

Features

- Full HD support at 60 fps for max video performance
- 20% extra imaging area for image stabilization in full HD
- Resampled binning to reduce jagged edges and artifacts
- Column summing for increased sensitivity in binned images
- 2 X 2 binning
- Row skipping: 2x, 4x, 8x, 16x, and 32x
- Column skipping: 2x, 4x
- On-sensor digital scaler
- Analog unity to 32x
- Digital unity to 15x
- Programmable controls: gain, horizontal and vertical blanking, auto black level offset correction, frame size/rate, exposure, left-right and top-bottom image reversal, window size, and panning
- Data interfaces: parallel or four-lane serial high-speed pixel interface (HiSPi™)
- On-die phase-locked loop (PLL) oscillator

Specifications (Preliminary)

Imaging Array

- Optical Format: 1/2.3-inch
- Active Array: 4384(H) x 3288(V)
- Imaging Area: 6.14mm(H) x 4.6mm(V)

Speed/Output

- Frame Rate: 13 fps (HiSPi serial I/F)
6 fps (parallel I/F)
- Data Rate: 2.8 Gb/s (700 Mb/s per lane)
(HiSPi serial I/F)
96 MHz (parallel I/F)
- Master Clock: 6–48 MHz
- Data Format: 12-bit RAW (10-bit RAW for video)

Sensitivity

- Pixel Size: 1.4μm x 1.4μm
- Dynamic Range: 65dB

Power

- Supply: Analog: 2.8V (nominal)
Digital: 1.8V (nominal)
I/O: 1.8V (nominal) or 2.8V (nominal)

Optics

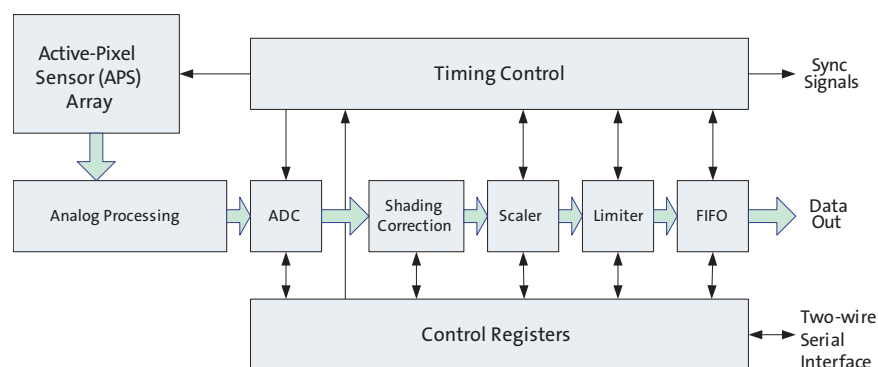
- CRA: 0°; 11.4°, 25°

Temperature Range

- Operating: –30°C to +70°C (at junction)

Package: 10mm x 10mm 48-pin iLCC

Block Diagram



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