

PS5226 Full-HD 1080p CMOS IMAGE SENSOR

General Description

The **PS5226** is a highly integrated CMOS image sensor that output of **1920x1080 (Full HD-1080p)** pixels with rolling shutter readout. It embedded the new FinePixel™ sensor technology to perform the excellent image quality. **PS5226** outputs 10-bit RGB raw data through a parallel data bus. It is available in **CSP** package.

The **PS5226** can be programmed to set the exposure time for different luminance condition via **I2C™** serial control bus. By programming the internal register set, it performs on-chip frame rate adjustment, offset correction DAC and programmable gain control.

Features

- **1936 x 1096 pixels with Bayer-RGB color filter array and micro-lens**
- **Output format:**
 - **10-bit RAW RGB**
- **Output interface**
 - **dual-lane serial MIPI CSI-2 output**
- **On-chip column A/D converter**
- **On-chip manual analog gain control**
- **Continuous variable frame time & exposure time**
- **I2C™ Interface**
- **Automatic black-level calibration**
- **Black sun cancellation**
- **Programmable fast-switch configuration**
- **Support WOI and subsampling**
- **Support dummy line & pixel timing**
- **Support output Hsync at Vsync**
- **Support 1.7V~3.3V I/O**
- **On-chip PLL**
(input_clock / PLL_m >= 1MHz)

Specifications

Parameter	Typical Value
Active array size	1936(H) x 1096(V)
Pixel size	3.0um (H) x 3.0um (V)
Shutter type	Electronic rolling shutter (ERS)
Optical format	1/2.7-inch
Lens chief ray angle	17 degree
ADC	10-bit
Sensitivity	3300 mV/Lux-sec
SNRmax	39 dB
Dynamic range	70 dB
Scan mode	Progressive scan
Input clock	Max 64Hz
Pixel clock	Max 81MHz
Max. frame rate	1080p: 1920x1080 @60fps 720p: 1280x720 @120fps VGA: 640x480 @240fps
Supply voltage	Analog: 3.3 V Digital: 1.2 V I/O: 1.7V~3.3V
Power consumption	85mW
Operating temperature	-30°C ~ 70°C



Applications

- **Surveillance HD-CCTV Camera**
- **Surveillance IP Camera**
- **Car Video Recorder**
- **Sports Camera**
- **Automotive Camera**
- **Video Door Phone**

Ordering Information

Part Number	Description
PS5226LT	60-Ball CSP