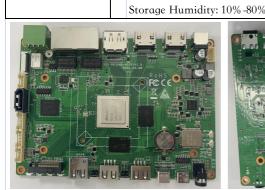
Specifications

Basic Specifications	
SOC	RockChip RK3588
CPU	8-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
	Supports OpenGL ES3.2 / OpenCL 2.2 / Vulkan1.1, 450 GFLOPS
NPU	NPU computing power is up to 6 TOPS, Supports INT4/INT8/INT16 mixed operation,
	Supports framework switching of TensorFlow / MXNet / PyTorch / Caffe / etc.
ISP	Integrated 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, Supports H.265 / H.264
	* Achieves up to 32-channel 1080P@30fps decoding and 16-channel 1080P@30fps encoding
RAM	4GB/8GB/16GB 64bit LPDDR4/LPDDR4x/LPDDR5 (Up to 32GB optional)
Storage	16GB/32GB/64GB/128GB eMMC
Storage Expansion	$1 \times SATA3.0$, can expand with 1 pcs of SATA3.0 SSD/HDD
Hardware Specifications	
Wireless	2.4GHz/5GHz dual-band WiFi6, Bluetooth 5.0, supports 5G/4G LTE expansion
Ethernet	2 × GbE (RJ45) , one supports POE power supply, max output 60w
Display	Video output:
	1 × HDMI2.1 (8K@60fps or 4K@120fps)
	1 × DP1.4 (8K@30fps, multiplexed with USB3.0)
	Video input:
	1 × HDMI-IN (4K@60fps) , Supports HDCP 2.3
	1 × 2 lane MIPI-CSI input
	* Supports multi-channel 8K video output and 4K video input, up to four-screen output with different displays
Audio	Audio output:
	1 × Speaker output
	1 × HDMI audio output
	1 × DP audio output
	Audio input:
PCIE	1 × HDMI audio input 1 × PCIe3.0 (4Lane) , can expand with standard PCIe3.0 devices
SATA	
SATA	1 × M.2 interface (SATA3.0) , 4 × standard SATA3.0 interface 1 × USB3.0 (Limit 1A)
USB	2 × USB-C (USB3.0 / DP1.4) (Limit 2A)
	2 × USB2.0 (3 of them are pins) (Limit 500mA)
	Various power supply ways:
Power	DC12V input (DC5.5 × 2.1mm)
	POE 48V power input (up to 60W)
Other Interface	1×RS485, 1×RS232, 8×GPIO, 1×I2C,1×Heating (12V), 6×GPIO
OS/Software	
	Android: Android 12.0
OS	Linux: Ubuntu Desktop, Ubuntu Server, Debian11, Buildroot, RTLinux, Kylin Linux, UOS
	* Supports UEFI Boot
	General
Size	14cm×10cm
Heat Dissipation	Heat sink installation hole pitch: 45mm
Power Consumption	Idle: ≈1.35W (12V/110mA)
	Typical: $\approx 4.8 \text{W} (12 \text{V}/400 \text{mA})$
	Max: $\approx 12W (12V/1000mA)$
	Operating Temporature, 20°C 60°C



Evironment

Operating Temperature: -20°C -60°C,

Storage Temperature: -20 $^{\circ}\text{C}$ -70 $^{\circ}\text{C}$,



