



## Features

### CPU

ARM Cortex-A7, 1.2GHz

MCU 300MHz

### NPU

0.5TOPS, support INT4, INT8, INT16

### Memory

16-bit DDR3/DDR3L/DDR4

RV1106G2 embedded 1Gb DDR design

eMMC 4.51, CAN, and quad SPI Flash Support

### Multi-Media

5M ISP 3.x with 2F HDR(Line-based/Frame-based/DCG)

Support 2\*MIPI CSI/VIDS/sub-LVDS/5

D/Dr interface with DTCL/DTF/120

H.264/H.265 encoder capability:

3072\*1728@25 + 1280\*720@25 +

720\*576@25 + 5FPS JPEG

2592\*1944@25 + 1280\*720@25 + 720

2880\*1620@25 + 1280\*720@25 + 720\*576@25 + 5FPS JPEG

2560\*1440@30 + 1280\*720@30 + 720\*576@30 + 5FPS JPEG

16M FPS JPEG snapshot

AVBR, QMAP, and CVBR)

Intelligent encoding mode

8-area OSD

Ultra-low delay encoding

### Multi-Media

Support 20+ IVE algorithms

Support rotation, v-mirror, y-

Support scale-down/undo

### External Interface

MIPI interface with TCO and camera interface

and Ethernet PHY

One USB 2.0 Host/Device

Dual SDIO 3.0 interface for Wi-Fi and SD card

2-channel I2C, 12 PWM interfaces

I2C, SPI, and UART interfaces

Embedded Audio codec, RTC, POR

### SDK

Linux-5.10 base SDK

### Physical Specifications

Power Consumption

Typical power consumption of RV1106

760mW

Operating Voltage

0.9V core voltage

1.2V I/O voltage

1.8V DDR2/1.5(1.35)V DDR3(L)/1.2V DDR4

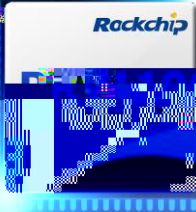
SDRAM interface voltage

### Device Information

Package: QFN128

Body: 13.2mm x 13.2mm

Ball pitch: 0.35mm



AI Application

IPC

## Block Diagram

