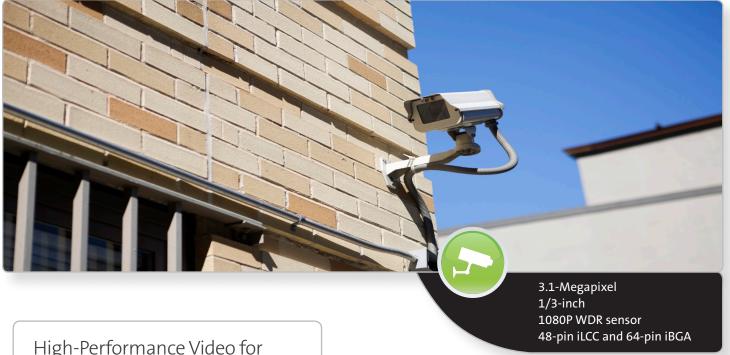
AR0331



High-Performance Video for Cost-Effective Security Systems



Easy to Source Cost-Effective Megapixel Lens 1/3"-Optical



1080P HD/Digital PTZ/Forensic ID/EIS/4:3 &16:9 Aspect Ratio

3.1M/30 FPS Resolution



True HDTV Standard with Added WDR Feature 1080P 60 FPS in both linear and WDR



Uncompromised Image Quality for Video Application

Best Aptina™ A-Pix™ Pixel Technology Performance



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.



AR0331

Features

- Superior low-light performance
- Latest 2.2um 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: 3.1MOptical 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

