



Quad-core 64-bit processor

Quad-core 64bit Cortex-A55 processor
22nm lithography process
up to 2.0GHz



8GB large RAM

Up to 8GB RAM,
frequency up to 1600MHz
It supports all-data-link ECC



GPU/VPU/NPU

OpenGL ES3.2/2.0, Vulkan1.1
4K@60fps H.265/VP9 video decoding
1080P@100fps H.265 video encoding
1TOPS NPU



Dual Gigabit Ethernet

Dual 1000Mbps (RJ45)
2.4G/5G Dual-band WiFi, BT5.0
4G LTE module can be expanded.



Supports various systems

Android, Ubuntu, Buildroot
It enables stable operation and
customization for industries.



A variety of interfaces

Control Port (RS232 x2, RS485x1)
HDMI2.0, GE (RJ45), USB3.0, USB2.0
USB-C (OTG),

Specifications	
SOC	RK3568
CPU	Quad-core 64-bit Cortex-A55 processor, 22nm lithography process, frequency up to 2.0GHz
GPU	ARM G52 2EE, Support OpenGL ES 1.1/2.0/3.2, OpenCL 2.0 and Vulkan 1.1, Built-in high-performance 2D acceleration hardware
NPU	1Tops@INT8 RKNN NPU AI accelerator, Support one-click switching of Caffe/TensorFlow/TFLite/ONNX/PyTorch/Keras/Darknet
VPU	4K@60fps H.265/H.264/VP9 video decoding, 1080P@60fps H.265/H.264 video encoding
RAM	2GB/4GB/8GB LPDDR4
Storage	16GB/32GB/64GB/128GB eMMC, 16MB SPI Flash
Storage Expansion	1* M.2 PCIe 3.0 (2242 / 2280 NVMe SSD), 1*SATA 3.0 (2.5inch, 7mm thickness SSD/HDD), 1*TF Card Slot
Ethernet	2*1000Mbps (RJ45)
Wireless	2.4G/5GHz Dual-band WiFi, 802.11 a/b/g/n/ac, Bluetooth 5.0, 4G LTE network communication can be expanded.
Video output	1 × HDMI2.0 (4K@60Hz), 1 × MIPI DSI (1920*1080@60fps or Dual channel 1×MIPI DSI 2560*1440@60fps), 1 × eDP1.3 (2560x1600@60fps), * Support up to three-screen output with different displays
Camera	1 × MIPI-CSI, Support HDR function
Audio	1 × HDMI audio output, 1 × Speaker output (1.3W/8Ω, located in PH2.0-30P), 1 × Phone headphone jack (3.5mm), 1 × SPDIF (located in PH2.0-30P)
USB	1*USB3.0 (Max:1A), 2*USB2.0 (Max:500mA), 1*USB-C (USB2.0 OTG)
Extended Interface	1 × RJ45 Control Port (1×RS485 + 2×RS232), 1 × PH2.0-30P (PWM, GPIO, I2S, I2C, UART, SPDIF), 1 × PH2.0-6P (POE)
Power	DC 12V (5.5*2.1mm, voltage tolerance±5%)
OS	Android 11.0、Ubuntu 18.04、Buildroot+QT、Station OS
Dimension	138.0 mm × 77.5 mm × 19.9 mm
Power Consumption	Idle: 0.3W, Typical: 4.2W, Max: 7.8W
Environment	Operating Temperature: -20°C- 60°C, Storage Temperature: -20°C- 70°C, Storage Humidity: 10% ~ 80 %



