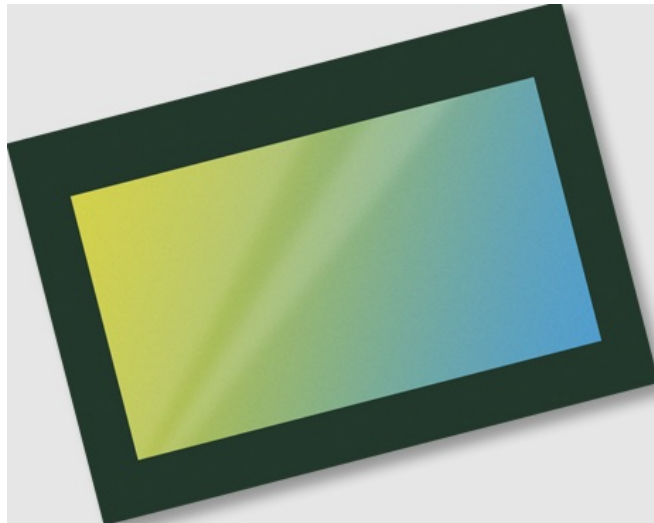


# OMNIVISION OV2735 High-Sensitivity 1080p HD OmniPixel 3-HS Sensor Owner's Manual

[Home](#) » [OMNIVISION](#) » OMNIVISION OV2735 High-Sensitivity 1080p HD OmniPixel 3-HS Sensor Owner's Manual 

## OMNIVISION OV2735 High-Sensitivity 1080p HD OmniPixel 3-HS Sensor Owner's Manual



### Contents

- [1 INSTRUCTION](#)
- [2 Applications](#)
- [3 Product Features](#)
- [4 Technical Specifications](#)
- [5 Functional Block Diagram](#)
- [6 Documents / Resources](#)

## INSTRUCTION

OMNIVISION'S OV2735 is a high-performance image sensor that brings 1080p high-definition (HD) video capture

to mainstream security and surveillance cameras. The OV2735 offers technical advancements such as support for low-power mode, stable image quality within operating temperatures ranging from 0°C to +60°C, and dramatically reduced power consumption. As such, the OV2735 offers security and surveillance camera OEMs an easy upgrade camera solution in the popular 1/2.7-inch optical format.

Built on OMNIVISION's proven OmniPixel 3-HS pixel technology, the OV2735 captures full-resolution 1080p HD video at 30 frames per second (fps) and 720p video at 60 fps. The OV2735 also offers MIPI with parallel support and frame synchronization in a compact and power-efficient package.

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

## Applications

- security IPC
- analog HD video cameras

## Product Features

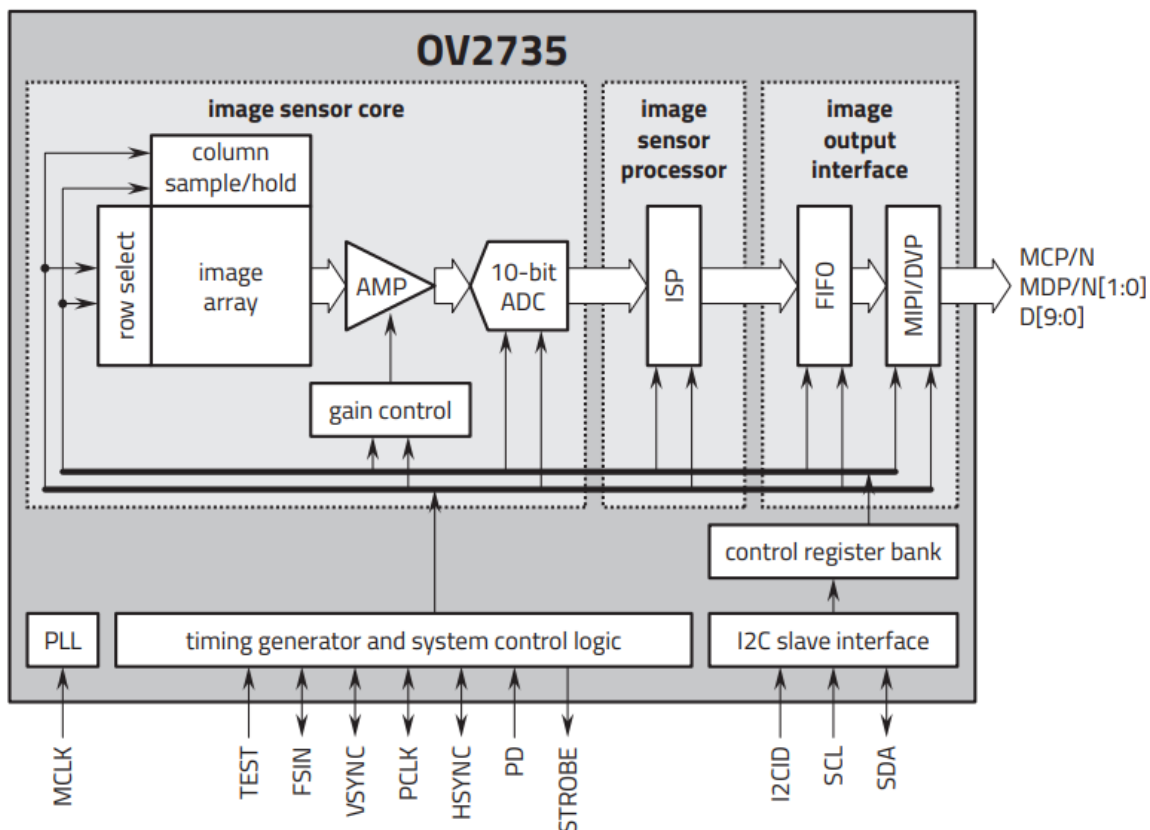
- programmable controls:
  - exposure
  - frame rate
  - image size
  - horizontal mirror
  - vertical flip
  - cropping
  - windowing
- – black level calibration (BLC)
- support for black sun cancellation
- defective pixel correction (DPC)
- supports binning function
- on-chip phase lock loop (PLL)
- support for low power mode
- digital video port (DVP) parallel output interface
- 12C control interface for register programming support for two lane MIPI interface (up to 420 Mbps) support for image sizes:
  - 1080p @ 30 fps
  - 720p @ 60 fps
  - VGA @ 60 fps

## Technical Specifications

- **active array size:** 1920 x 1080
- **maximum image transfer rate:** – 1080p: 30 fps – 720p: 60 fps
- **power supply:** – core: 1.7 – 1.9V (1.8V nominal) – analog: 2.6 – 3.0V (2.8V nominal) – I/O: 1.7 – 3.0V (1.8V nominal)
- **power requirements:** – active: 176 mW

- **temperature range:** – operating: -30°C to +85°C junction temperature
  - **stable image:** 0°C to +60°C junction temperature
- **output interfaces:** two-lane MIPI / DVP parallel
  - **output formats:** RAW10
- **lens size:** 1/2.7" • lens chief ray angle: 12° linear
  - **scan mode:** progressive
  - **shutter:** rolling shutter
  - **pixel size:** 3  $\mu$ m x 3  $\mu$ m
  - **image area:** 5808  $\mu$ m x 3288  $\mu$ m

## Functional Block Diagram



## COSTUMER SUPPORT

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[www.ovt.com](http://www.ovt.com)

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## Documents / Resources

	<p><a href="#">OMNIVISION OV2735 High-Sensitivity 1080p HD OmniPixel 3-HS Sensor</a> [pdf] Owner's Manual</p> <p>OV2735, OV2735 High-Sensitivity 1080p HD OmniPixel 3-HS Sensor, High-Sensitivity 1080p HD OmniPixel 3-HS Sensor, 1080p HD OmniPixel 3-HS Sensor, HD OmniPixel 3-HS Sensor, OmniPixel 3-HS Sensor, 3-HS Sensor, Sensor</p>
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