

OV2718 full HD (1080p) product brief



Best-In-Class Low-Light Sensitivity and 1080p High Definition Video for Mainstream Security Applications



available in
a lead-free
package

OmniVision's OV2718 is a native 16:9 high definition (HD) CameraChip™ sensor that delivers best-in-class low-light sensitivity, high dynamic range (HDR), and 1080p HD video. These capabilities make the OV2718 an ideal camera solution for mainstream security and surveillance systems.

Built on advanced 2.8-micron OmniBSI-2™ pixel architecture, the sensor can record 1080p HD video at 30 frames per second (fps) in HDR mode. The 1/2.9-inch

OV2718 leverages OmniVision's in-pixel HDR technology to capture exceptional images and video when recording in high- and low-light environments, a critical benefit for security and surveillance cameras.

The OV2718 is available in a 6.5 x 5.7 mm chip scale package (CSP).

Find out more at www.ovt.com.



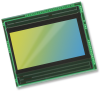
Applications

- Security and Surveillance Cameras

Product Features

- support for image size: 1920x1080, VGA, QVGA and any cropped size
- high dynamic range
- high sensitivity
- low power consumption
- image sensor processor functions: lens correction, defective pixel cancelation, and automatic black level correction
- supported output formats: RAW
- horizontal and vertical sub-sampling
- SCCB for register programming
- high speed serial data transfer with MIPI CSI-2/LVDS
- parallel 12-bit DVP output
- external frame synchronization capability
- embedded temperature sensor
- one time programmable (OTP) memory

OV2718



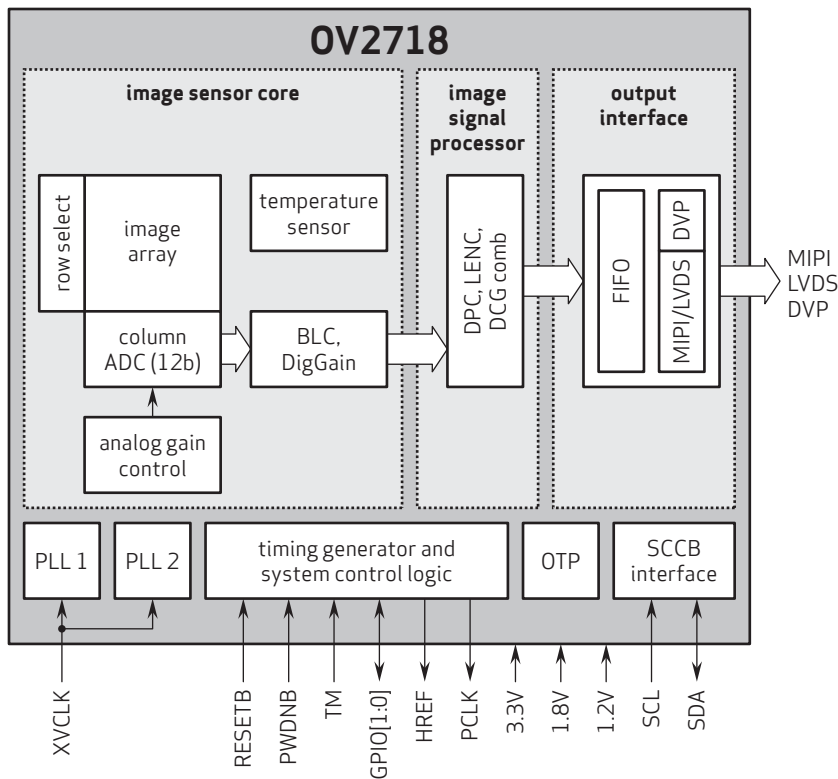
Ordering Information

- OV02718-H77A-1C**
(color, lead-free, 77-pin CSP5)

Product Specifications

- active array size:** 1920 x 1080
- power supply:**
 - analog: 3.14 - 3.47V
 - digital: 1.14 - 1.26V
 - DVDD: 1.7 - 1.9V
 - AVDD: 1.7 - 1.9V
- temperature range:**
 - operating: -30°C to +85°C junction temperature
 - stable: 0°C to +60°C junction temperature
- output interfaces:** up to 4-lane MIPI CSI-2/LVDS, 12-bit DVP
- lens size:** 1/2.9°
- lens chief ray angle:** 9°
- output formats:** linear - 12-bit RAW; HDR - 2x12-bit DCG RAW, 16-bit combined DCG, 12-bit compressed combined DCG
- input clock frequency:** 6 - 36 MHz
- scan mode:** progressive
- maximum image transfer rate:** 30 fps
- shutter:** rolling shutter
- pixel size:** 2.8 μm x 2.8 μm
- image area:** 5482.35 μm x 3202 μm
- package dimensions:** 6534 μm x 5724 μm

Functional Block Diagram



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