

**JAL-OV4689 V1.0 IR850**

**OmniVision OV4689 MIPI Interface Fixed Focus 4MP M12 Camera Module  
With IR 850nm Pass Filter Lens**



<b>Camera Module No.</b>	<b>JAL-OV4689 V1.0 IR850</b>
<b>Image Sensor</b>	OV4689
<b>EFL</b>	2.35 mm
<b>F.NO</b>	2.5
<b>Pixel</b>	2688 x 1520
<b>View Angle</b>	160°(D) 98°(H)
<b>Lens Type</b>	1/3 inch, IR 850nm Pass Filter
<b>Lens Dimensions</b>	13.7 x 13.7 x 14.2 mm
<b>Module Size</b>	40.05 x 17 mm
<b>Module Type</b>	Fixed Focus
<b>Interface</b>	MIPI

**Mating Connector Part No. AXK7L40223G**



Mating Connector On Main Board. Sold Separately.

## Applications

- Security and Surveillance

## Product Features

- automatic black level calibration (ABLC)
- programmable controls for frame rate, mirror and flip, cropping, and windowing
- static defective pixel canceling
- supports output formats: 10-bit RAW RGB (MIPI)
- supports horizontal and vertical subsampling
- supports images sizes: 4MP, 3MP, EIS1080p, 1080p, EIS720p
- fast mode switching
- support 2x2 binning, 4x4 binning, re-sampling filter
- standard serial SCCB interface
- up to 4-lane MIPI serial output interface
- embedded 4K bits one-time programmable (OTP) memory for part identification, etc
- two on-chip phase lock loops (PLLs)
- programmable I/O drive capability
- built-in temperature sensor
- supports staggered, sequential and alternative row HDR timing

# OV4689



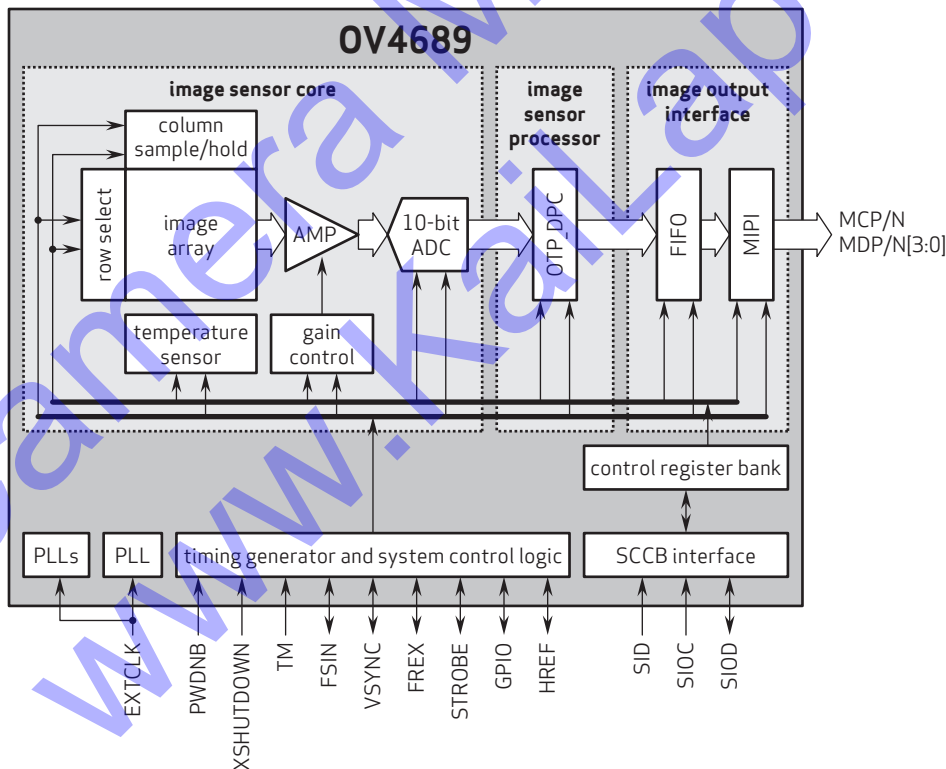
## Ordering Information

- OV04689-H67A (color, lead-free, 67-pin CSP5)

## Product Specifications

- active array size: 2688 x 1520
- max S/N ratio: 38.3 dB
- power supply:
  - core: 1.1 - 1.3V
  - analog: 2.6 - 3.0V
  - I/O: 1.7 - 3.0V
- dynamic range: 64.6 dB @ 1x gain
- power requirements:
  - active: 163 mA (261 mW)
  - standby: 1 mA
  - XSHUTDOWN: <math>\lt; 10 \mu\text{A}</math>
- temperature range:
  - operating: -30°C to +85°C junction temperature
  - stable image: 0°C to +60°C junction temperature
- output formats: 10-bit RAW RGB data
- maximum image transfer rate:
  - 2688x1520: 90 fps
  - 1920x1080: 120 fps
  - 1280x720: 180 fps
- lens size: 1/3"
- input clock frequency: 6 - 64 MHz
- lens chief ray angle: 0°
- sensitivity: 1900 mV/lux-sec
- scan mode: progressive
- maximum exposure interval: 1548 x T<sub>ROW</sub>
- pixel size: 2 μm x 2 μm
- dark current: 4 mV/sec @ 60°C junction temperature
- image area: 5440 μm x 3072 μm
- package dimensions: 6630 μm x 5830 μm

## Functional Block Diagram



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USA

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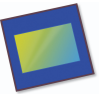
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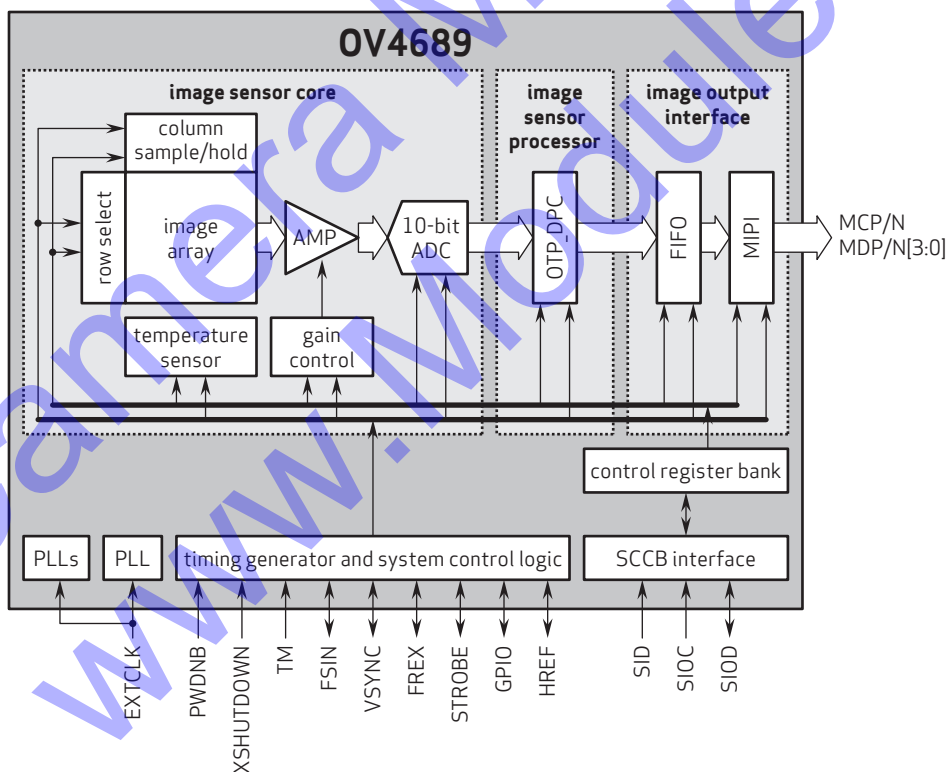
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