

JEA-E068

Rockchip RK3568
Arm-based Edge AI BOX



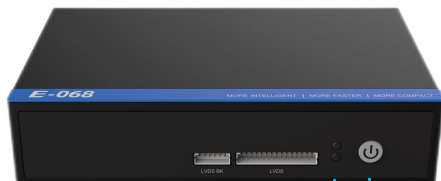
Features

- Rockchip RK3568 SoC up to 2.0 GHz
- 4x Cortex-A55 + Mali-G52 GPU + 1 TOPS NPU
- Ideal for entry level edge AI applications
- Compact design for easy integration
- Dual display: 1x HDMI, 1x Dual ch. LVDS
- Rich I/Os: 1x GbE, 2x USB, 4x DB9 COM
- On-board WiFi+BT module + M.2 Key B for 5G/4G
- Wake-on-LAN, Watchdog Timer & RTC support
- Android / Linux / OpenHarmony OS support



OpenHarmony

Product View



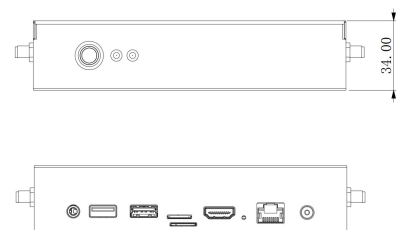
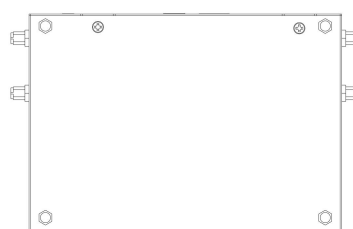
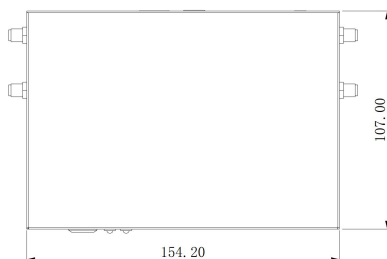
Backlight LVDS LEDs Power



Audio USB 2.0 USB 3.0 TF/SIM HDMI Recover GbE LAN DC-IN

4x DB9 COM

Dimensions



System	AI Platform	Rockchip RK3568
	AI Performance	1 TOPS (INT8)
	GPU	Arm Mali-G52, supports OpenGL ES 1.1/2.0/3.2, Vulkan 1.0/1.1, OpenCL 2.0 FP
	CPU	Quad core Arm Cortex-A55 up to 2.0 GHz
	Neural Network Acceleration	Integrated NPU for INT8/INT16/FP16 hybrid operation Supports model conversion from TensorFlow, Pytorch, Caffe, ONNX, MXNet etc.
	HW Video Codec	H.265/H.264/VP9/VP8 Decoder up to 4K60 H.265/H.264 Encoder up to 1080p60
	Memory	On-board 2GB/4GB LPDDR4/4X
	Storage & Expansion	On-board 8GB/16GB/32GB eMMC 5.1 for OS 1x Micro SD slot for storage expansion
Ethernet	Chipset	RTL8111H
	Interface	1x RJ45, 10/100/1000 Mbps
Wireless Connectivity	WiFi	On-board 2.4 GHz WiFi + BT 4.2 module
	5G/4G	1x M.2 Key B for 4G/5G with Micro SIM slot
	LoRa	-
	Others	-
Multimedia	Display	1x HDMI 2.0a Type-A up to 4K60 1x Dual channel LVDS up to 1920x1200p60 Supports dual independent display
	Audio	1x 3.5mm Line out
I/O	USB	1x USB 3.0 OTG Type-A 1x USB 2.0 Type-A
	Serial Port	4x DB9 COM (RS-232/485 optional)
	CAN	-
	GPIO	2x GPIO wafer (7-bit GPIO, 1-bit ADC)
Other Features	Watchdog	Watchdog Timer & power on/off management
	Real Time Clock	On-board RTC chip, battery-backed
	Security	-
Power	Power Input	12V DC-IN
	Interface	5.5x2.5mm DC Jack
	System Ctrl & Monitoring	1x Power button, 1x Recovery button 2x programmable LEDs
Mechanical	Dimensions	154mm x 107mm x 34mm
Software	OS Support	Android 11, Debian 10/11, Ubuntu 18.04, OpenHarmony 3.2/4.1
Environment	Operating Temp.	-5~50°C
	Storage Temp.	-20~70°C
	Humidity	10%~90% RH, non-condensing
	Certifications	CCC

Part Number	SoC	Memory	Flash	Wireless	LAN	USB	COM	GPIO	Operating Temp.
JEA-E068-BQH22	RK3568	4GB	16GB	2.4G WiFi + BT 4.2	2	2	4	7	-5~50°C
JEA-E068-BQM42	RK3568	2GB	16GB	2.4G WiFi + BT 4.2	2	2	4	7	-5~50°C

■ Packing List

Article	Description
24W Power Adaptor	AC 100~240V to DC 12V/2.0A
WiFi Antenna	2.4/5 GHz Dual band Antenna for WiFi

■ Optional Accessories

Article	Description
4G Expansion kit	Quectel EM05-CN LTE Cat 4 module with antenna (optional GNSS)
4G Expansion kit	Fibocom NL668-CN-22 LTE Cat 4 module with antenna
5G Expansion kit	Quectel RM500U-CN 5G Sub-6 GHz module with antenna
5G Expansion kit	Fibocom FM650-CN-23 5G Sub-6 GHz module with antenna
Thermal kit for 5G module	Al. heatsink with thermal pad & screws