

Features

- Wide dynamic range
- Real-time exposure context-switching; dual register
- Operating temperature range up to +105°C
- Tested to AEC-Q100 specifications
- TrueSNAP™ global shutter with simultaneous integrate and readout
- Monochrome, RGB Bayer, or RCCC (red/clear) color filters available
- Enhanced near-IR performance
- Programmable to any window size (QVGA, CIF, QCIF, etc.)
- Progressive or interlaced readout modes
- 2x2 and 4x4 binning at full resolution
- Simple two-wire serial interface
- Automatic and programmable functions: regionally weighted exposure, black level offset correction, horizontal blanking, vertical blanking, lighting control, windowing, left-right and top-bottom image reversal, regional gain, image decimation, manual or automatic high dynamic range

Specifications

Imaging Array

- Optical Format: 1/3-inch
- Active Array: 752(H) x 480(V)

Speed/Output

- Imaging Area: 4.55mm(H) x 2.97mm(V)
- Frame Rate: 60 fps @ 752H x 480V; (higher frame rates at lower resolutions)
- Data Rate: 27 Mp/s
- Master Clock: 26 MHz
- Data Format: Parallel/LVDS (serial); selectable 10 to 8 bits

Sensitivity

- Pixel Size: 6µm x 6µm
- Dynamic Range: 80dB to >100dB
- Responsivity: 4.8 V/lux-sec (550nm)
- Minimum Detectable Light: sub-0.1 lux (mono), 5 lux (color)

Power

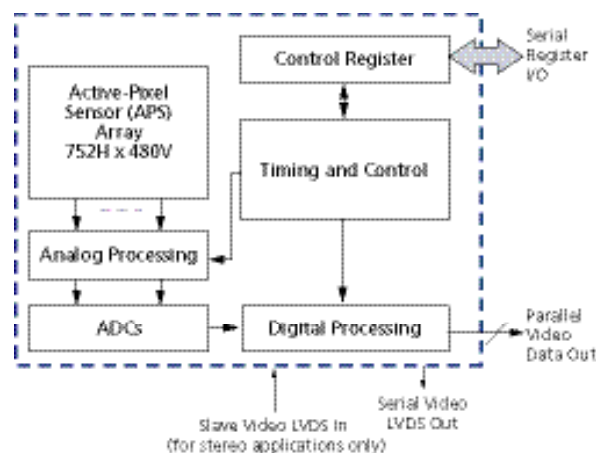
- Supply: 3.0–3.6V (3.3V nominal)
- Consumption: <160mW @ 60 fps; <120µW standby

Temperature Range

- Operating: –40°C to +105°C
- Storage: –50°C to +125°C

Package: automotive qualified 52-ball iBGA (9mm x 9mm) or die

Block Diagram



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