CMOS CAMERA MODULES

your BEST camera module partner

KLT-B8MF-OS05A10 V1.0

OmniVision OS05A10 MIPI Interface Foco Fixo 5MP M12 Módulo de Câmera



Módulo de câmara No.	KLT-B8MF-OS05A10 V1.0
Sensor de imagem	OS05A10
EFL	3.07 mm
F.NO	1.8
Pixel	2688 x 1944
Ângulo de visão	164°
Tipo de lente	1/2.7 polegada
Dimensões da lente	13.00 x 13.00 x 18.07 mm
Tamanho do Módulo	40.00 x 22.00 mm
Tipo de Módulo	Foco Fixo
Interface	MIPI



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

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OS05A10 5-megapixel product brief



Versatile 5-Megapixel PureCel[®] Sensor with High Dynamic Range for a Wide Range of Commercial Security and Consumer Applications

OmniVision's low-power OS05A10 is a 5-megapixel image sensor that brings crisp 1080p high definition, 2K, and 5-megapixel video to a wide range of commercial security and consumer applications, including 360-degree full-view cameras. Built on OmniVision's advanced PureCel® pixel architecture, the OS05A10 utilizes backside illumination (BSI) technology to deliver enhanced low-light sensitivity and wide field of view (FOV).

available in a lead-free package

Available in the popular 1/2.7-inch optical format, the OS05A10 enables video applications in widely used 4:3 and 16:9 aspect ratios. The sensor can capture 1080p full high definition slow-motion video at 120 frames per second (fps) and 2688 x 1944 resolution at 60 fps.

Additionally, the OS05A10 features a 12-degree chief ray angle (CRA) and a dual-exposure staggered high dynamic range (HDR) mode to enable excellent scene reproduction in difficult high-contrast lighting conditions.

The OS05A10 is compatible with MIPI and LVDS interfaces and comes in a chip scale package (CSP) of $6.6 \text{ mm} \times 5.9 \text{ mm}$.

Find out more at www.ovt.com.





Applications

- Security Cameras
- Action Cameras

Product Features

- 2 μm x 2 μm pixel
- optical size of 1/2.7"
- programmable controls for:
 frame rate - mirror and flip cropping
 windowing
- supports output formats: 10/12-bit RAW RGB
- supports images sizes:
 5MP (2688x1944) - 1080p (1920x1080) - 720p (1280x720)
- supports 2x2 binning

standard serial SCCB interface

High Resolution Consumer Cameras

- 12/10-bit ADC
- up to 4-lane MIPI/LVDS serial output interface (supports maximum speed up to 1500 Mbps/lane)
- 2-exposure staggered HDR support
- programmable I/O drive capability
- light sensing mode (LSM) PLL with SCC support
- support for frame sync

OS05A10-H79A-Z (color, lead-free, 79-pin CSP)

Product Specifications

- active array size: 2688 x 1944
- power supply:
- core: 1.2V - analog: 2.8V - I/O: 1.8V

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- power requirements:
 active: 221 mW
 standby: 210 μA
 XSHUTDOWN: 0.6 μA
- temperature range:
 operating: -30°C to +85°C junction temperature stable image: 0°C to +60°C junction
- temperature output formats: 10/12-bit RGB RAW
- lens size: 1/2.7"

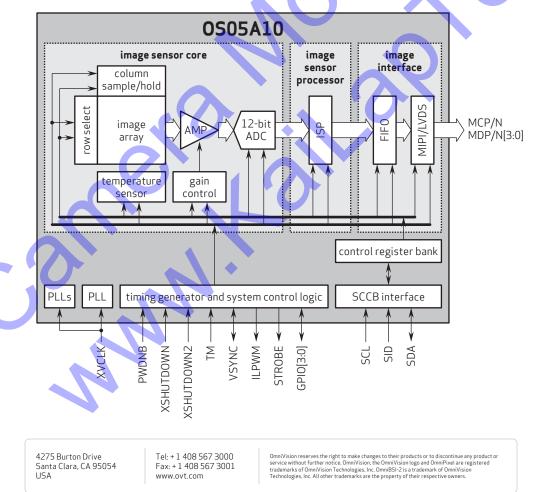
lens chief ray angle: 11° linear ■ input clock frequency: 6 - 27 MHz

OS05A10

- scan mode: progressive
- maximum image transfer rate: 2688x1944: 60 fps - 2688x1520: 60 fps
- maximum exposure interval: VTS 8
- minimum exposure interval: 2 t_{ROW}
- pixel size: 2.0 μm x 2.0 μm
- image area: 5434.56 μm x 3948.05 μm

package dimensions: - CSP: 6638.8 μm x 5935 μm

Functional Block Diagram





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