

G6-F1 RK3588

Rockchip RK3588
Ai Edge Gateway

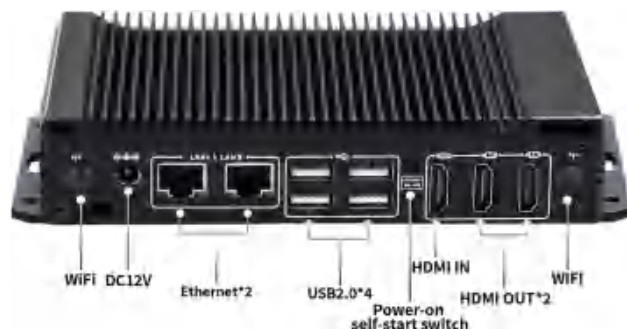
■ Interface Layout



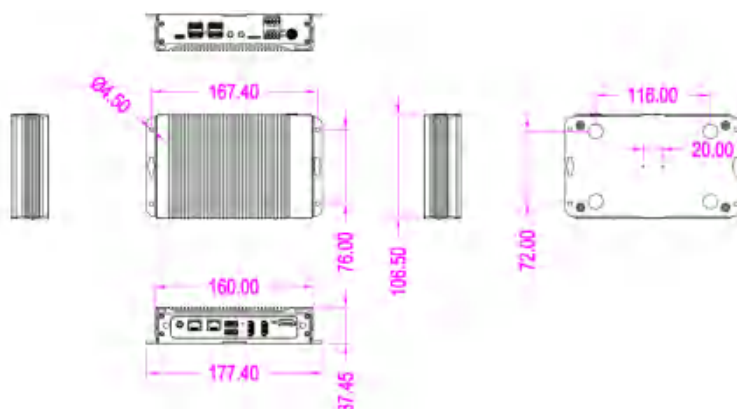
Product Features

- 8nm advanced manufacturing process, 8-core 64-bit architecture, delivering high performance and low power consumption.
- Equipped with ARM Mali-G610 MC4 GPU and a dedicated graphics acceleration module.
- 6TOPS NPU, empowering various AI scenarios.
- Supports video input; 8K video encoding and decoding.
- Built-in multiple display interfaces, supporting multi-screen independent display.
- Boasts a powerful image processing ability with a 48MP ISP.
- Comes with a wealth of high-speed interfaces (PCIe, Gigabit Ethernet), facilitating easy expansion.
- Supports Android and Linux operating systems.

■ Interface Layout



■ Product Dimension



System	SOC	4*Cortex-A76 + 4*Cortex-A55
	CPU	RK3588
	NPU	6TOPS/32TOPS (On-board 26 TOPS computing power chip)
	Memory	8GB/16GB
	Storage/Extension	EMMC 64GB; 1TF card slot (supports storage expansion); 1*M.2 2280 NVME (expandable SSD & computing power stick)
Video	GPU	Mali-G610 MC4
	Hardware Codec	JPEG Encoder/Decoder; 8K Video Encoder (H265/H264...) ; 8K 10-bits Video Decoder (H265/H264/VP9/AV1...)
	Display Interfaces	1HDMI in; 2HDMI out; supports image overlay & independent display; 4K resolution output (max 8K@60Hz)
Network	Ethernet	Dual-Gigabit Ethernet
	Wireless Networks	2.4G+5G Dual-band WIFI+Bluetooth (optional)
I/O	USB	2*USB3.0; 4*USB2.0
	Phoneix Terminal	1RS232; 2 RS485; 2 CAN; 1GND; 4 -pin GPIO
	Audio	AUX3.5* headphone output + AUX3.5* microphone input
	SIM	1*SIM card slot; (Mini-PCle slot) Supports built-in 4G/5G module
Others	Watchdog	Supports customization
	RTC	Supported
Power supply	Power Input	DC 12V - 2 A; Supports 9V~36V wide voltage
	Buttons/Indicators	Red/Green
Physical parameters	Enclosure Dimension	178mm×105mm×38mm (7.01in×4.13in×1.50in)
	Package Dimension	213mm×210mm×50mm (8.39in×8.27in×1.97in)
	Net Weight	0.68kg (1.50lbs)
	Gross Weight	1.3kg (2.87lbs)
Software	Operating System	Ubuntu22.04;
Environment	Working Temperature	Ambient Temperature:-40~60 °C;
	Storage Temperature	Ambient Temperature:-40~85 °C;
	Working/Storage Humidity	Relative Humidity:0~85% (No Condensation) / Relative Humidity:0~85% (No Condensation)
	Certifications	CE; 3C

Product Model	SOC	Memory	Flash	LAN	RS485	RS232	HDMI	WiFi	TF	SIM
G6-F1-RK3588	RK3588	8GB LPDDR4	64GB EMMC	2	1	1	3	1	1	1
G6-F1-RK3588	RK3588	16GB LPDDR4	64GB EMMC	2	1	1	3	1	1	1

Packing List

Accessories	Description
Power Adapter	DC 12V - 2 A, (Supports 12V~48V wide voltage)
WiFi Antenna	SMA*1
VESA bracket Kit	VESE Bracket*1,Accessory Screw Pack*1,Foot pads*4
User Manual	Universal Version*1
Certificate of Conformity	Universal Version*1

Optional Accessories

Accessories	Description
128GB NVME SSD	XP1000F128G,M.2 2280 PCIE GEN3 SSD 8Gbps(Operating Temperature:0°C to 70°C)
256GB NVME SSD	XP1000F256G,M.2 2280 PCIE GEN3 SSD 8Gbps(Operating Temperature:0°C to 70°C)
512GB NVME SSD	XP1000F512G,M.2 2280 PCIE GEN3 SSD 8Gbps(Operating Temperature:0°C to 70°C)
4G Module Kit	Quectel EC2-EC LTE Cat4 module with a matching antenna
Computing Power Stick	HAILO 26T Computing Power Stick