

0V2718 full HD (1080p) product brief





available in a lead-free package

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

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 0V2718 is available in a 6.5×5.7 mm chip scale package (CSP).

Find out more at www.ovt.com.





Applications

■ Security and Surveillance Cameras

0V2718



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

■ 0V02718-H77A-1C (color, lead-free, 77-pin CSP5)

Product Specifications

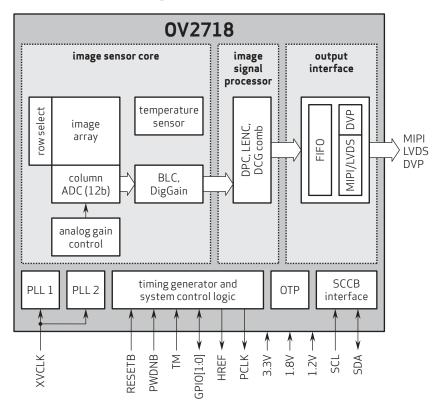
- active array size: 1920 x 1080

- power supply:
 analog: 3.14 3.47V
 digital: 1.14 1.26V
 DOVDD: 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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