

## KLT-IRSW-OV9732 V1.0

OmniVision OV9732 with IR Switch DVP 병렬 인터페이스 고정 초점 1MP M12 카메라 모듈

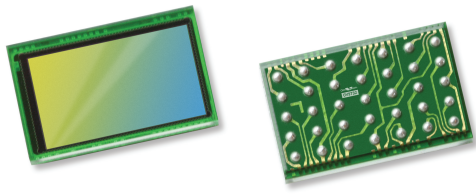


카메라 모듈 번호	<b>KLT-IRSW-OV9732 V1.0</b>	
이미지 센서	OV9732	<b>IR SWITCH</b>
<b>EFL</b>	2.5 mm	Input Voltage: 3.5V ~ 12V
<b>F.NO</b>	2.1	Operating Current: 88 ~ 300 mA
픽셀	1280 x 720	Red Line: Positive
보기 각도	120°	Black Line: Negative
렌즈 유형	1/4 인치	
렌즈 치수	14.00 x 14.00 x 18.61 mm	Operation:
모듈 크기	60.00 x 30.00 mm	ON: IR Active (Day Time)
모듈 유형	고정 초점	OFF: IR Disable (Night Time)
인터페이스	DVP 병렬	

메이팅 커넥터 부품 번호. **AXT524124**



메인 보드의 메이팅 커넥터. 별매.



# OV9732 720p HD product brief



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



available in  
a lead-free  
package

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.

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 low-light 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](http://www.ovt.com).



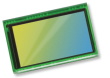
## Applications

- 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)

# OV9732



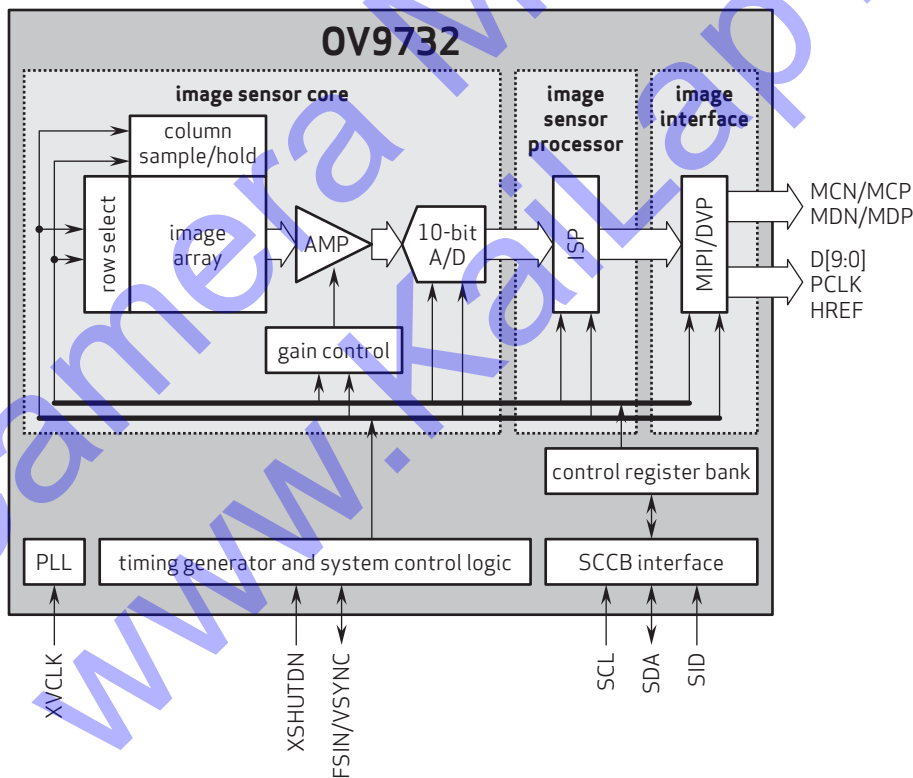
## Ordering Information

- 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)
- power requirements:
  - active: 99 mW
  - standby: 36  $\mu$ W
- 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 x t<sub>row</sub>
- pixel size: 3  $\mu$ m x 3  $\mu$ m
- dark current: 5 mV/sec @ 60°C junction temperature
- image area: 3888  $\mu$ m x 2208  $\mu$ m
- package dimensions: 4704  $\mu$ m x 2994  $\mu$ m

## Functional Block Diagram



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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