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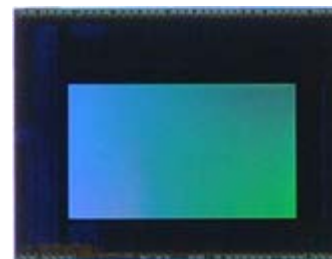
1080p 1.75μm CMOS image sensor: T4K24

The Toshiba T4K24 is a small FSI image sensor.

The sensor area of 2016 horizontal by 1176 vertical output signal pixels and the image size satisfy the 1/4.4 inch optical format. The CMOS process enables low-power-consumption operations.

It has high resolution (1080p), pixel size of 1.75μm × 1.75μm sensor, high speed of 30 fps @ full resolution of 1080p, and provides excellent color reproduction through its small and simple camera system with a primary color filter.

So the T4K24 is suitable for use as an image input device for phone cameras and PC cameras.



Features

Applications

- ▶ Mobile phones and Smart phones
- ▶ PCs and tablet PCs

Features

- ▶ 1/4.4" 1080p resolution (1.75μm)
- ▶ Progressive scan
- ▶ I²C interface
- ▶ CSI-2 1lane
- ▶ Binning:
Horizontal 1/2
Vertical 1/2
- ▶ Built-in phase lock loop
- ▶ Lens shading correction
- ▶ Defect pixel correction
- ▶ Picture flip (horizontal and vertical)
- ▶ Standby mode, Power down mode
- ▶ OTP (One Time Programmable) memory:

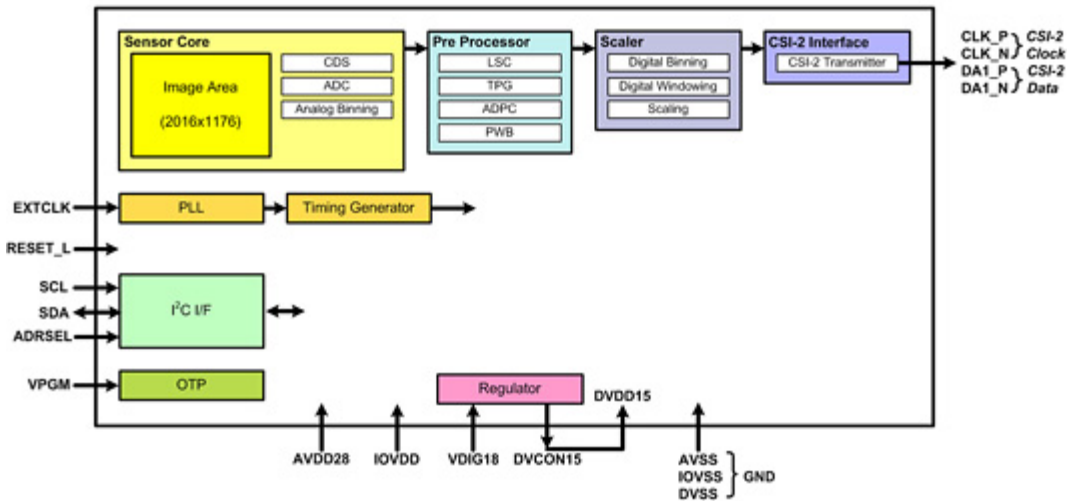
Specifications

- ▶ Optical format: 1/4.4"
- ▶ Pixel size: 1.75 μm × 1.75 μm
- ▶ Effective pixels: 2016 (H) × 1176 (V)
(2.37mega pixels including EIS area (10 %))
- ▶ Data formats: RAW-8,10 bits
- ▶ Frame rate:
30 fps @1080p
30 fps @720p
60 fps @VGA
- ▶ Power supply:
Analog = 2.6 to 3.0 V
Digital = 1.7 to 1.9 V
I/O = 1.7 to 3.0 V
- ▶ Operating temperature:
-20 to +60°C
- ▶ Storage temperature:
-30 to +85°C

4kbits

- ▶ Built-in regulator (1.8 V to 1.5 V)

System Block Diagram



- ▶ [CMOS Image Sensor Product Lineup>>](#)

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Links

Other Topics

- [2M 1.75 µm CMOS image sensor: T4K28](#)(26 Jul, 2012)
- [1080p 1.75µm CMOS image sensor: T4K24](#)(26 Jul, 2012)
- [720p 1.75 µm CMOS image sensor with ISP: T4K08](#)(26 Jul, 2012)

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