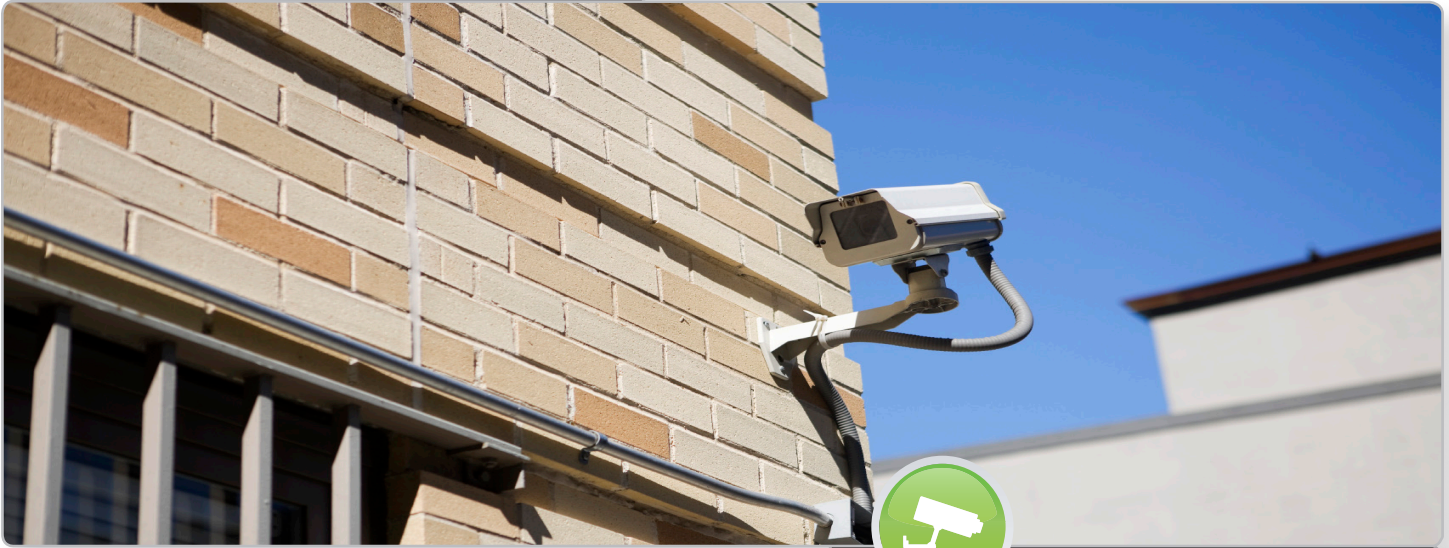


AR0331



3.1-Megapixel
1/3-inch
1080P WDR sensor
48-pin iLCC and 64-pin iBGA

High-Performance Video for Cost-Effective Security Systems

- 1 **Easy to Source Cost-Effective Megapixel Lens**
1/3"-Optical
- 2 **1080P HD/Digital PTZ/Forensic ID/EIS/4:3
&16:9 Aspect Ratio**
3.1M/30 FPS Resolution
- 3 **True HDTV Standard with Added WDR Feature**
1080P 60 FPS in both linear and WDR
- 4 **Uncompromised Image Quality for Video
Application**
Best Aptina™ A-Pix™ Pixel Technology Performance
- 5 **Place -it -Anywhere/High Contrast Lighting
Condition**
Up to 100 dB High Dynamic Range

Applications

- Full HD surveillance camera
- Digital Pan Tilt Zoom camera
- WDR camera
- License plate reading camera
- Video conferencing camera
- Stereo vision camera
- Surround view camera



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

- Superior low-light performance
- Latest 2.2µm pixel with Aptina™ A-Pix™ Technology
- Full HD support at 1080P 60fps for superior video performance
- Linear or high dynamic range capture
- 3.1M (4:3) and 1080P Full HD (16:9) images
- Optional Adaptive Local Tone Mapping
- Interleaved T1/T2 output
- Support for external mechanical shutter
- Support for external LED or xenon flash
- Slow-motion video (VGA 120 fps)
- On-chip phase-locked loop (PLL) oscillator
- Integrated position-based color and lens shading correction
- Slave mode for precise frame-rate control
- Stereo/3D camera support
- Statistics engine
- Data interfaces: four-lane serial high-speed pixel interface (HiSPi™) differential signaling (SLVS), or parallel
- Auto black level calibration
- High-speed Context switching
- Temperature Sensor

Specifications

General

- iLCC and iBGA package
- Surveillance camera, LPNR camera
WDR camera, 1080P 60fps HD camera

Imaging Array

- Resolution: 3.1M
- Optical Format: 1/3"
- Active Array: 2052(H) x 1536(V)
- Imaging Area: 2048(H) x 1536(V)

Sensitivity

- Pixel Size: 2.2µm Apix
- Dynamic Range: Up to 100 dB
- Responsivity: 1.9 V/lux-sec

Speed/Output

- Frame Rate: 3.1M 30fps/1080P 60fps
- Chroma: RGB
- Shutter Type: ERS
- Data Rate : 74.25Mhz
- Data Format: Bayer 12

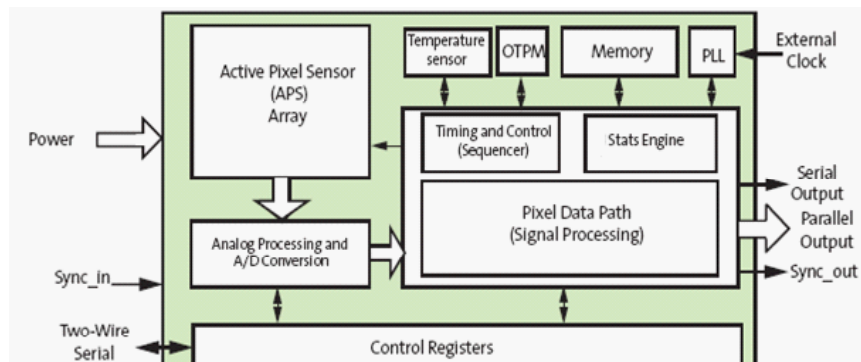
Environmental

- Supply Voltage: 1.8V/2.8V
- Power Consumption: <720mW at full frame rate/speed
- Operating Temperature: -30°C to +85°C
- ROHS Compliance: Yes

Package

- Package: iLCC and iBGA
- Package Dimension: 10x10mm and 9x9mm

Block Diagram



aptina.com

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