

applications

- security and surveillance cameras
- video applications
- smart home

ordering information

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

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
- one-time programmable (OTP) memory



note To reduce image artifacts from infrared light, and provide the best image quality, OmniVision recommends an IR cut filter

key specifications (typical)

- active array size: 1920 x 1080
- 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 (see [table 8-2](#))
 - stable image: 0°C to +60°C junction temperature (see [table 8-2](#))
- 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° (see [figure 10-2](#))
- 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 full resolution HDR, 30 fps full resolution linear
- sensitivity: 26,200 e⁻/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: 6544 μm x 5734 μm