



OV2718

1080p full HD product brief



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

Find out more at www.ovt.com.



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

Applications

- security and surveillance cameras
- smart home
- video applications

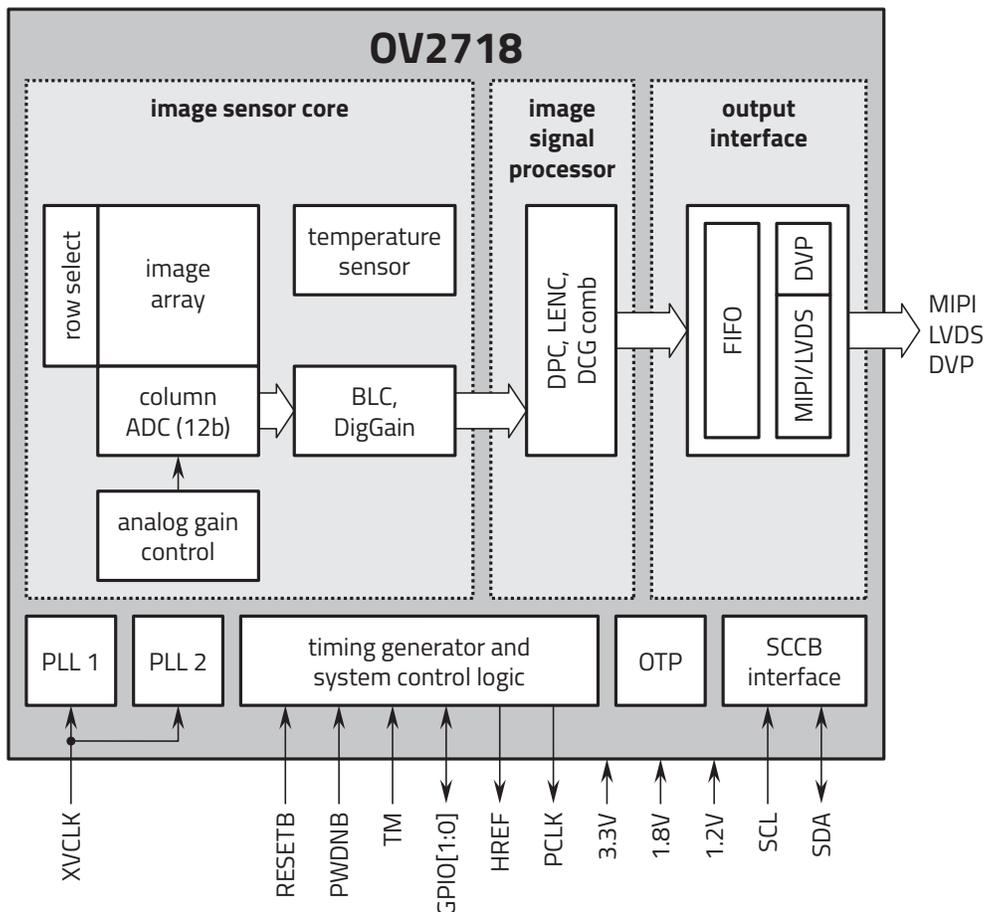
Product Features

- 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 cancellation
 - 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

Technical Specifications

- active array size: 1920 x 1080
- maximum image transfer rate:
 - 30 fps full resolution HDR
 - 30 fps full resolution linear
- power supply:
 - analog: 3.14 ~ 3.47V
 - digital: 1.2 ~ 1.4V
 - DOVDD: 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
- 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
- pixel size: 2.8 μm x 2.8 μm
- image area: 5482.35 μm x 3202 μm

Functional Block Diagram



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