

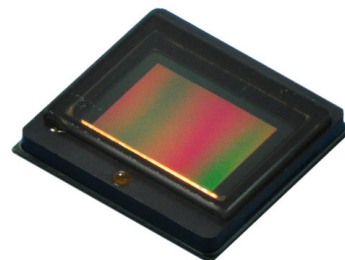
CMOS image sensor

16Megapixel 1.34μm

Under
development

TCM5107PL

1/2.3 inch 16Mpixels 1.34μm BSI CMOS image sensor



The Toshiba TCM5107PL is small BSI image sensor.

In the sensor area 4640 horizontal and 3488 vertical signal pixels, and the image size meets with 1/2.3 inch optical format.

Use of the CMOS process enables low power consumption operations.

It has high resolution : 16M. Its pixel size is 1.34μm × 1.34μm, sensor. Its speed rate is high: 60 fps for 1080p.

■ Features

Applications

- ▶ Digital cameras
- ▶ Mobile phones and Smart phones

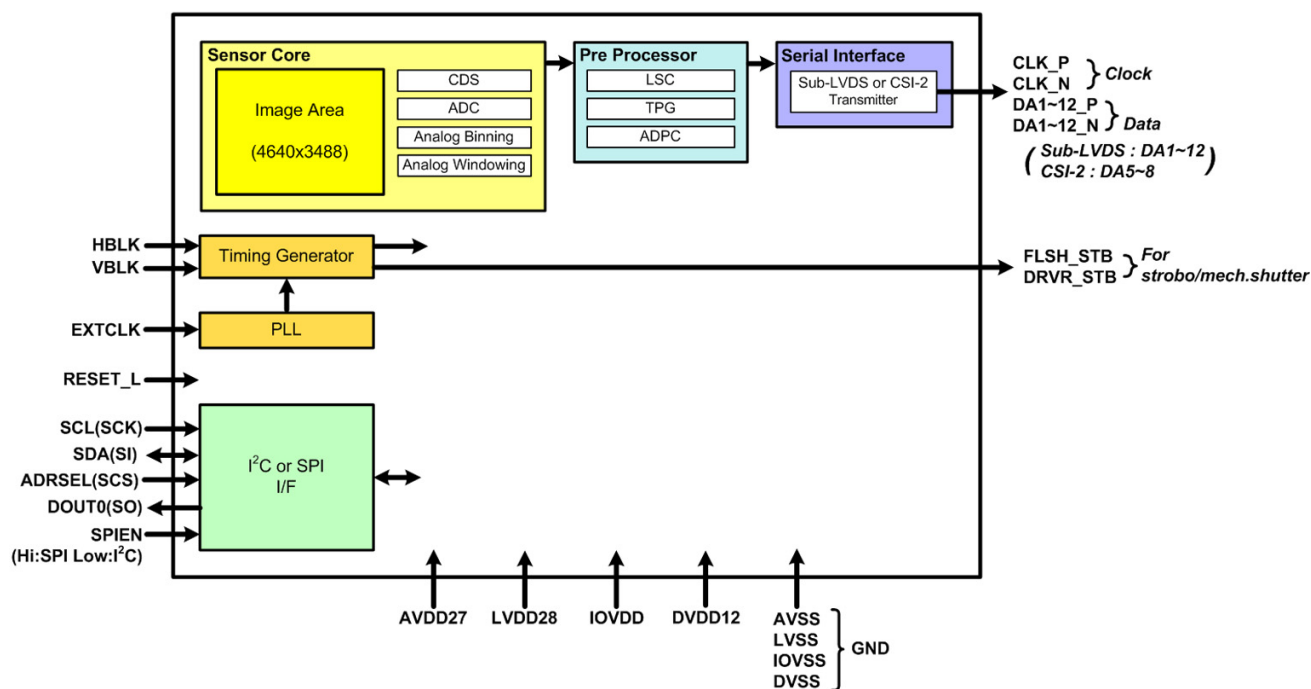
Features

- ▶ 1/2.3" 16M resolution (1.34μm)
- ▶ BSI
- ▶ I²C and SPI interface
- ▶ CSI-2 4lanes, Sub-LVDS 12lanes
- ▶ Binning:
 - Horizontal 1/2
 - Vertical 1/2 to 1/8
- ▶ Built-in Phase lock loop
- ▶ Lens shading correction
- ▶ Defect pixel correction
- ▶ Picture flip (horizontal and vertical)
- ▶ Global reset for mechanical shutter
- ▶ Strobe timing pulse
- ▶ Standby mode, Power down mode

Specifications

- ▶ Optical format: 1/2.3"
- ▶ Pixel size: 1.34μm × 1.34μm
- ▶ Effective pixels: 4640(H) × 3488(V)
- ▶ Data formats: RAW-10,12bits
- ▶ Frame rate:
 - 30fps @full resolution
 - 60fps @HV 1/2 binning for 1080p
- ▶ Power supply:
 - Analog='2.6 to 2.9V' and '2.6 to 3.0V'
 - Digital=1.1 to 1.3V
 - I/O='1.65 to 1.95V' or '2.6 to 3.0V'
- ▶ Operating temperature: -20 to +60°C
- ▶ Storage temperature: -30 to +85°C
- ▶ Package: LGA-80pin plastic package
10.5mm × 10.0mm

■ System Block Diagram



» For further information about Toshiba Sensors, please visit
<http://www.semicon.toshiba.co.jp/eng/product/sensor/index.html>

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