

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

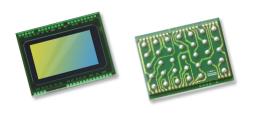
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









OV2740 1080p product brief





available in a lead-free package

World's Most Power-Efficient 1080p/60 High Definition Image Sensor for Front-Facing Camera Applications

OmniVision's OV2740 PureCel $^{\text{TM}}$ is an ultra-low power, full high-definition (FHD) image sensor for front-facing camera applications in smartphones, tablets, notebooks and Ultrabooks. By consuming under 90 mW when recording 1080p HD video at 60 frames per second (fps), the OV2740 is the lowest power 1080p/60 image sensor currently on the market.

Built on a 1.4-micron pixel, the OV2740 PureCel image sensor boasts a signal-to-noise ratio of less than 50 lux, with improvements in full-well capacity (FWC) and sensitivity. The sensor records best-in-class 1080p HD video at 60 fps and 720p HD video at 90 fps, and uses

staggered high dynamic range (HDR) to minimize motion artifacts to capture crisp, clear video in difficult lighting conditions.

The OV2740 is the only 1080p HD image sensor to feature light-sensing mode (LSM) and ultra-low power mode (ULPM), enabling advanced features such as motion detection or gesture control. Additionally, the sensor is stereo ready with frame synchronization to support a host of depth perception applications. The OV2740 fits into a compact $5.5 \times 5.5 \times 3$ mm module.

Find out more at www.ovt.com.





Applications

- Smartphones
- Ultrabooks and Notebooks
- Tablets

- Digital Still Cameras (DSC)
- Digital Video Camcorders (DVC)
- PC Multimedia

Product Features

- 1.4 µm x 1.4 µm pixel
- optical size of 1/6"
- programmable controls for frame rate, mirror and flip, cropping, and windowing
- supports output formats: 10-bit RAW RGB
- supports images sizes:1080p (1920x1080)
 - 720p (1280x720) VGA (640x480)
 - QVGA (320×240)
 - QQVGÀ (160x120)
- supports 2x2 binning
- standard serial SCCB interface

- up to 2-lane MIPI serial output interface (supports maximum speed up to 1000 Mbps/lane)
- embedded 4 kilobits of one-time programmable (OTP) memory for customer use
- add staggered HDR raw data output
- interleave row high dynamic range (iHDR) output
- programmable I/O drive capability
- power saving (PSV) mode
- support for LENC color shading

OV2740



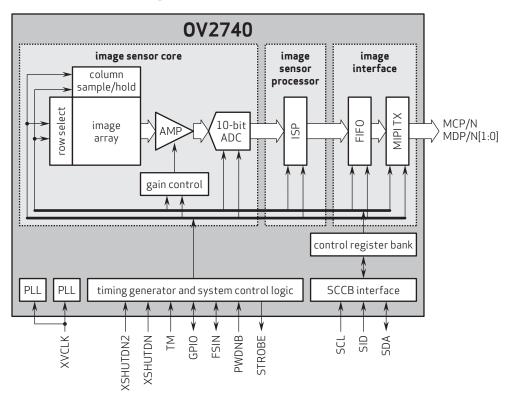
■ 0V02740-H34A-Z (color, lead-free, 34-pin CSP5)

Product Specifications

- active array size: 1920 x 1080
- power supply:
- core: 1.2\
- analog: 2.8V I/0: 1.8V
- power requirements:
 - active: 86.7 mW standby: 250 µA
- XSHUTDN: 0.15 μA
- temperature range:
- operating: -30°C to +85°C junction temperature
- stable image: 0°C to +60°C junction temperature
- output formats: 10-bit RAW RGB data

- lens size: 1/6"
- lens chief ray angle: 33° non-linear
- input clock frequency: 6 27 MHz
- maximum image transfer rate:
- 1080p: 60 fps -720p: 90 fps
- scan mode: progressive
- pixel size: 1.4 µm x 1.4 µm
- image area: 2728.8 µm x 1549.8 µm
- package dimensions: CSP5: 3855 µm x 2919 µm

Functional Block Diagram



4275 Burton Drive Santa Clara, CA 95054

Tel: +1 408 567 3000 Fax: +1 408 567 3001 www.ovt.com

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