

AR1411HS



14-Megapixel
1-inch
CMOS Image Sensor
CLCC

High-Resolution, High-Quality Image Capture and HD Video

- 1 14.2MP with 2.86 μm pixel**
High-Resolution still Images with stunning color fidelity
- 2 DR-Pix™ Technology**
Adjustable pixel response optimized for best noise performance in all scene conditions
- 3 60fps (1/80fps scan rate)**
Burst still image capture with minimal rolling shutter artifacts, seamless capture of stills from video
- 4 4K Digital Cinema supported**
4K (4096H x 2160V or 8.8Mp) at 60fps is supported, which is standardized by Digital Cinema Initiatives (DCI)
- 5 High-Speed modes: 1080p120, video up to 1200fps**
High-Quality, slow motion video

Applications

- DSC
- DSLR
- Mirrorless
- Surveillance



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

- 2.86µm pixel size with Aptina DR-Pix™ technology
- 1/80 sec frame readout time, 1-inch optical size, 14MP imager
- 60 fps continuous readout in 14.2Mp full resolution mode
- 4K digital Cinema (4096H x 2016V) is supported
- Multiple operation modes including; 4K60fps, 1080p120fps,
- High speed differential serial video output (HiSPi™)
- External master clock frequency 29.16 MHz

Specifications

Imaging Array

- Resolution: 4620 (H) x 3084 (V)
- Aspect Ratio: 3:2
- Optical Format: 1-inch (15.8mm diagonal)
- Active Array: 4620 (H) x 3084 (V)
- Imaging Area: 13.2mm x 8.8mm

Sensitivity

- Pixel Size: 2.86µm x 2.86µm
- Dynamic Range: 79.0dB
- Responsivity: 20.5 ke/lx*s

Speed/Output

- Frame Rate: 60fps (1/80sec scan rate)
- Chroma: RGB Bayer
- Shutter type: ERS
- Data Rate: 700Mbps x 24 = 16.8Gbps
- Master Clock: 19.16 MHz
- Data Format: HiSPi (SLVS: 24 Lanes)

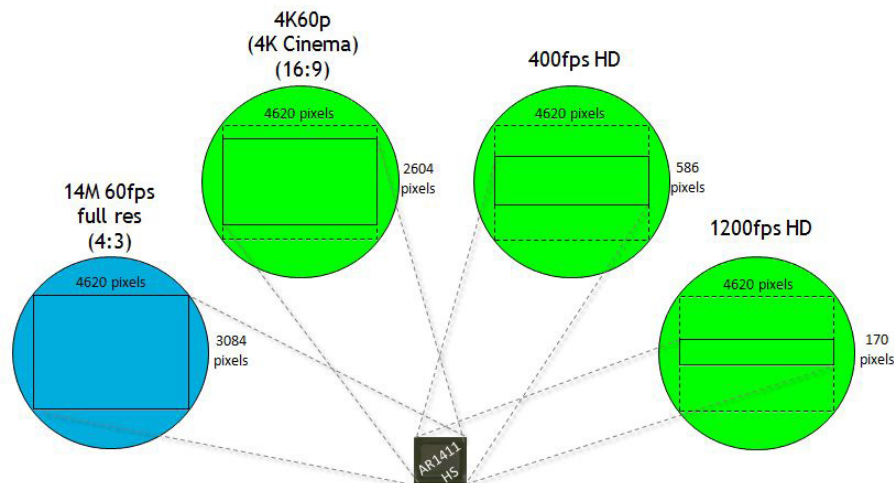
Environmental

- Supply Voltage: 3.0, 1.8, 2.8, 0.4 V
- Power consumption: Max 1,100mW at Full Resolution Continuous
- Operating Temperature: -30°C to +70°C
- ROHS Compliance: Passed

Package

- **Package:** 124-pin CLCC
- **Package Dimension:** 23.6 x 22.0 x 2.6 mm

Key Readout Modes



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