CMOS CAMERA MODULES

your BEST camera module partner

KLT-USB1ACM-OV9732 V2.1

OmniVision OV9732 MIPI Interfaccia Messa a fuoco fissa 1MP Modulo telecamera

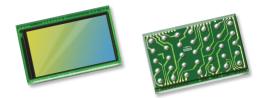


Modulo telecamera n.	KLT-USB1ACM-OV9732 V2.1
Sensore d'immagine	OV9732
EFL	3.29 mm
F.NO	2.8
Pixel	1280 x 720
Vista ad angolo	68.7°
Tipo di lente	1/4 pollice
Dimensioni dell'obiettivo	8.00 x 8.00 x 4.97 mm
Dimensione del modulo	66.00 x 11.00 mm
Tipo di modulo	Messa a fuoco fissa
Interfaccia	MIPI



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OV9732 720p HD product brief



Power-Efficient and Compact HD CameraChip[™] Sensor for Battery-Powered Smart-Home and Security Applications

OmniVision's OV9732 is a low-power and ultra-compact CameraChip[™] sensor that brings 720p high definition (HD) video to mainstream security systems and wireless battery-powered smart-home cameras. Compared to the previous generation OV9712, the OV9732 is 35 percent smaller and delivers dramatically improved pixel performance.

available in

a lead-free

package

The OV9732 CameraChip sensor utilizes OmniPixel3-HS[™] high sensitivity 3.0 µm pixel technology to bring industry-leading scene reproduction to a wide range of security and lifestyle camera applications that operate in extremely high- and lowlight conditions. The sensor's narrow 9-degree chief ray angle (CRA) supports consumer-grade optical lens systems and reduces image artifacts for enhanced performance.

When operating in low-power mode, the 1/4-inch OV9732 requires just 99 mW to capture 720p HD video at 30 frames per second.

Find out more at www.ovt.com.





Applications

IP Cameras

- Life Style Cameras
- Surveillance
- Motion Cameras

Product Features

- support for image sizes: full size (1280x720), VGA (640x480), 2x2 RGB binning (640x360)
- support for output formats: 10-bit RAW output with 1-lane MIPI and DVP
- on-chip phase lock loop (PLL)
- programmable controls for frame rate, mirror and flip, gain/exposure, and windowing
- support for horizontal and vertical sub-sampling

- low power mode (LPM) function
- capable of maintaining register values at software power down
- standard SCCB interface
- GPIO tri-state configurability and programmable polarity
- FSIN
- image quality control: defect pixel correction (DPC) and automatic black level calibration (ABLC)

Ordering Information

 OV09732-H35A (color, lead-free, 35-pin CSP5)

Product Specifications

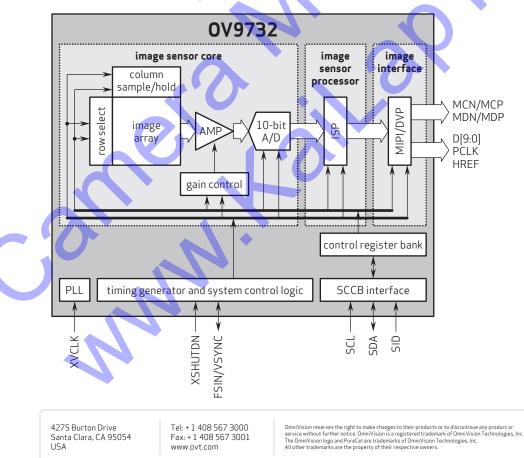
- active array size: 1280 x 720
- power supply:
 core: 1.7 1.9V (1.8V normal)
 analog: 2.7 2.9V (2.8V normal)
 I/O: 1.7 1.9V (1.8V normal)
- I/O: 1.7 1.9V (1.8V normal)
 power requirements:

 active: 99 mW
 - active: 99 mW - standby: 36 µW
- temperature range:
 operating: -30°C to +70°C junction temperature
 stable image: 0°C to +50°C junction
- temperature
- output formats: 10-bit RAW RGB
- lens size: 1/4"
- lens chief ray angle: 9°
- input clock frequency: 6 27 MHz

maximum image transfer rate: 30 fps

- sensitivity: 2.066 V/lux-sec
- scan mode: progressive
- shutter: rolling shutter
- max S/N ratio: 39 dB
- dynamic range: 72 dB @ 8x gain
- maximum exposure interval: 798 × t_{ROW}
- pixel size: 3 µm x 3 µm
- dark current: 5 mV/sec
 @ 60°C junction temperature
- **π image area:** 3888 μm x 2208 μm
- package dimensions: 4704 μm x 2994 μm

Functional Block Diagram





Version 1.1, December, 2015

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