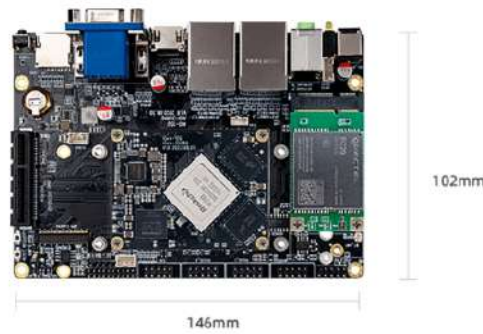


Specifications



Basic Specifications

SOC	RockChip RK3588
CPU	Octa-core 64-bit (4×Cortex-A76+4×Cortex-A55), 8nm lithography process, frequency up to 2.4GHz
GPU	ARM Mali-G610 MP4 quad-core GPU Support OpenGL ES3.2 / OpenCL 2.2 / Vulkan1.1, 450 GFLOPS
NPU	NPU computing power up to 6 TOPS Support INT4/INT8/INT16 mixed operation Framework switching of TensorFlow / MXNet / PyTorch / Caffe can be achieved.
ISP	Intagrated 48MP ISP with HDR&3DNR
VPU	Video decoding: 8K@60fps H.265/VP9/AVS2 8K@30fps H.264 AVC/MVC 4K@60fps AV1 1080P@60fps MPEG-2/-1/VC-1/VP8 Video encoding: 8K@30fps encoding, support H.265 / H.264 *Up to 32-channel 1080P@30fps decoding and 16-channel 1080P@30fps encoding can be achieved.
RAM	4GB/8GB/16GB (Up to 32GB optional) 64bit LPDDR4/LPDDR4x/LPDDR5
Storage	16GB/32GB/64GB/128GB eMMC
Storage Expansion	M.2 SATA3.0 SSD (2242) TF Card slot×1

Hardware Specifications

Ethernet	2 * 1000Mbps Ethernet
Wireless	2.4GHz/5GHz dual band WiFi 6 (802.11a/b/g/n/ac/ax), Bluetooth 5.0 Capable of 5G/4G LTE
Display	Video output: 1 * HDMI2.1 (8K@60fps or 4K@120fps) 1 * DP1.4 (8K@30fps, Via USB-C) 1 * VGA (1080P@60fps) 1 * eDP1.3 (4K@60HZ) 2 * MIPI-DSI (4K@60fps) * Support six-screen output with different displays Video input: 1 * HDMI-IN (4K@60fps), support HDCP 2.3 1 * MIPI_CSI0 (1*4 Lane or 2*2 Lane, 30P-0.5mm) 1 * BTB (1*MIPI_CSI1 (4 Lane) or 2*MIPI_CSI1 (2 Lane) + 2*MIPI_D/C (4 Lane DPHY v2.0 or 3 Lane CPHY V1.1))

Audio	<p>Audio output</p> <ul style="list-style-type: none"> 1 * HDMI2.1 audio output 1 * DP1.4 audio output 1 * Phone audio output <p>Audio input:</p> <ul style="list-style-type: none"> 1 * Line-in input (pin header) 1 * Mic input
PCIe	1 * PCIe3.0 (4lanes)
USB	4 * USB3.1 (Gen1), 3 * USB2.0 (pin header), 1 * USB-C (OTG/DP1.4)
Power	DC12V (DC5.5*2.1mm, above 12V-2A power recommended)
Other Interfaces	<p>2 * RS232, RS485, CAN, Debug,</p> <p>20P-2.0 pin header (GPIO, ADC, SPI, I2C and LED/REV/PWR/RST)</p>

OS/Software

OS	<p>Android 12.0, Ubuntu Desktop and Server, Debian11, Buildroot;</p> <p>RTLinux (delivering excellent real-time performance)</p>
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General

Dimension	146mm×102mm×37.5mm
Weight	≈200g
Power Consumption	<p>Idle: ≈0.72W (12V/60mA)</p> <p>Typical: ≈2.4W (12V/200mA)</p> <p>Max: ≈14.4W (12V/1200mA)</p>
Environment	<p>Operating Temperature: -20°C- 60°C</p> <p>Storage Temperature: -20°C- 70°C</p> <p>Storage Humidity: 10% ~ 80 %</p>