KLT CMOS CAMERA MODULES

JAL-KM9-OVM6211 V1.0

OmniVision OVM6211 MIPI Interfaccia Messa a fuoco fissa 400x400 Metà VGA Modulo telecamera


| Modulo telecamera n.	JAL-KM9-OVM6211 V1.0
Sensore d'immagine	OVM6211
EFL	1.68 mm
F.NO	3.1
Pixel	400 x 400
Vista ad angolo	50°
Tipo di lente	1/10.5 pollice
Dimensioni dell'obiettivo	3.23 x 3.23 x 2.76 mm
Dimensione del modulo	30.00 x 5.00 mm
Tipo di modulo	Messa a fuoco fissa
Interfaccia	MIPI

Connettore di accoppiamento Codice.   AXT524124
Connettore di accoppiamento sulla scheda principale.Venduto separatamente.

www.KaiLapTech.com   sales@KaiLapTech.com   Tel: (852) 6908 1256   Fax: (852) 3017 6778
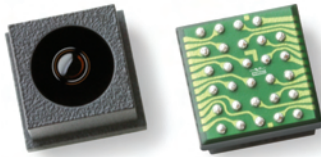
OVM6211 400x400 product brief
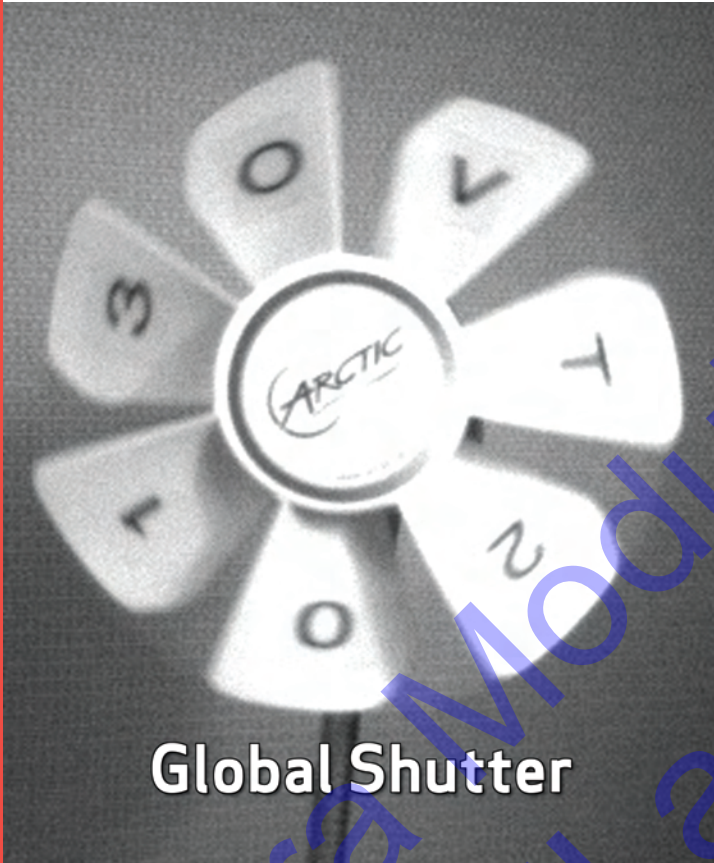
Global Shutter
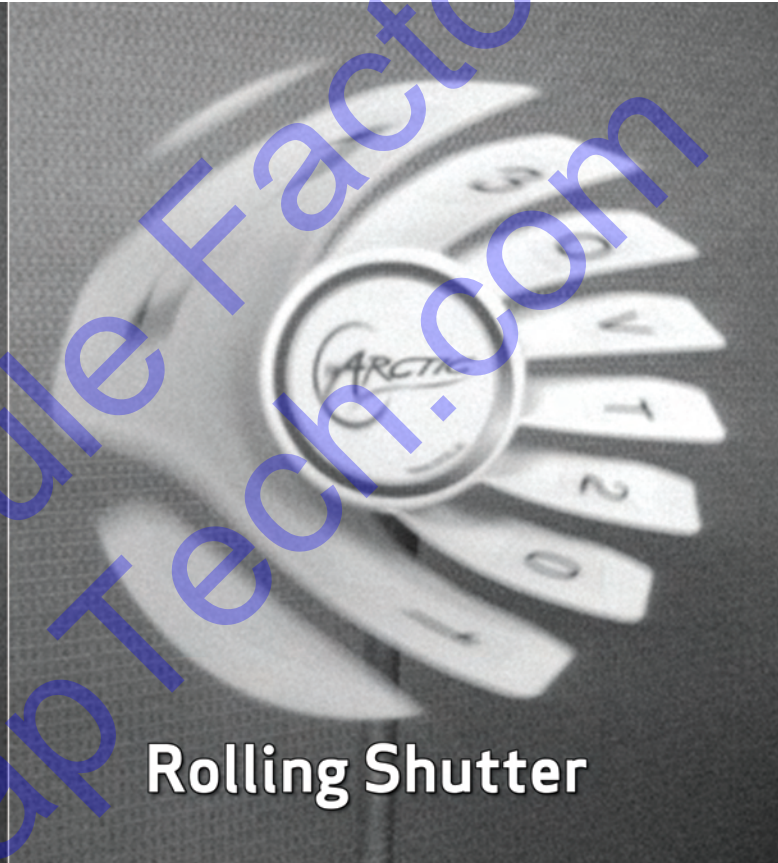
Rolling Shutter

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

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.

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
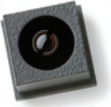
Product Specifications

- **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

OmniVision