OX01G10

1.3-Megapixel Product Brief

1/3.55" Color 1.3-Megapixel (1340 x 1020) HDR CMOS Image Sensor with PureCel®Plus Technology

The OX01G10 is a 1/3.55" optical format, 1340 x 1020 single-chip, low power CMOS, active-pixel, digital, high dynamic range (HDR) sensor for both human vision and machine vision automotive applications.

The OX01G10 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 different exposure channels based on the dynamic range of the scene. The fully processed output provides the optimized HDR rendering for human vision applications.

The OX01G10 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 system
- Rear view camera

Features

- **Active array size:** 1340 x 1020
- **Maximum image transfer rate:**
  - 1340 x 1020: 30 fps (10-bit)
- **Power supply:**
  - Analog: 3.3V
  - Digital: 1.1V
  - I/O pins: 1.8V or 3.3V
- **Output interfaces:** Up to 2-lane MIPI CSI-2 and 96 MHz parallel clock
- **Output formats:**
  - Linear output
  - Dual exposure HDR (long and short)
  - 3-exposure HDR (long, short, and very short)
- **Lens size:** 1/3.55"
- **Pixel size:** 3 µm x 3 µm

Version 1.0, September 2025

OMNIVISION®

4275 Burton Drive
Santa Clara, CA 95054
USA

Tel: + 1 408 567 3000
Fax: + 1 408 567 3001
www.ovt.com