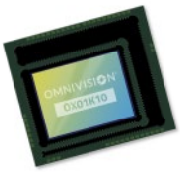


OX01K10

1.2-Megapixel Product Brief



1/5" Color 1280 x 960 HDR CMOS Image Sensor with PureCel®Plus Technology for Automotive Vision Systems

The OX01K10 is a 1/5" optical format, 1280 x 960 single-chip, low power CMOS image sensor featuring active-pixel, digital, and high dynamic range (HDR) for both human vision and machine vision automotive applications.

The OX01K10 features PureCel®Plus technology to extend the dynamic range. The on-chip AEC/AGC automatically adjusts the ratio of the exposure and gain of the sub-pixels based on the dynamic range of the scene. The fully processed output provides the optimized HDR rendering for human vision applications.

The OX01K10 is a complete camera-on-a-chip. It performs sophisticated camera functions on-chip controlled via the serial camera control bus (SCCB) interface. This includes lens shading correction, auto white balance, HDR combination, defect pixel correction, color interpolation and correction, de-noise and sharpening, gamma correction and tone mapping. It enables advanced HDR imaging in a simple, cost effective system.

Applications

- 360° surround view systems
- Rear view cameras

Features

- **Active array size:** 1280 x 960
- **Maximum image transfer rate:**
  - 30 fps @ 1280 x 960 YUV422
- **Power supply:**
  - Analog: 3.3V
  - Digital: 1.2V
  - I/O: 1.8V or 3.3V
- **Output interfaces:** Up to 2-lane MIPI CSI-2 and 96 MHz parallel clock
- **Output formats:**
  - Dual exposure HDR (long and short)
  - 3-exposure HDR (long, short, and very short)
- **Lens size:** 1/5"
- **Pixel size:** 1.998 µm x 1.998 µm

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