



## 0.3 Mega Pixel CMOS Image Sensor SP0A09



## 1/10 Inch VGA RAW CMOS Image Sensor

### --For Handset Market



SuperPix's high performance SP0A09 is a cost-effective 1/10 inch VGA RAW image sensor. SP0A09 can provide high quality digital pictures and high-definition (HD) video, and it focuses on high-end and mainstream mobile applications, for example, smart phones and tablets. By introducing advanced 2.2um pixel architecture, SP0A09 achieves excellent best-in-class low-light sensitivity, signal-to-noise ratio, full-well capacity, quantum efficiency and low-power consumption. The SP0A09 is able to provide stable performance between 0°C and 50°C. It also offers following image control functions: mirror, flip, windowing and auto black level calibration, etc. SP0A09 supports high frame rate up to 30fps@VGA format through the MIPI interface. The integrated proprietary technology of SP0A09 assists to cancel Fixed Pattern Noise (FPN), reduce blooming, and eliminate smearing. These prominent features integrated in SP0A09 will result in vivid still and video image and make it be an effective solution for next-generation mobile handsets and ultra-slim camera designs.

Please contact us with no doubt to find out more.

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## Application

- Mobile Phone Camera
- Pad
- PC Camera
- Web Camera
- Toys

## Features

- Support VGA (0.3Mega 640x480) resolution
- Support mirror and flip function
- Support auto black level calibration
- Support black sun cancellation
- Support test pattern
- I<sup>2</sup>C bus controlling registers inside chip
- Support MIPI 1-lane data output interface
- High image quality, stable chip quality

## Product Specifications

Parameter	Value	
Active Pixel Array	640 x 480	
Pixel Size	2.2um x 2.2um Square Pixel	
Lens Size	1/10 inch	
Color Filter	Primary Color Filter Bayer arrangement	
Power Supply	I/O	1.7V - 1.9V
	Analog	2.6V - 3.0V
	Internal Regulator	1.35V - 1.65V
Power Consumption	Active	< 30 mA
	Standby	15uA
Data Formats	Raw10	
	Raw8	
Output Formats	MIPI 1-lane	
Input Clock	6 – 30 MHz	
Max. Frame Rate	30fps@VGA mode	
Operating Temperature	-20°C ~ 70°C	
Stable Temperature	0°C ~ 50°C	
Package	TSV	

