

Toshiba CMOS Image Sensor Camera Module TCM8230MD

Highlights

- The TCM8230MD is the industry smallest VGA camera module and provides best-in-class picture quality with CMOS process technology
- CMOS process technology enables low-cost, small form factor and low-power consumption
- The TCM8230MD camera module integrates color imaging with ADC and DSP camera signal processing
- Toshiba has proven manufacturing capability to serve high-volume consumer markets for mobile phones, PDAs and other handheld products
- Sleep-mode operation minimizes power consumption
- Reduced external part count simplifies design
- Module integrates a lens unit

Description

The TCM8230MD camera module is a member of the Toshiba family of CMOS image sensors providing best-in-class picture quality at low-power consumption. Featuring 640(H) X 480(V) VGA pixel resolution and 30 frames per second operation, the TCM8230MD camera module integrates color imaging and camera signal processing in a compact 6(W) x 6(D) x 4.5 mm(H) module. TCM8230MD is ideal for high-volume electronic products where small size, low-power consumption, and high-quality imaging are key design criteria.

Features

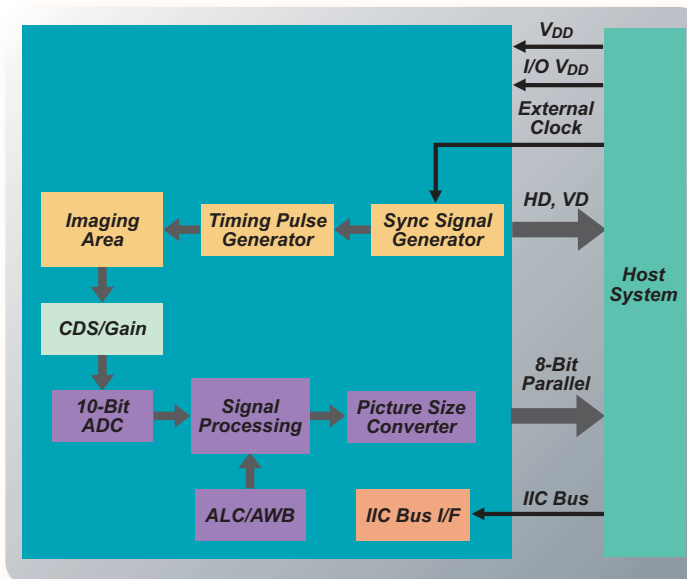
- Module Size: 6(W) x 6(D) x 4.5(H) mm
- Power supply: 1.5V and 2.8V

- I²C bus control
- 1/8 inch optical format
- Effective pixel numbers: 330K Pixels (658(H) x 494(V))
- Pixel pitch: 3.75 μm(H) x 3.75 μm(V)
- Frame rate: 30 fps max.
- Color filter: RGB, Bayer arrangement
- Multiple picture size and exposure modes
- Digital outputs: YUV=4:2:2 or RGB=5:6:5 (8-Bit parallel)

Specifications

- Storage temperature: -30 to 85°C
- Operating Temperature: -20 to 60°C
- Power consumption @ VGA and 15 fps: 53 mW typ.
- Lens field of view (fixed): 57° Horizontal, 44° Vertical, 69° Diagonal

Block Diagram—VGA Chip



Product Brief

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Module TCM8230MD**

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