

AR0132AT



1/3-inch
Megapixel Sensor
High Dynamic Range or Linear Capture

Automotive, High Dynamic Range, Megapixel Sensor

1

High Dynamic Range or Linear Capture

Aptina™ DR-Pix™ Technology utilizes two modes of operation in one pixel design

2

Excellent Low-Light Performance

Enhanced pixel performance in very low light conditions

3

HD Video (720p/60fps)

Excellent pixel sensitivity for HD video

4

Context Switching

Allows customer multi-function use with one sensor

5

Advanced Features Allow Customer Flexibility

AE control, windowing, binning, row skip, temperature sensor

6

Compatible with Aptina's Automotive Image Co-processors

Provides Megapixel HDR Image Processing

Automotive Applications

- Lane Departure Warning (LDW)
- Traffic Sign Recognition (TSR)
- Stereo Vision
- High Beam Control (HBC)
- Driver Monitoring
- Rear View
- Surround View
- Blind Spot Monitoring



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.

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Features

- Superior low light performance
- HD video (720p60)
- Linear or high dynamic range capture
- Video and single-frame modes
- On-chip AE and statistics engine
- Parallel and serial output
- Simple two-wire programmable serial interface
- Auto black level calibration
- Context switching
- Temperature sensor
- Electronic Rolling shutter (ERS)
- Windowing
- Automotive Qualified
- Compatible with Aptina's Automotive Image Co-Processors

Specifications

Imaging Array

- Optical Format: 1/3-inch (6mm)
- Active Pixels: 1280 x 960

Speed/Output

- Frame Rate: 60fps at 720p;
45fps at full resolution

Sensitivity

- Pixel Size: 3.75μm
- Dynamic Range: >115dB
- Responsivity: 5.48V/lux-sec

Power

- Supply: I/O 1.8 or 2.8V
Digital 1.8V
Analog 2.8V
HiSPi 0.4V or 1.8V

Temperature Range

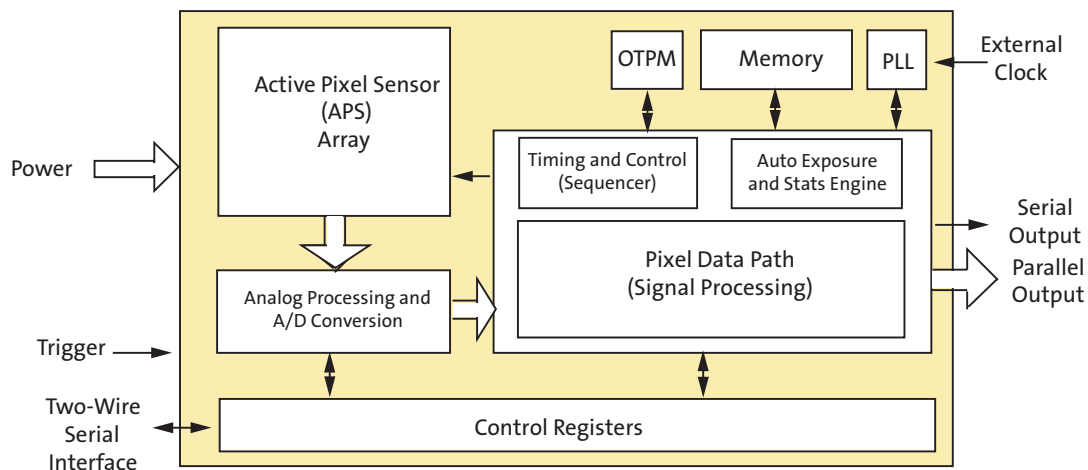
- Ambient: -40°C to +105°C (automotive)

Package: 64-ball iBGA or bare die

Color Filter Array: RGB Bayer, Monochrome, RCCC (Red, Clear, Clear, Clear)

Automotive Qualified: AEC-Q100, Grade 2

Block Diagram



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