

OS08G10

8-Megapixel Product Brief



High Frame Rate HDR CMOS Image Sensor featuring TheiaCel™ Technology for High Resolution Security Applications

The OS08G10 is an 8-megapixel (MP) CMOS image sensor that features OMNIVISION's 2.1-micron (µm) TheiaCel™ technology, which harnesses the capabilities of next-generation lateral overflow integration capacitors (LOFIC) and OMNIVISION's DCG™ high dynamic range (HDR) technology for use in security cameras and high resolution consumer applications.

The new OS08G10 achieves overall superior performance in key areas compared to its non-LOFIC-based predecessor – in particular, its LFM dynamic range is 3.3x higher and total dynamic range nearly 3x higher.

The OS08G10 can support 45 fps high frame rate HDR mode at 4K resolution, and can achieve 140 dB highest high dynamic range.

Applications

- Security cameras
- High resolution consumer cameras

Features

- **Active array size:** 3840 x 2160
- **Maximum image transfer rate:**
  - 45 fps @ 3840 x 2160
- **Power supply:**
  - Analog: 3.3V
  - Digital: 1.1V
  - I/O pads: 1.8/3.3V
- **Output interfaces:** Up to 4-lane MIPI CSI-2
- **Output formats:** Uncompressed 24-bit (HDR4)/20-bit (HDR3), and 20/16/14/12-bit (PWL) combined HDR
- **Lens size:** 1/1.729"
- **Pixel size:** 2.1 µm x 2.1 µm

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