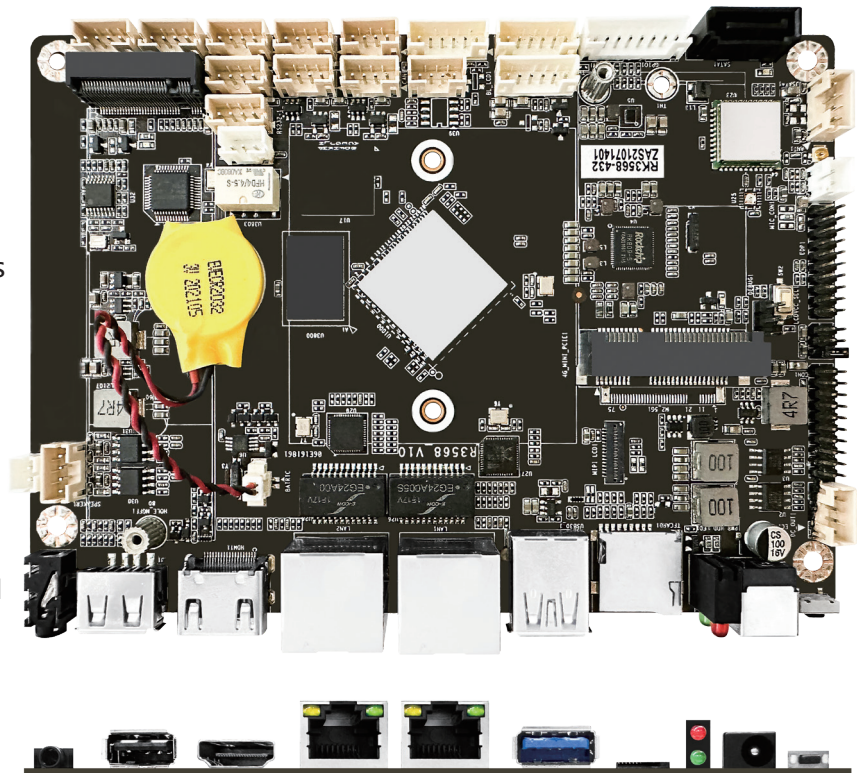


ZA-RK3568-432 Mainboard

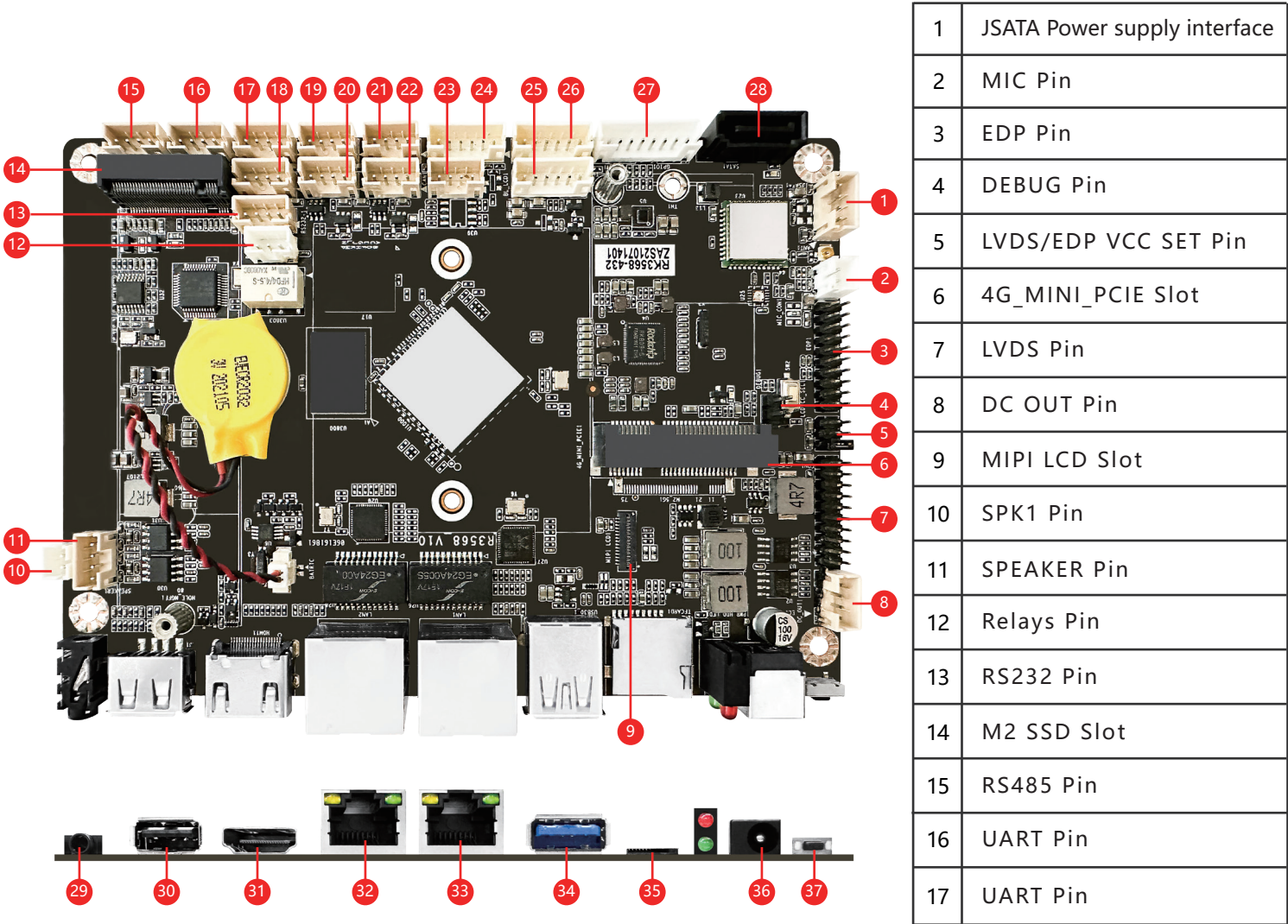
Product characteristics:

- RK3568A, quad-core, up to 2.0GHz
- High-performance processing chips: integrated HDMI/LVDS/EDP/Ethernet/WIFI/BT in one. Easily handle calculations in various application scenarios
- Built-in M.2 5G module interface. It supports Quectel, SIMCom and more M.2- 5G/4G module Internet access
- Support 2*LAN (1Gbps/100Mbps/10Mbps Ethernet Controller) Support Wifi&BT module, support Wi-Fi 802.11 b/g/n/ (ac optional) protocol Support BT4.2
- Support SATA hard disk interface, support M2 PCIE SSD hard diskIt can meet the needs of storage expansion

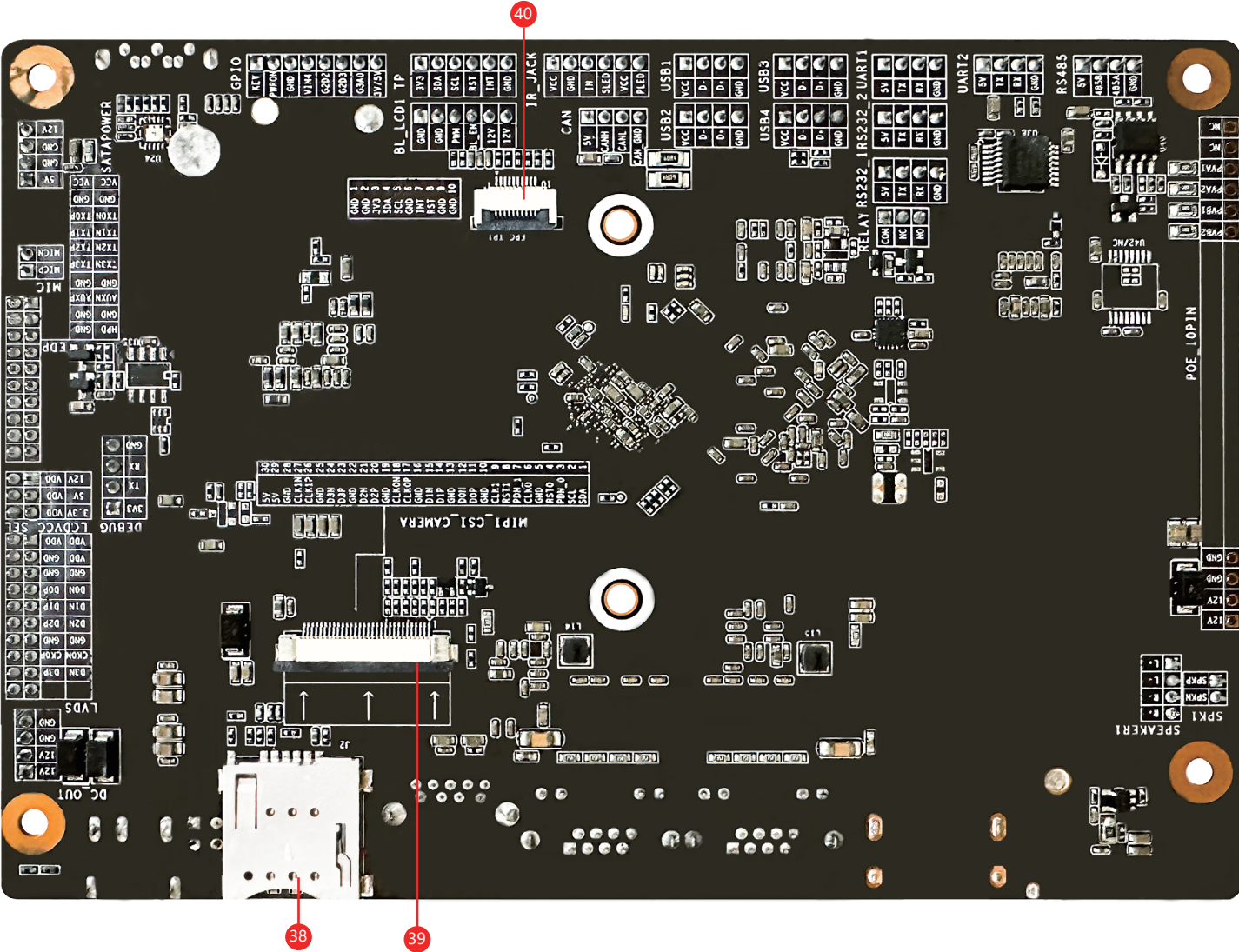


ZA-RK3568-432 Motherboard Specifications

Size	140mm*104mm
CPU	RK3568A, quad-core, up to 2.0GHz
Onboard backlight	Support 3.3V/5V/12V optional
RAN	LPDDR4 Sticker 2G (optional sticker 8G)
EMMC	32G
Internal I/O	1*JSATA Power supply interface 1*MIC Pin 1*EDP Pin 1*DEBUG Pin 1*LVDS/EDP VCC SET Pin 1*MIPI LCD Slot 1*LVDS Pin 1*DC OUT Pin 1*SPEAKER Pin 1*RS485 Pin 2*UART Pin 2*RS232 Pin 4*USB2.0 Pin 1*CAN Pin 1*IR Pin 1*LVDS/EDP Pin 1*TP Pin 1*GPIO Pin 1*SATA Data interface
Rear I/O	1*AUDIO interface 1*USB2.0 interface 1*HDMI interface 2*LAN interface 1*USB3.0 interface 1*TF Card slots 1*SIM Card slots
LAN	2*1Gbps/100Mbps/10Mbps Ethernet Controller
Wi-Fi	Support Wifi&BT module, support Wi-Fi 802.11b/g/n/ (ac optional) protocol Support BT4.2
Expansion slot	1*M.2 SSD Slot / 1*4G_MINI_PCIE Slot
Operating System	Android 12 system, open root permission, can be customized product development



18	RS232 Pin	28	SATA Data interface
19	USB2.0 Pin	29	AUDIO interface
20	USB2.0 Pin	30	USB2.0 interface
21	USB2.0 Pin	31	HDMI interface
22	USB2.0 Pin	32	LAN interface
23	CAN Pin	33	LAN interface
24	IR Pin	34	USB3.0 interface
25	LVDS/EDP Pin	35	TF Card slots
26	TP Pin	36	DC 12V interface
27	GPIO Pin	37	KEY button



38	SIM Card slots	40	TP Slot
39	MIPI_CSI_CAMERA Slot		

ZA-RK3568-432 Mainboard Definition

(1) JSATA Power supply interface

Location	Pin	Definition
JSATA	1	5V
	2	GND
	3	GND
	4	12V

(2) MIC Pin

CLEAR_MOS	
1	MICP
2	MICN

(3) EDP Pin

Location	Pin	Definition	Pin	Definition
EDP1 (2mm)	1	HPD	2	GND
	3	GND	4	GND
	5	AUXN	6	AUXP
	7	GND	8	GND
	9	TX3N	10	TX3P
	11	TX2N	12	TX2P
	13	TX1N	14	TX1P
	15	TX0N	16	TX0P
	17	GND	18	GND
	19	VCC	20	VCC

(4) DEBUG Pin

Location	Pin	Definition
DEBUG	1	3V3
	2	TX
	3	RX
	4	GND

(5) LVDS/EDP VCC SET Pin

Location	Pin	Definition	Pin	Definition
LVSD/EDP VCC SET	1	3.3V	2	VDD
	3	5V	4	VDD
	5	12V	6	VDD

(7) LVDS Pin

Location	Pin	Definition	Pin	Definition
LVDS1 (2mm)	1	D3N	2	D3P
	3	CKON	4	CKOP
	5	GND	6	GND
	7	D2N	8	D2P
	9	D1N	10	D1P
	11	D0N	12	D0P
	13	GND	14	GND
	15	VDD	16	GND
	17	VDD	18	VDD

(8) DC_OUT Pin

Location	Pin	Definition
DC_OUT	1	12V
	2	12V
	3	GND
	4	GND

(11) SPEAKER Pin

Location	Pin	Definition
SPEAKER	1	R+
	2	R-
	3	L-
	4	L+

(13/18) RS232 Pin

Location	Pin	Definition
RS232	1	5V
	2	TX
	3	RX
	4	GND

(15) RS485 Pin

Location	Pin	Definition
RS485	1	5V
	2	485B
	3	485A
	4	GND

(16/17) UART Pin

Location	Pin	Definition
UART	1	5V
	2	TX
	3	RX
	4	GND

(19-22) USB1-4 Pin

Location	Pin	Definition
USB	1	5V
	2	TX
	3	RX
	4	GND

(23) CAN Pin

Location	Pin	Definition
CAN	1	5V
	2	CANH
	3	CANL
	4	CAN_GND

(24) IR Pin

Location	Pin	Definition
IR	1	VCC
	2	GND
	3	IN
	4	SLED
	5	VCC
	6	PLED

(25) LVDS/EDP Pin

Location	Pin	Definition
LVDS/EDP	1	GND
	2	GND
	3	PWM
	4	BL_EN
	5	12V
	6	12V

(26) TP Pin

Location	Pin	Definition
TP	1	3V3
	2	SDA
	3	SCL
	4	RST
	5	INT
	6	GND

(27) GPIO Pin

Location	Pin	Definition
GPIO	1	KEY
	2	PWRON
	3	GND
	4	VIN4
	5	G2D2
	6	G2D3
	7	G3A0
	8	3V/5V