



# RK3568

High

A high performance and low power quad-core application processor



## Features

### CPU

Quad-core ARM Cortex-A55 processor

### GPU

ARM G52-2EE

OpenGL ES 1.1/2.0/3.0/3.1/3.2, Vulkan 1.1

OpenCL 2.1

### NPU

1TOPs@INT8

Support INT8/INT16/FP16/BFP16

Support deep learning frameworks:

TensorFlow, Caffe, Tflite, Pytorch, Onnx,

Android NN, etc

### Memory

32bit DDR4/3/3L/LPDDR4/4X/3

DDR4 and DDR3 support ECC

### Display

Multiple display engine, max 3 screen support

HDMI2.0

eDP 1.3

Dual MIPI-DSI, combo with single LVDS

24bit RGB/BT 1120

EBC interface

### Multi-Media

4K H.265/H.264/VP9 video decoder

1080p@60fps H.264/H.265 video encoder

### Video Input

8M Pixel ISP with HDR&3DNR

Support 2 lanes MIPI CSI 1.4 and DVP

interface

### Audio Interface

I2S0/I2S1 with 8 channels

I2S2/I2S3 with 2 channels

SPDIF0

PDMA with 8 channels

TDMA with 8 channels

VAD (Voice Activity Detection)

### High S

Share three serial lanes

Dual USB 2.0 host

Dual RGMII interface

### Security

ARM TrustZone with ARMv8.2

Secure Video Path

Secure JTAG to debug

Secure boot

OTP

AA) Crypto (AES/TDES/SM4/SM3/SHA256/SHA512 /RS

Android 11 & 12

### Device Information

FCRCAC36L & F66SR636L

Ball pitch: 0.65mm



