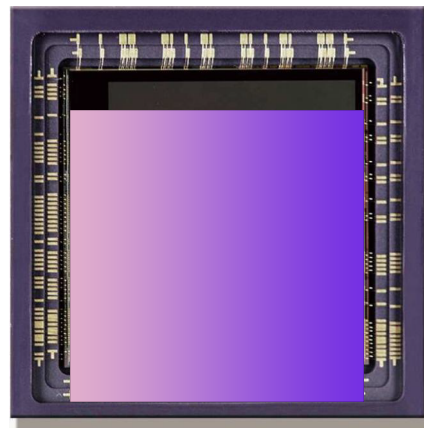


# ISG4006S

## GLOBAL SHUTTER CMOS IMAGE SENSOR

### 产品介绍

### CHIEF APPLICATION



ISG4006S chip is a global pixel CMOS image sensor chip designed to meet the needs of machine vision applications based on the self-developed global pixel unit, through the full digital adjustable mode selection control, the use of high-precision, low-power digital-analog mixed signal design, through advanced CIS process processing. Effective pixel array of the chip is 2048X2048. The maximum frame rate of 180fps is LVDS high-speed data interface. The ISG4006S features high resolution, high frame rate, high definition, on-chip temperature sensor and global shutter exposure, and supports both color and black and white versions to provide customers with options for different application needs.

### 规格说明

### Specification

| 项目   Item                      | 参数   Parameters                       |
|--------------------------------|---------------------------------------|
| Active Array Size              | 2048(H)*2048(V)                       |
| Pixel Size                     | 5.5 um x 5.5 um                       |
| Shutter                        | Global Shutter                        |
| Optical Format                 | 1inch                                 |
| Chip Size                      | 13.5mm*13.5mm                         |
| Input Clock Frequency          | 5-48MHz                               |
| Frame Rate                     | 37fps@12bit, 180fps@10bit             |
| Package                        | uPGA-95/CLCC-92                       |
| Supply Voltage                 | 1.2V/2.5V/3.3V                        |
| Sensitivity                    | 9.8 V/lux.s                           |
| Conversion Gain                | 65uV/e <sup>-</sup> (10bit mode)      |
| SNR                            | 40 dB                                 |
| Dynamic Range                  | 60 dB                                 |
| Read Noise                     | 10e <sup>-</sup>                      |
| QE                             | 66.7%540nm (RGB)<br>83.1%540nm (Mono) |
| Power Consumption              | <600mW @16ch                          |
| Operating Junction Temperature | -40~85°C                              |

### 应用场景

### Application Scenarios

- 机器视觉 Machine Vision
- 智能交通 ITS
- 运动监测 Motion Monitoring
- 高速检测 High Speed detection

### 产品特性

### Product Feature

- 高帧率 High Frame rate
- 低功耗 Low Power consumption
- 内置温度传感器 Built-in Temperature sensor
- 编程控制 Programming Control



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