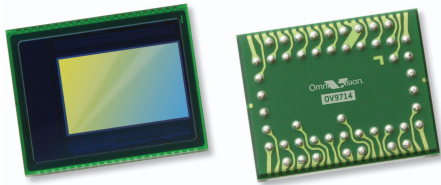


**KLT-K3MF-OV9714 V1.1****OmniVision OV9714 MIPI Interface Foco Fixo 1MP Módulo de Câmera**

<b>Módulo de câmara No.</b>	<b>KLT-K3MF-OV9714 V1.1</b>
<b>Sensor de imagem</b>	OV9714
<b>EFL</b>	3.29 mm
<b>F.NO</b>	2.8
<b>Pixel</b>	1296 x 812
<b>Ângulo de visão</b>	68.7°
<b>Tipo de lente</b>	1/4 polegada
<b>Dimensões da lente</b>	8.00 x 8.00 x 4.92 mm
<b>Tamanho do Módulo</b>	66.00 x 11.00 mm
<b>Tipo de Módulo</b>	Foco Fixo
<b>Interface</b>	MIPI

**Acasalamento Parte conector No. AXE540124**

Conector de acoplamento na placa principal. Vendido separadamente.



# OV9714 720p product brief



## Native High Definition OV9714 CameraChip™ With Improved Dynamic Range and 720p/60 Video



available in  
a lead-free  
package

The 1/4-inch OV9714 is a native high-definition (HD) image sensor capable of capturing high quality 720p video at 60 frames per second (fps) or cropped VGA at 120 fps. Built on an enhanced OmniPixel3-HS™ pixel, the OV9714 combines excellent low-light performance of 3300 mV/lux-sec and high dynamic range (HDR) with fast frame rates, making it ideally suited for entertainment, notebook, telepresence and high-end security applications.

The sensor's new and improved OmniPixel3-HS pixel architecture offers better low-light sensitivity, signal to noise ratio (SNR) performance and a 5 dB improvement in dynamic range compared to the previous generation. The OV9714's 12-bit RGB RAW output capability

provides optimized HDR, while the embedded sequential line- or frame-based HDR features allow higher dynamic range for high-contrast scenes often encountered indoors.

The OV9714's fast frame rate minimizes latency delay, resulting in quick response time for interactive gaming and real-time communication applications. Additionally, the sensor offers frame synchronization functionality for use in 3D (stereo) camera systems.

The sensor comes with a standard 2-lane MIPI interface and fits into an 8 x 6 x 4.5 mm module size.

Find out more at [www.ovt.com](http://www.ovt.com).

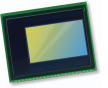
## Applications

- PC Multimedia
- Entertainment
- Tablets
- Cellular and Mobile Phones
- Security
- Games

## Product Features

- automatic black level calibration (ABLC)
- support 2x2 binning
- programmable controls for frame rate, mirror and flip, cropping and windowing
- standard serial SCCB interface
- image quality controls: lens correction and defective pixel canceling
- two-lane MIPI/LVDS serial output interface
- supports output formats: 8/10/12-bit RAW RGB (MIPI/LVDS)
- embedded 256 bits one-time programmable (OTP) memory for part identification, etc.
- supports horizontal and vertical sub-sampling
- on-chip phase lock loop (PLL)
- supports images sizes: 1280x800, 640x400, 320x200, and 160x100
- programmable I/O drive capability
- fast mode switching
- support alternate frame HDR/line HDR

# OV9714



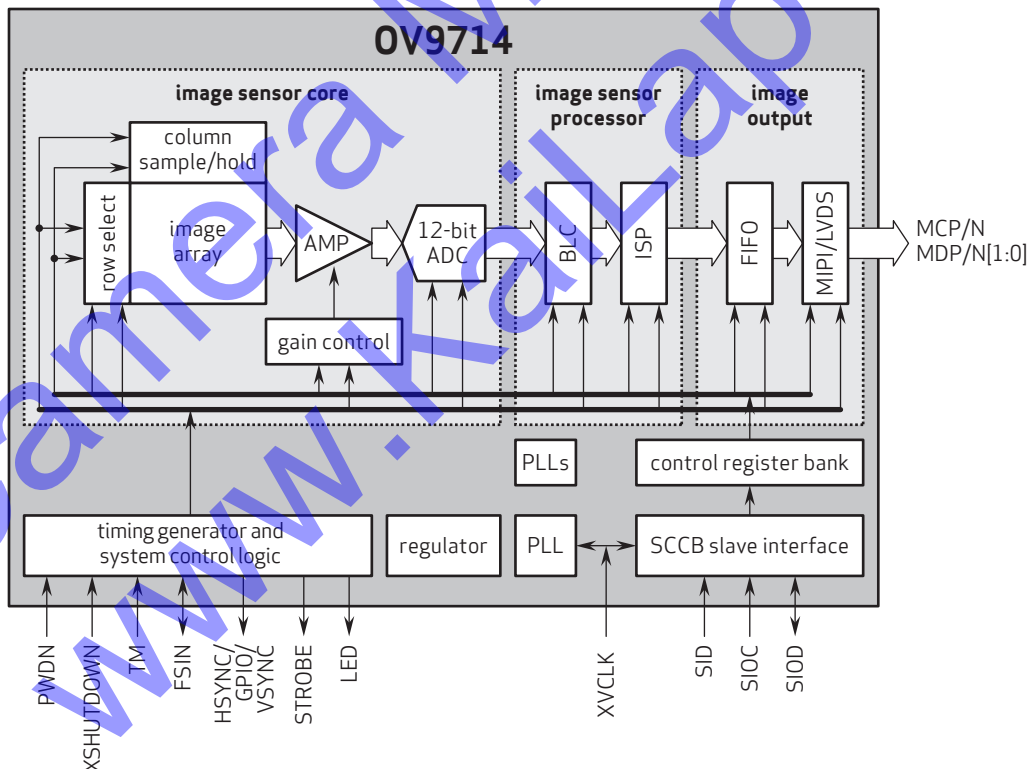
## Ordering Information

- OV09714-A49A (color, lead-free, 49-pin CSP3)

## Product Specifications

- active array size: 1296 x 812
- max S/N ratio: 39 dB
- power supply:
  - core: 1.5 VDC  $\pm$ 5%
  - analog: 2.6 - 3.0V
  - I/O: 1.7 - 3.0V
- dynamic range: 73 dB @ 8x gain
- power requirements:
  - active: 95 mA
  - standby: 30  $\mu$ A
  - xshutdown: 5  $\mu$ A
- maximum image transfer rate:
  - 1280x800: 60 fps
  - 640x400: 120 fps
  - 320x200: 240 fps
- temperature range:
  - operating: -30°C to 85°C junction temperature
  - stable image: 0°C to 50°C junction temperature
- sensitivity: 3300 mV/lux-sec
- scan mode: progressive
- output formats: 12-bit RGB RAW
- maximum exposure interval: 800 x  $t_{row}$
- lens size: 1/4"
- pixel size: 3.0  $\mu$ m x 3.0  $\mu$ m
- lens chief ray angle: 28.7° non-linear
- dark current: 2.3 mV/s @ 50°C junction temperature
- input clock frequency: 6 - 27 MHz
- image area: 3936  $\mu$ m x 2460  $\mu$ m
- package dimensions: 6110  $\mu$ m x 4930  $\mu$ m

## Functional Block Diagram



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