

MT9M032



1.6-Megapixel
1/4.5-Inch
Image Sensor
48-Pin CLCC

Superior HD Video Surveillance Performance

1 HD Video at Fast Frame Rates

High quality displays deserve high quality input: 720p HD video at 60 fps.

2 Inherently Low Power Consumption

This sensor's very low power consumption is ideal for power-over-Ethernet IP camera designs.

3 Image Stabilization Support

Additional active pixel area supports high-quality image stabilization, eliminating the effects of camera shake.

4 High-Resolution, High-Speed Video

Capture single frames and continuous video at high rates and with crystal-clear detail.

5 Powerful Features for Superb Output

Monochrome version enables greater sensitivity and response in near infrared, producing high quality images in challenging conditions.

Applications

- HD surveillance cameras (720p)
- High-speed security cameras
- ePTZ cameras
- Power-over-Ethernet cameras
- IP cameras



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.

Features

- DigitalClarity® imaging technology
- State-of-the-art, 2.2µm pixel design
- High-definition video capture (1280H x 720V, 60 fps progressive)
- Parallel data interfaces
- Available in Bayer color or monochrome versions
- Designed to work with long-range zoom lenses used in surveillance cameras
- Auto black-level calibration
- Low power consumption

Specifications

Imaging Array

- Optical Format: 1/4.5-inch
- Active Array: 1472(H) x 1096(V)
- Imaging Area: 3.24mm(H) x 2.41mm(V)

Speed/Output

- Frame Rate: 60 fps at 1280(H) x 720(V)
30 fps at 1440(H) x 1080(V)

- Data Rate: 99 Mp/s
- Master Clock: 49.5 MHz
- Data Format: 12-bit parallel

Sensitivity

- Pixel Size: 2.2µm x 2.2µm
- Dynamic Range: 70.1dB
- Responsivity: 1.4 V/lux-sec (550nm)

Power

- Supply: Analog: 2.6–3.1V
Digital: 1.7–1.9V
I/O: 2.6–3.1V
- Consumption: 364.6mW at 2.8V

Temperature Range

- Operating: –30°C to +70°C

Package: 48-pin CLCC

Block Diagram

