AR0330

3.5-Megapixel
1/3-inch Digital Image Sensor
Image Stabilization Support

1080p/60 Digital Video with Image Stabilization Support

1 Captures 2304 x 1296 at 60 fps

Maximum Full HD (1080p60) video performance at Full FOV

2 New 4th generation 2.2 µm pixel

Superior low-light performance

3 3.4M (3:2) and 3.15M (4:3) still images at 30 fps

Burst still image capability to capture fast-moving action with minimal ERS artifacts

4 WVGA video at 240 fps

Slow motion playback at full FOV

5 Data interfaces: four-lane serial high-speed pixel interface (HiSPi™) differential signaling (SLVS), four-lane serial MIPI interface

Multiple high-speed serial interface options allow for flexible system designs

Applications

- DVC
- Web Cam
- Video Conferencing
- Telepresence

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.

Aptina™
IMAGING

Features

- 2.2µm pixel with Aptina™ A-Pix technology
- Full HD support at 60 fps (2304H x 1296V) for maximum video performance
- Superior low-light performance , with electronic image stabilization support
- 3.4MP (3:2) and 3.15MP (4:3)still images
- Slow-motion video (WVGA 240 fps)
- Slave mode for precise frame-rate control , and sensor synchronization for 3D applications
- Data interfaces: four-lane serial high-speed pixel interface (HiSPi™) differential signaling (SLVS), four-lane serial MIPI® interface, or parallel
- On-chip phase-locked loop (PLL) oscillator
- Integrated position-based color and lens shading correction
- Simple two-wire serial interface
- Auto black level calibration
- 12-to-10 bit output A-Law compression
- Support for external mechanical shutter
- Support for external LED or Xenon flash

Specifications

Imaging Array
- Optical Format: 1/3-inch (5.8mm)
- Chief Ray Angle: 0 ˚, 21 ˚, 25 ˚
- Active Array: 2304H x 1536V

Speed/Output
- Imaging Area: 2304H x 1536V (5.07mm x 3.38mm)
- Frame Rate: 60fps (2304H x 1296V)
- Data Rate: 196 Mp/sec
- Master Clock: 6-64 MHz input clock
- Data Format: 12-bit, 10-bit RAW

Sensitivity
- Pixel Size: 2.2µm x 2.2µm
- Dynamic Range: 72.4dB
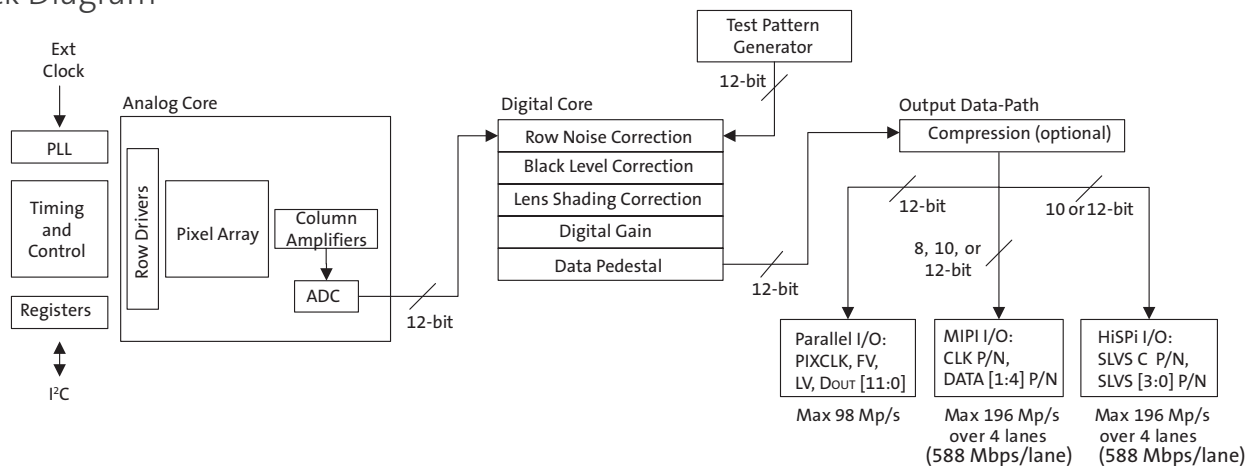- Responsivity: 1.9 V/lux-sec (550nm)

Power
- Supply: 2.8V/1.8V

Temperature Range
- Operating: −30°C to +70°C

Package: 11.4 mm x 11.4mm CLCC, 6.28 mm x 6.65 mm CSP, or bare die

Block Diagram