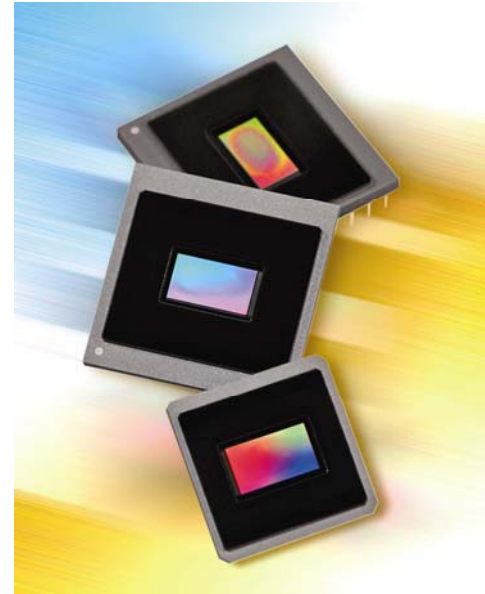


Fast 1080p60 imaging System-on-Chip

ProCamHD™ 3562: 2/3-inch 2.1Mpixel CMOS iSoC

Key Integrated Features:

- 1920x1080 at Standard 2/3" Optical Format
- 12b Output with >11b Dynamic Range at 75MHz
- Compact 97-pin μ PGA Ceramic Package
- High Efficiency Microlens Array
- RGB Color Filter Array
- Progressive Readout with Rolling Shutter
- Light-Sensing Area Roughly Die-Centered
- Patented Low-Noise, High-Speed Video Architecture
- Programmable Gain at 0.006, 3 & 6 dB resolution
- 1x12b or 2x12b Video Bus; 3.3V Tolerant
- Programmable Operation via 3-wire serial interface
 - 1080/60p (75/150 MHz), 1080/60i (75 MHz)
 - 720/120p (1/2-inch)
 - Variable Electronic Shutter
 - Synchronizable to Ext. Shutter/Flash
 - Synchronizable to External Frame and/or Line Synchronization clocks
 - 10-bit mode operation with 10-bit output increases sensitivity
 - Video Gain from -24 to 72 dB; independent control of R, G and B channels (3562)
 - Sub-Sampling Modes Optionally Provide 1.5, 2, 3 or 4X lower resolution
 - Windowing with 16 Column and 9 Row Resolution
- Supports various video timing protocols including SMPTE 274M and 296M
- i-SoC Power Consumption <650 mW at 74.25 MHz Video Rate



ProCamHD™ is 12-bit imaging System-on-Chip (iSoC) technology that offers the highest imaging resolution at the lowest power and random noise currently available. The 3562 specifically supports progressive and interlaced imaging of 2.1 Mpixels at 60Hz. In addition to HDTV at 1080p60, 1080i60, and 720p120, the sensor supports video at 720p60, NTSC, PAL and CCIR-601. Its unique architecture simultaneously facilitates high video rate and fill factor at low read noise. iSoC integration includes programmable state machine, analog and digital signal processing, low-power 12-bit digitization, gain amps, and clock and bias generators.

Sensor features and specifications are subject to change without notice. ProCamHD™ iSoCs can be damaged by electrostatic discharge.