![Chipsmall logo]

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!
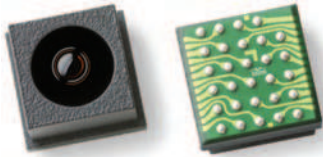
Contact us

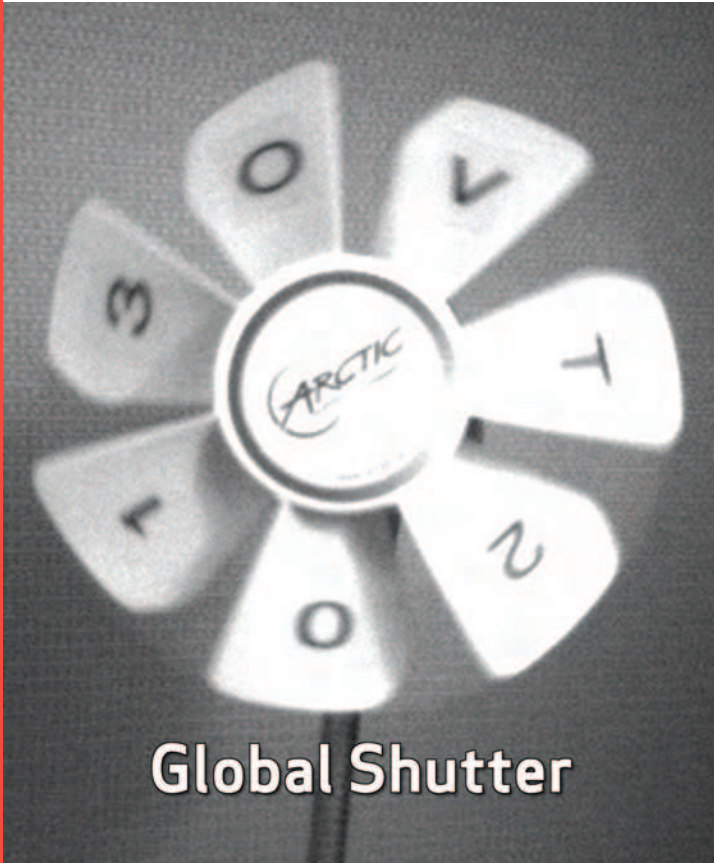Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China
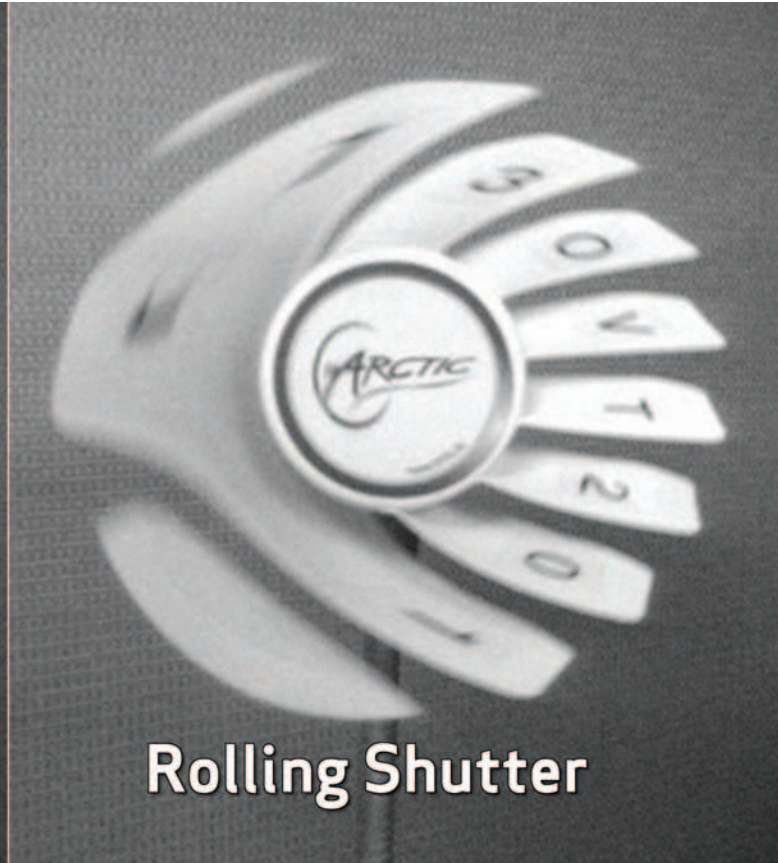
OVM6211 400x400 product brief

Global Shutter

Rolling Shutter

Compact Global Shutter CameraCubeChip™ Brings Computer Vision to Mobile Devices, Notebooks and Wearables

lead free

available in a lead-free package

OmniVision's high performance OVM6211 offers a number of advanced features, including gesture recognition, eye tracking and motion detection in the industry's smallest global shutter package. Its advanced functionality, easy adoption and compact form-factor make it an ideal camera solution for advanced space-constrained devices, such as smartphones, tablets, notebooks and wearables.

Featuring a 3-micron OmniPixel3-GS™ global shutter pixel, the OVM6211 is capable of capturing full resolution (400 x 400 pixels) video at 120 fps and features two low-power modes: light sensing mode and ultra-low power mode.

The OVM6211 CameraCubeChip™ will be available in two packages. The OVM6211-RADA is intended for human interface systems including eye tracking and will have a narrow field of view (FOV) at approximately 50 degrees. The OVM6211-RAHA is a complementary product intended for applications including gesture recognition and wearable devices and uses a lens with FOV wider than 90 degrees.

Find out more at www.ovt.com.

OmniVision.

OVM6211

Applications

- Cellular Phones
- Digital Video Camcorders (DVC)
- PC Multimedia
- Tablets
- Security/Surveillance
- Gaming

Product Features

- 3 µm global shutter pixel
- automatic black level calibration (ABLC)
- programmable controls for:
  - frame rate
  - mirror and flip
  - cropping and windowing
- supports output formats: 8/10-bit RAW
- supports images sizes:
  - 400 x 400
  - 200 x 200
  - 100 x 100
- fast mode switching
- supports horizontal and vertical 2:1 and 4:1 monochrome subsampling
- supports 2x2 monochrome binning
- standard serial SCCB interface
- programmable SCCB device ID
- one-lane MIPI serial output interface
- embedded 128 bits of one-time programmable (OTP) memory for part identification, etc.
- two on-chip phase lock loop (PLL)
- programmable I/O drive capability
- built-in 1.5V regulator for core
- PWM
- built-in strobe control
- ultra low power mode for ambient light sensor
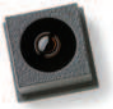
Product Specifications

- **active array size:** 400 x 400
- **power supply:**
  - **analog:** 2.6 - 3.0V
  - **core:** 1.5 VDC ±5%
  - **I/O:** 1.7 - 3.0V
- **power requirements:**
  - **active:** 85 mW @ 120 fps
  - **standby:** 15 µA for AVDD, 40/700 µA for DOVDD with/without input clock
  - **XSHUTDOWN:** 5 µA for AVDD, 5 µA for DOVDD
- **temperature range:**
  - **operating:** -30°C to +70°C junction temperature
  - **stable image:** 0°C to +50°C junction temperature
- **output formats:** 8/10-bit RAW
- **optical format:** 1/10.5"
- **input clock frequency:** 6 - 27 MHz
- **f no.:**
  - **OVM6211-RADA:** 3.1
  - **OVM6211-RAHA:** 2.4
- **focal length:**
  - **OVM6211-RADA:** 1.681 mm
  - **OVM6211-RAHA:** 0.776 mm
- **scan mode:** progressive
- **maximum image transfer rate:**
  - **400x400:** 120 fps
  - **200x200:** 220 fps
  - **100x100:** 380 fps
- **max S/N ratio:** 37.5 dB
- **dynamic range:** 66.5 dB @ 8x gain
- **maximum exposure interval:** 434 x t_{ROW}
- **pixel size:** 3 µm x 3 µm
- **image area:** 1248 µm x 1248 µm

Functional Block Diagram

Version 1.4, October, 2016