

HIGH QUALITY CMOS ISP

5037C is a cost-effective image signal processing (ISP) chip designed for CMOS image sensors. It supports both MIPI and DVP interfaces and can connect to sensors up to 5M. It integrates a high-performance ISP processor with support for 3D noise reduction and digital wide dynamic range (WDR). For analog output, it supports 960H in standard definition, and HDCCTV 720P/1080P/4M/5M in high definition. With a high level of integration for peripheral components, 5037C simplifies product design. It also embeds a CPU processor, enabling flexible software applications.

- ⊙ **Built-in video Buffer and Comparator**

- ⊙ **Supports HDcctv and CVBS**

- ⊙ **960H/720P/1080P/4M/5M**

- ⊙ **High-performance 2D/3DNR**

- ⊙ **Reduced Frame Rate**

- **Video input interface**

- DVP@10bit
- MIPI 2 Lanes

- **Audio interface**

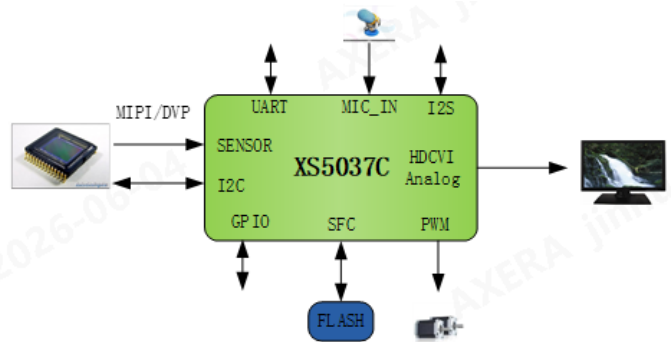
- I2S
- MIC_IN

- **Peripheral**

- POR
- UARTx2
- I2C x1
- SPIx1
- PWMx4
- ADCx2
- JTAG
- Built-in comparator
- Built-in High performance Video DAC and Buffer

- **ISP**

- 2DNR
- 3DNR
- LSC
- DPCC
- GIC
- CCM



- AE、AWB

- DWDR

- Edge Enhanced process

- Reduced Frame Rate

- **Camera Function**

- Scaling and crop

- Mask and OSD

- **DC Characteristics**

- Core voltage: 1.1V

- IO voltage: 3.3V

- Sensor & I2C IO voltage: 1.8/3.3V

- DAC/MIPI DPHY voltage: 3.3V

- **QFN7X7, 68-pin, 0.35mm pitch**

- **Video output**

960H@25/30fps

720P@25/30/50/60fps

1080P@25/30fps

4M@12.5/15/25/30fps

5M@10/12.5/20/25fps