CMOS CAMERA MODULES

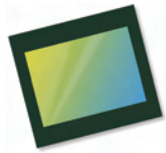## KLT-B8MF-OS05A10 V3.0

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

Módulo de câmara No.	KLT-B8MF-OS05A10 V3.0
Sensor de imagem	OS05A10
EFL	2.4 mm
F.NO	2.0
Pixel	2688 x 1944
Ângulo de visão	169°(D) 144°(H) 78.5°(V)
Tipo de lente	1/2.7 polegada
Dimensões da lente	13.10 x 13.10 x 16.06 mm
Tamanho do Módulo	40.00 x 22.00 mm
Tipo de Módulo	Foco Fixo
Interface	MIPI

Acasalamento Parte conector No. AXE540124

Conector de acoplamento na placa principal. Vendido separadamente.

OS05A10 5-megapixel product brief

lead free

available in a lead-free package

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 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 mm x 5.9 mm.

Find out more at www.ovt.com.

OmniVision®

Applications

- Security Cameras
- Action Cameras
- High Resolution Consumer Cameras

Ordering Information

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

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
- 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)
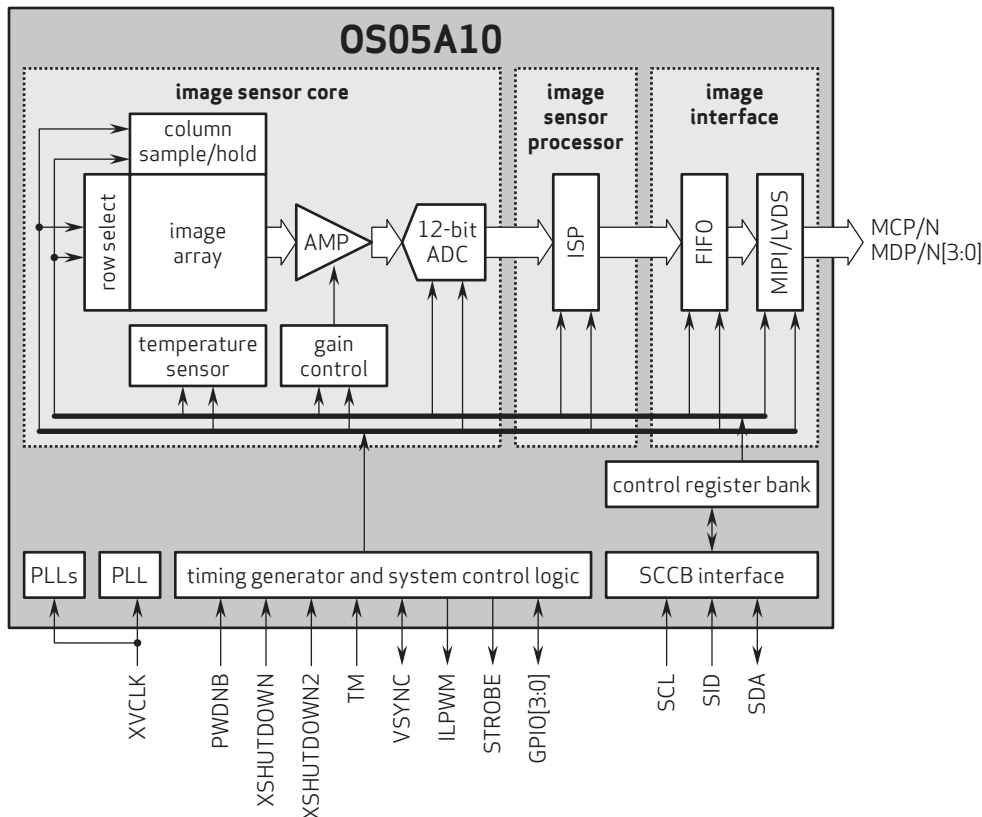- PLL with SCC support
- support for frame sync

Product Specifications

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