GENERAL DESCRIPTION

The CIF CMOS image sensor is a single chip digital image sensor device, fabricated with 0.35um CMOS technology. It incorporates a 357 x 293 effective image array, and its frame rate can be operating up to 30 Hz based on the proprietary sensor technology inside the chip. Moreover, the proprietary on-chip CDS and 8-bit analog-to-digital conversion circuits can reduce fixed pattern noise (FPN) drastically. With its few interface signals and 8-bit digital outputs directly connected to the external devices, a camera system can be configured easily.

FEATURES

* Capable of 30 frames per second
* Wide dynamic range
* Proprietary on-chip CDS circuit
* Proprietary on-chip ADC circuit
* Bayer RGB color pattern
* External synchronization scheme
* Auto exposure control/Auto gain control
* 8-bit raw data output
* Single 3.3V power supply
* Low power consumption
* 32-pin PLCC package available

APPLICATIONS

* PC Camera
* Toy Camera
* Finger Printer

DEVICE STRUCTURE

* CIF progressive scan CMOS Image Sensor
* Optical size : 1/7 inch format
* Pixel size : 5.6um x 5.6um
* Fill Factor : 27%
* Number of effective pixels : 357 (H) x 293 (V)
* Total number of pixels : 383 (H) x 297 (V)
* Image area : 2.0mm (H) x 1.64mm (V)
* Optical black : Horizontal direction : Front 13 pixels, rear 13 pixels
  Vertical direction : Front 2 pixels, rear 2 pixels

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