

MT9M034



1/3-Inch  
Digital Image Sensor  
iLCC or Die

## Next-Generation, Megapixel WDR Image Sensor

### 1 Best-In-Class, HD Video Sensor

Providing 720p at 60 fps HD streaming, this image sensor offers high-speed video performance.

### 2 Superior, Low-Light Performance

Dynamic pixel response technology significantly improves sensitivity for superb low-light performance.

### 3 Exceptional Image Quality

The MT9M034 has a dynamic range of up to 120dB, producing crystal-clear images in all lighting conditions.

### 4 Perfect for Day/Night Camera Applications

High quantum efficiency in visible/NIR range improves versatility for use in day and night applications.

### 5 All-Purpose Image Solution

The perfect choice for mainstream surveillance lens formats.

## Applications

- Surveillance cameras
- Automatic license plate recognition (ALPR) cameras
- Wide dynamic range (WDR) cameras
- HDTV
- Day/Night cameras
- Dome cameras
- Pan, tilt, zoom 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

- Best-in-class, low-light performance
- HD video (60 fps @ 720p)
- Linear or high dynamic range video streaming
- Video and snapshot modes
- 2X2 binning and windowing
- Flexible row-skip modes
- Parallel and serial outputs
- On-chip AE and statistics engine
- Support for external LED or flash
- Auto black level calibration
- Context switching
- Sophisticated camera functions, including auto exposure control, windowing, binning, and high-speed row-skipping mode
- Programmable through two-wire serial interface
- Advance gain control

## Specifications

### Imaging Array

- Optical Format: 1/3-inch
- Active Array: 1280(H) x 960(V)
- Imaging Area: 3.54mm(H) x 2.69mm(V)

### Speed/Output

- Frame Rate: 60 fps @ 720p (HD mode);  
45 fps @ full resolution
- Data Rate: 27 Mb/s
- Master Clock: 74.25 MHz
- Data Format: Serial (HiSpi), parallel (12- or 14-bit)

### Sensitivity

- Pixel Size: 3.75 $\mu$ m x 3.75 $\mu$ m
- Pixel Dynamic Range: 120dB
- Responsivity: 6.0 V/lux-sec

### Power

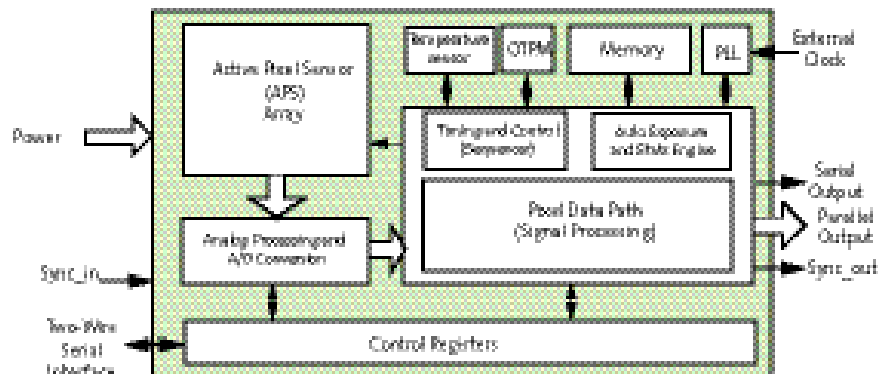
- Supply: I/O: 1.8V  
Core: 1.8V  
Analog: 2.8V
- Consumption: ~300mW

### Temperature Range

- Operating: -20°C to +70°C
- Storage: -40°C to +125°C

Package: iLCC or die

## Block Diagram



[aptina.com](http://aptina.com)

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