

Features

- Embedded NTSC/PAL encoder
- Best-in-class, low-light performance
- System on a chip (SOC)—completely integrated camera system
- Ultralow power, low-cost progressive scan
- On-chip image flow processor performs processing such as color recovery/correction, sharpening, gamma, lens shading correction, on-the-fly defect correction, auto white balance, and auto exposure
- Programmable functions: 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
- Progressive scan or interlace, parallel data formats
- Two-wire serial programming interface
- SPI interface

Specifications

Imaging Array

- Optical Format: 1/4-inch
- Active Array: 680(H) x 512(V)
- Imaging Area: 3.54mm(H) x 2.69mm(V)

Speed/Output

- Frame Rate: 30 fps NTSC/25 fps PAL;
60 fps digital at full resolution
- Data Rate: 27 Mb/s
- Master Clock: 27 MHz
- Data Format: NTSC/PAL/digital progressive scan

Sensitivity

- Pixel Size: 5.6μm x 5.6μm
- Pixel Dynamic Range: 82dB
- Responsivity: 11.5 V/lux-sec (550nm)

Power

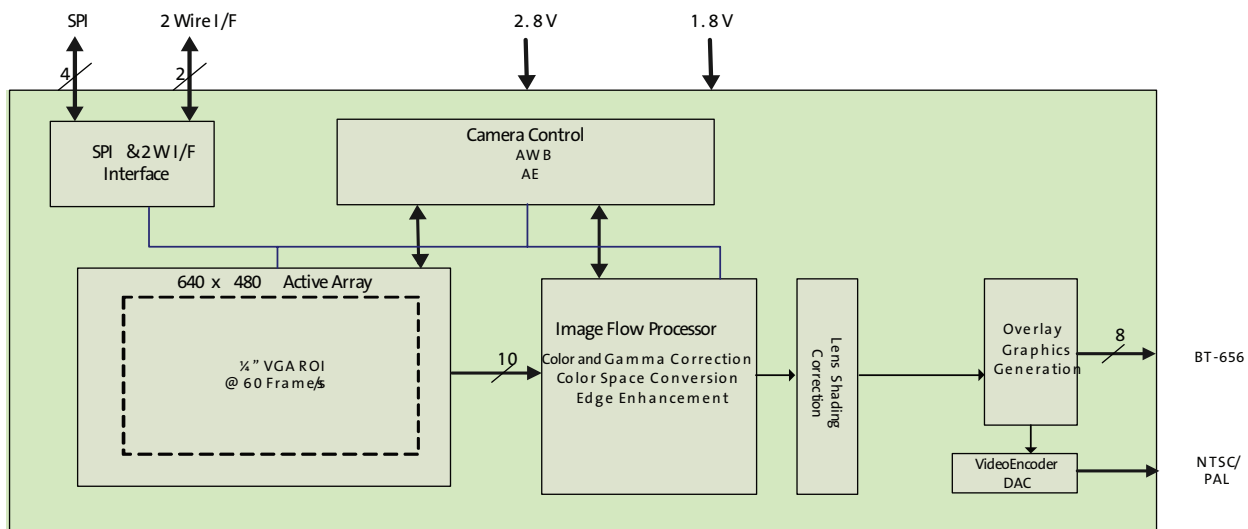
- Supply: I/O digital 2.8V ±5%
Core: 1.8V ±5%
Analog: 2.8V ±5%
- Consumption: 300mW

Temperature Range

- Operating: -30°C to +85°C
- Storage: -40°C to +125°C

Package: 48-pin CLCC or die

Block Diagram



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