

CMOS CAMERA MODULES



your BEST camera module partner

KLT-H7K-OV2732 V3.0

OmniVision OV2732 MIPI and DVP Parallel Interface Fixed Focus 2 MP M12 **Camera Module**



Camera Module No.	KLT-H7K-OV2732 V3.0
Image Sensor	OV2732
EFL	1.58mm
F.NO	2
Pixel	1920 x 1080
View Angle	180°(D) 145°(H) 82°(V)
Lens Type	1/4 inch
Lens Dimensions	13.40 x 13.40 x 15.16 mm
Module Size	40.00 x 22.00 mm
Module Type	Fixed Focus
Interface	MIPI and DVP Parallel



www.KaiLapTech.com sales@KaiLapTech.com Tel: (852) 6908 1256 Fax: (852) 3017 6778



$0V2732_{1080p}$ product brief



Low-Power 1080p High Definition PureCel® Sensor for Security Applications



OmniVision's OV2732 is a compact and power-efficient PureCel® image sensor designed for IoT-based residential and commercial monitoring systems. The OV2732 captures quality images and videos with staggered high dynamic range (HDR), ensuring excellent scene reproduction in all lighting environments. The sensor features frame sync for use in multi-camera or 360-degree camera systems and supports ultra-low power mode (ULPM) and an ambient light sensor (ALS), making it particularly well-suited for battery-powered security applications.

Built on OmniVision's PureCel® technology, the 1/4-inch OV2732 captures 1080p high definition (HD) video at 60 frames per second (fps), 720p HD video at 90 p, and VGA resolution video at 90 p, and VGA resolution video at 90 p, and video, even in challenging low-light conditions.

Find out more at www.ovt.com.





Applications

- Internet of Things (IoT)
- High-end Video Conferencing
- Security

- Lifestyle Camera
- Home Monitoring

Product Features

- programmable controls:
 - gain exposure

 - frame rate
- image size horizontal mirror
- vertical flip
- cropping windowing
- automatic image control functions:
 black level calibration (BLC)
- serial camera control bus (SCCB)
- defective pixel correction (DPC)
- digital video port (DVP) parallel output

- support for two lane MIPI interface (up to 800 Mbps)
- support for image sizes:
- 1080p @ 60 fps 720p @ 90 fps
- · VGA @ 120 fps
- QVGA @ 240 fps, and more
- support for light sensing mode (LSM)
- support for staggered 2 frame HDR
- support for black sun cancellation
- on-chip phase lock loop (PLL)

OV2732



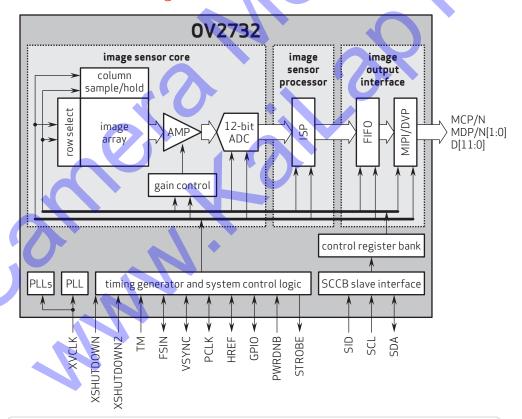
■ 0V02732-H57A (color, lead-free, 57-pin CSP4)

Product Specifications

- active array size: 1920 x 1080
- power supply:
- core: 1.2V
- analog: 2.8V I/0: 1.8V
- power requirements: active: 110 mW
- temperature range: operating: -40°C to +85°C junction
- temperature stable image: 0°C to +60°C junction temperature
- output interfaces: two-lane MIPI / DVP parallel
- output formats: 10/12-bit RAW RGB
- lens size: 1/4"
- lens chief ray angle: 12° line

- input clock frequency: 6 27 MHz
- scan mode: progressive
- maximum image transfer rate:
 - -1080p: 60 fps
- **720p**: 90 fps **VGA**: 120 fps **QVGA**: 240 fps
- shutter: rolling shutter
- maximum exposure interval: 1184 × t_{ROW}
- pixel size: 2 µm x 2 µm
- image area: 3868 µm x 2190 µm
- package dimensions: 5174 µm x 3680 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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