

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



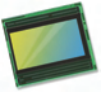
## Applications

- Security and Surveillance Cameras
- Smart Home
- Video Applications

## Product Features

- support for image size:
  - 1920 x 1080
  - VGA
  - QVGA, and any cropped size
- high dynamic range
- high sensitivity
- low power consumption
- image sensor processor functions:
  - lens correction
  - defective pixel cancelation
  - 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
- one time programmable (OTP) memory

# OV2718



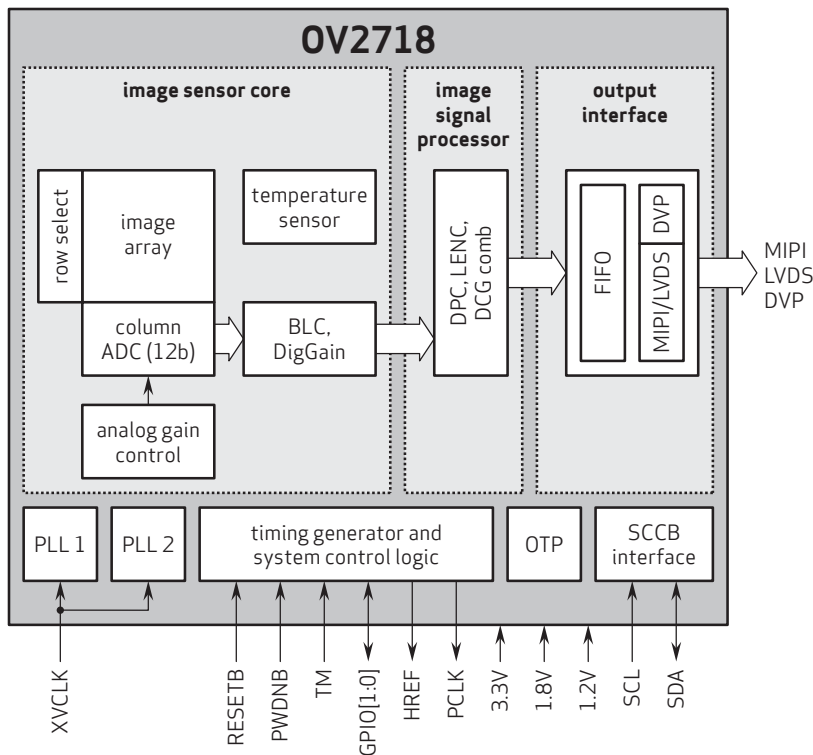
## Ordering Information

- OV02718-H77A-2B (color, lead-free) 77-pin CSP
- OV02718-H77A-PE (color, lead-free) 77-pin CSP with protective film

## Product Specifications

- active array size: 1920 x 1080
- power supply:
  - analog: 3.14 - 3.47V
  - digital: 1.2 - 1.4V
  - DVDD: 1.7 - 1.9V
  - AVDD: 1.7 - 1.9V
- power requirements:
  - active: 350 mW
  - software standby: 1.14 mW
- 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
- input clock frequency: 6 - 36 MHz
- 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
- scan mode: progressive
- shutter: rolling shutter
- maximum image transfer rate: 30 fps
- sensitivity: 26,200 e<sup>-</sup>/Lux-sec @ 530 nm
- max S/N ratio: 42.6 dB
- dynamic range: 86 dB
- pixel size: 2.8 μm x 2.8 μm
- image area: 5482.35 μm x 3202 μm
- package dimensions:
  - CSP: 6544 μm x 5734 μm

## Functional Block Diagram



4275 Burton Drive  
Santa Clara, CA 95054  
USA

Tel: + 1 408 567 3000  
Fax: + 1 408 567 3001  
www.ovt.com

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