OVO2G10 2-megapixel product brief

1/2.9" Color 2-Megapixel CMOS Image Sensor for Smart Home / IoT Consumer Cameras

The OVO2G10 is a high quality, 1/2.9-inch 1080p CMOS image sensor providing high-definition (HD) video and high quality digital imaging for smart home / IoT consumer camera applications.

By introducing an advanced 2.8 µm pixel architecture, the OVO2G10 achieves excellent low-light sensitivity, signal-tonoise ratio, full-well capacity, quantum efficiency and lowpower consumption. The default mode and programmable mode allow for a more convenient way of controlling the parameters of frame size, exposure time, gain value, etc. It also offers the following image control functions: mirror and flip, windowing, auto black level calibration, defective pixel correction, black sun cancellation, and other functions.

The OV02G10 supports a high frame rate of up to 30 fps @ 1080p format through the DVP interface or MIPI interface. These prominent features integrated in the OV02G10 allow for a best-in-class image sensor that will bring users vivid pictures and an excellent experience.

Find out more at www.ovt.com.



R. S. S.

OV02G10

Ordering Information

Technical Specifications

 OV02G10-A41A-001A (color, lead-free) 41-pin CSP

Applications

- security surveillance systems
- DVRs

smart TVs

IoT

Product Features

- programmable controls:
- frame rate
- mirror and flipcropping
- windowing
- supports 2x2 color binning function
- supports output formats: 10-bit RAW RGB
- SCCB control interface for register programming

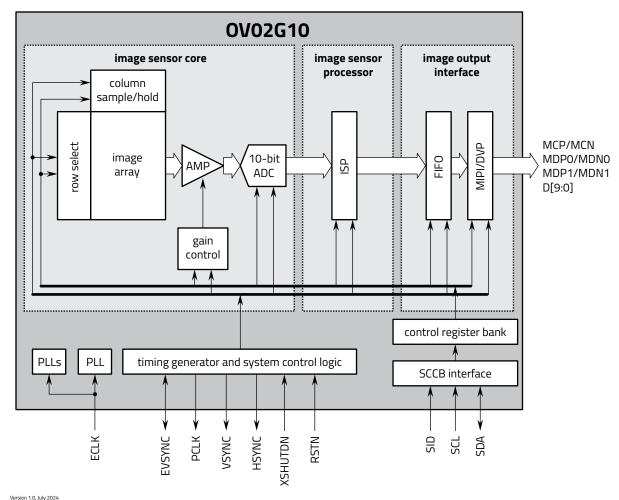
- supports MIPI 2-lane serial output interface
- supports DVP 10-bit output interface
- supports image sizes: 1920 x 1080 @ 30 fps
- supports automatic black level calibration
- supports multi-camera synchronous function

Functional Block Diagram

• active array size: 1920 x 1080

- maximum image transfer rate:
 1920 x 1080: 30 fps
- power supply:
 analog: 2.8V
 I/O: 1.8/2.8V
- core: 1.5V
- power requirements:
 active: 115 mW
 standby: 10 μA
- output interfaces: 10-bit 2-lane MIPI/10-bit DVP

- temperature range:
 operating: -30°C to +85°C
- junction temperature
- stable image: -20°C to +60°C junction temperature
- output formats: 10-bit RAW RGB
- lens size: 1/2.9"
- Iens chief ray angle: 34.04° non-linear
- scan mode: progressive
- pixel size: 2.8 µm x 2.8 µm
- image area: 5398.4 µm x 3046.4 µm





4275 Burton Drive Santa Clara, CA 95054 USA Tel: + 1 408 567 3000 Fax: + 1 408 567 3001 www.ovt.com

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