

MT9P006



5-Megapixel
1/2.5-Inch
Image Sensor
48-Pin iLCC or Die

Deliver Crystal-Clear Images for Wide FOV and Electronic Pan/Tilt/Zoom Cameras

1

Excellent Image Quality

Capture brilliant, high-resolution color images, rivaling CCD image quality.

2

Superb Low-Light Performance

Binning enables a pixel-combo mode that significantly improves sensitivity for superb low-light performance.

3

HD Video Capable

HD video capability—720p at up to 60 fps and 1080p 30fps—enhances the viewing experience of HD cameras.

4

Inherently Low Power Consumption

This sensor's very low power consumption is ideal for power-over-Ethernet cameras.

5

Feature-Rich Design

High-speed readout and viewfinder modes eliminate shot-to-shot delay and video-to-still lag.

Applications

- High-resolution security cameras
- Electronic pan/tilt/zoom cameras
- Wide field of view cameras
- Power-over-Ethernet cameras
- HD security cameras (720p and 1080p)



How to Buy

Production and sample quantities of Aptina products may be ordered through qualified distributors. See our Web site for details. You may also request access to NDA data sheets and other technical documentation by visiting our Web site.

MT9P006

Features

- Low-power, progressive scan image sensor
- 5-megapixel resolution (2592H x 1944V)
- 1/2.5-inch optical format
- On-chip, 12-bit analog-to-digital converter (ADC)
- Up to 15 fps at full resolution
- Up to 60 fps at 720p resolution
- Viewfinder and snapshot modes
- Programmable gain and exposure
- Two-wire serial interface
- Global reset
- Binning for enhanced viewing experience
- Phase-locked loop (PLL) for versatile clock-in scheme and sensitivity

Specifications

Imaging Array

- Optical Format: 1/2.5-inch
- Active Array: 2592(H) x 1944(V)
- Imaging Area: 5.70mm(H) x 4.28mm(V)

Speed/Output

- Frame Rate: 15 fps at full resolution
30 fps at 1080p resolution (1920H x 1080V)
Up to 60 fps at 720p resolution

- Data Rate: 96 Mp/s
- Master Clock: 96 MHz
- Data Format: 12-bit parallel

Sensitivity

- Pixel Size: 2.2 μ m x 2.2 μ m
- Dynamic Range: 70.1dB (full resolution)
76dB (2 x 2 binning)
- Responsivity: 1.76 V/lux-sec (550nm)

Power

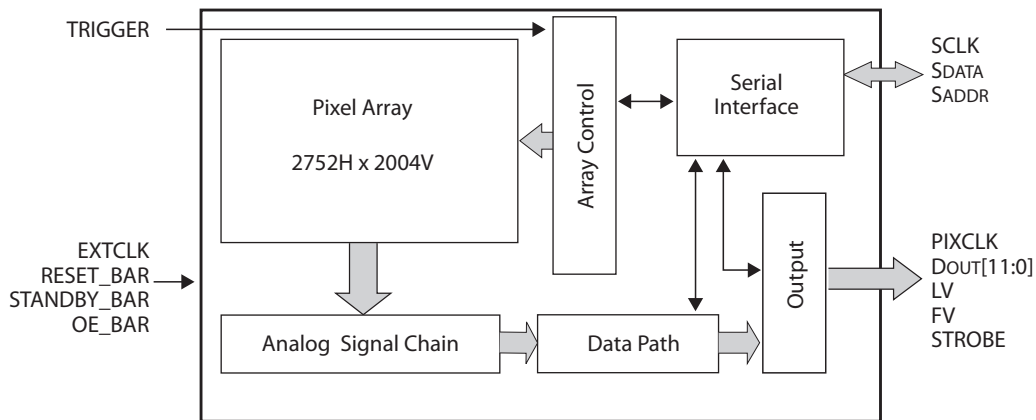
- Supply: Analog: 2.6–3.1V (2.8V nominal)
Digital: 1.7–1.9V (1.8V nominal)
I/O: 1.7–3.1V
- Consumption: <366mW

Temperature Range

- Operating: –30°C to +70°C

Package: 48-pin iLCC or Die

Block Diagram



aptina.com

Products are warranted only to meet Aptina's production data sheet specifications. Products and specifications are subject to change without notice. Aptina and the Aptina logo are trademarks of Aptina Imaging Corporation. All other trademarks are the property of their respective owners. ©2012 Aptina Imaging Corporation. All rights reserved. 5/14/12

