

## Low-Power 8-Megapixel PureCel® Sensor Brings 4K2K Video to Security and Consumer Applications

OMNIVISION's OS08A10 is a low-power image sensor that brings 8-megapixel resolution to a variety of applications, including commercial surveillance, IoT, action cameras, drones, and augmented / virtual reality (AR/VR) systems. Built on OMNIVISION's advanced PureCel® pixel architecture, the OS08A10 leverages backside illumination (BSI) technology with improved low-light sensitivity to deliver high-resolution images and capture ultra-high-resolution 4K2K video, even in challenging high-contrast lighting conditions. The OSO8A10 captures smooth, best-in-class 4K2K video at 60 frames per second (fps) and 1080p video at 120 fps, enabling detailed wide-area coverage.

The OS08A10 also features a 11-degree chief ray angle (CRA), a two-exposure staggered high dynamic range (HDR) mode, and low power requirements to enable a range of battery-powered drones and wireless devices. The OS08A10 is compatible with advanced compression technology such as high-efficiency video coding (HEVC) to deliver 4K video to mainstream displays.

Find out more at www.ovt.com.





# OS08A10

#### **Ordering Information**

 OSO8A10-H92A-1B (color, lead-free) 92-pin CSP

### Applications

- security cameras
- action cameras
- high resolution consumer cameras
- **Technical Specifications**
- active array size: 3840 x 2160
- maximum image transfer rate:
   4K2K: 60 fps
- 2560 x 1440: 60 fps
- 1080p: 120 fps
- power supply:
- core: 1.2V - analog: 2.8V
- 1/0: 1.8V
- power requirements:
   active: 240 mA
- XSHUTDOWN: <10  $\mu$ A
- output formats: 10/12-bit RGB RAW

• temperature range:

digital still cameras (DSC)

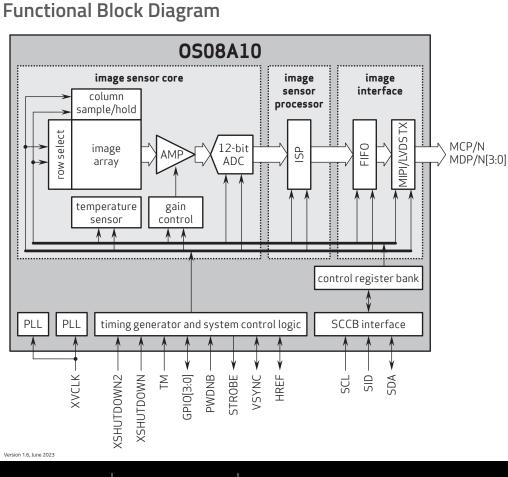
digital video camcorders (DVC)

- operating: -30°C to +85°C junction temperature
   stable image: 0°C to +60°C junction temperature
- lens size: 1/1.8"
- Iens chief ray angle: 11° linear
- scan mode: progressive
- pixel size: 2.0 µm x 2.0 µm
- image area: 7736.256 μm x 4379.616 μm

#### **Product Features**

- 2 µm x 2 µm pixel
- optical size of 1/1.8"
- programmable controls for:
   frame rate
- mirror and flip
- cropping
  windowing
- supports output formats: 10/12-bit RGB RAW
- supports image sizes:
- 4K2K (3840 x 2160)
- 2560 x 1440 - 1080p (1920 x 1080)
- 720p (1280 x 720)

- supports 2x2 binning
- standard serial SCCB interface
- 12-bit ADC
- up to 4-lane MIPI/LVDS serial output interface (supports maximum speed up to 1500 Mbps/lane)
- 2-exposure staggered HDR support
- programmable I/O drive capability
- light sensing mode (LSM)
- PLL with SCC support
- support for FSIN





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