



Features

CPU

- Dual core ARM Cortex-A7
- MCU

NPU

- 1.2Tops, support INT8/ INT16

Memory

- 32bit DDR3/DDR3L/LPDDR3/DDR4/LPDDR4
- Support eMMC 4.51, SPI Flash, Nand Flash
- Support fast booting

Display

- MIPI-DSI/RGB interface
- 1080P @ 60 FPS

2D graphics engine

- Support rotation, x-mirror, y-mirror
- Support alpha blending
- Support scale down/up

Multi-Media

- 5M ISP 3.x with 2F HDR(Line-based/Frame-based/DCG)
- Support 2*MIPI CSI /LVDS/sub LVDS
- DVP interface with BT.656/BT.1120
- H.264/H.265 encoder capability:
 - 2688 x 1520@30 fps+1280 x 720@30 fps
 - 3072 x 1728@30 fps+1280 x 720@30 fps
 - 2688 x 1944@30 fps+1280 x 720@30fps
- 5M H.264/H.265 decoder capability

External Interface

- RGMII interface with TSO network acceleration
- USB 2.0 OTG and USB 2.0 host
- Dual SDIO 3.0 interface for Wi-Fi and SD card
- 8ch I2S with TDM/PDM, 2ch I2S

SDK

- Kernel-4.19 base SDK

Physical Specifications

- Power Consumption
 - Typical power consumption at 5M30fps: 1.2W

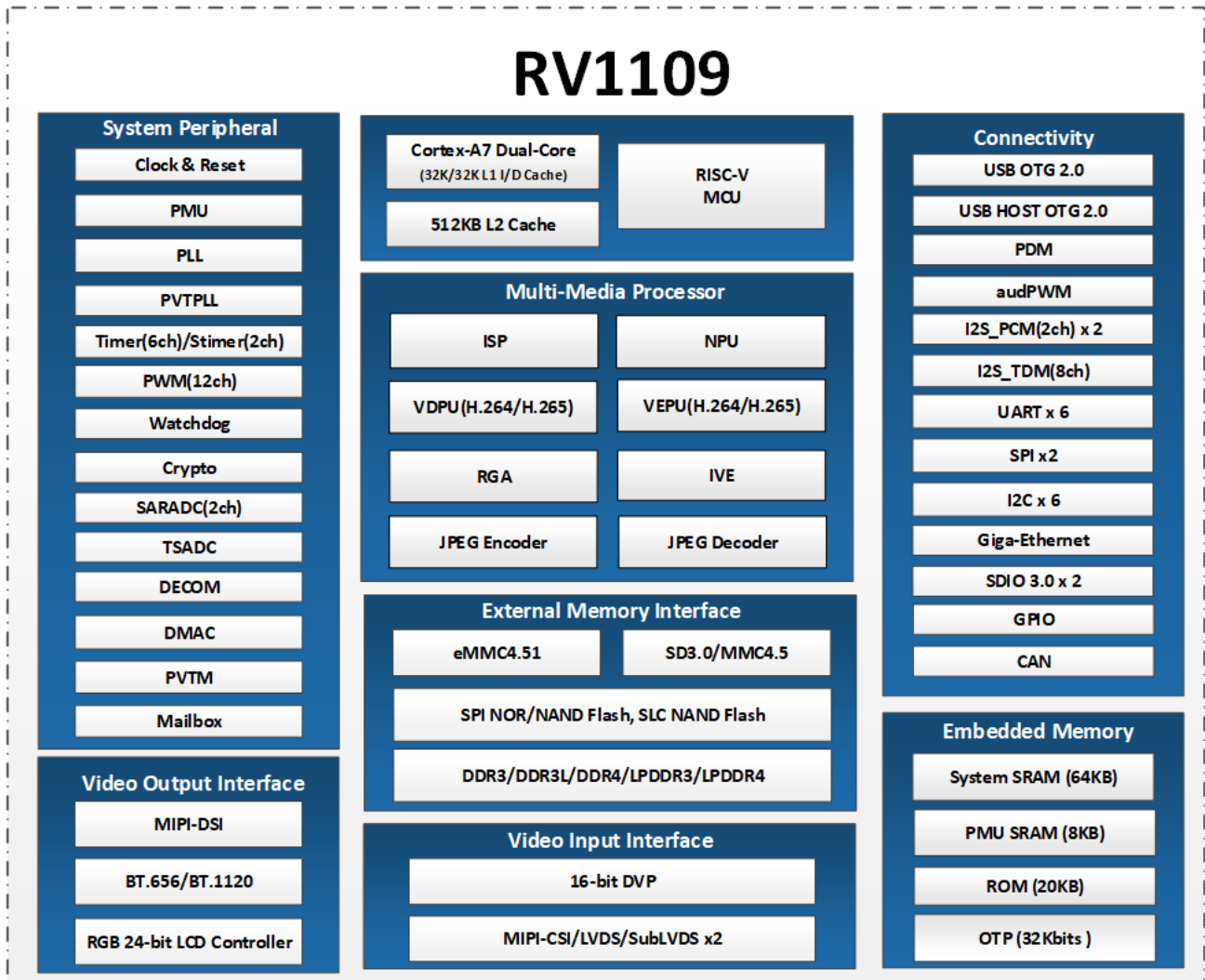
Device Information

- Package:
- FCCSP409LD
- Body: 14mm x 14mm
- Ball pitch: 0.65mm

RV1109 Target Applications

- AI Application
- IPC
- Dashboard Camera

Block Diagram



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Typical Application Diagram – IPC

