

# PAS009A

## QQVGA COLOR/B&W CMOS IMAGE SENSOR

### General Description

PAS009 is a 160x120 single-chip Color and B&W digital CMOS image sensor that delivers 4-bit digital raw data per pixel. Pas009 is also with AEC/AGC, internal CDS Ckts, external 256K SRAM interface and Tri-state mode on data bus to store a frame size of image data for later using. By proprietary technology, FPN, smear and blooming are drastically reduced.

### Key Features

- 160x120 pixels, 1/11" Lens
- 4-bit Digital Raw Data output
- Auto gain control
- Wide power supply range: 3.6V - 5.4V
- Auto-Exposure control
- Built-in oscillator
- Simple SRAM Interface with tri-state. Easily data access control

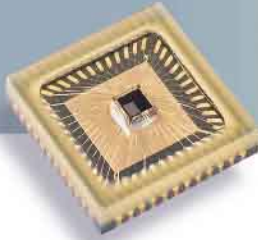
### Applications

- Visual Toy
- PC Camera
- Video Cellular Phone
- Biometrics
- PDA

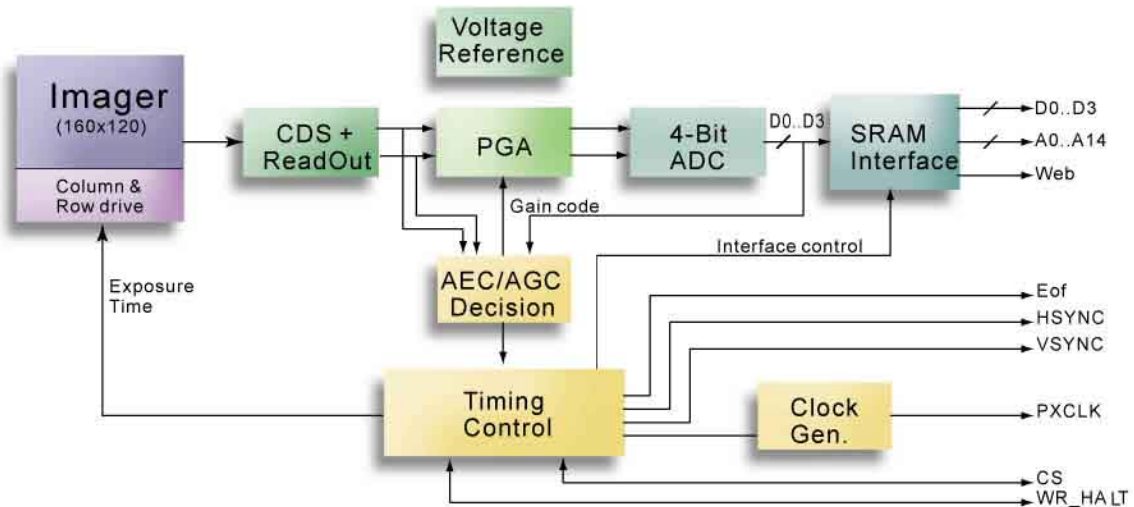


### Technical Specifications

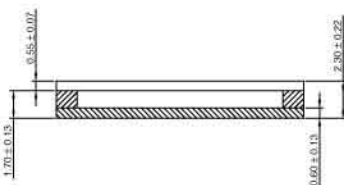
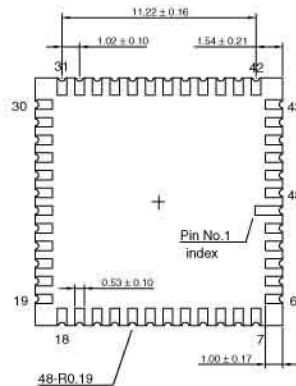
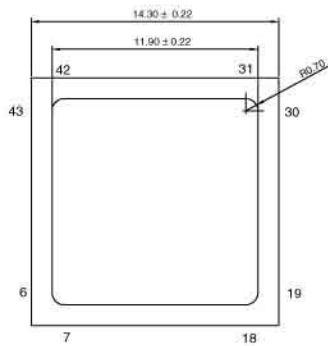
Power Supply	Wide operating supply range 3.6V - 5.4V
Array Elements	160 x 120
Optical Format	1/11"
Pixel Size	7.25 $\mu\text{m}$ x 7.25 $\mu\text{m}$
System Clock	4.8MHz
FPN	< 0.2% saturation
Max. Pixel Rate	240kHz
Frame Rate	10fps
Scan Mode	Progressive
Package	48 pin LCC



### Block Diagram



### Package Outline



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