OC0TC

400 x 400 Product Brief

Smallest Reflowable Global Shutter Camera for Augmented Reality and Smart Glasses

The OC0TC reflowable global shutter (GS) camera is designed for eye and face tracking in augmented reality (AR) consumer headsets and smart glasses. Based on OMNIVISION's patented CameraCubeChip® technology, the OC0TC is a complete camera module that features a 2.2-micron (µm) pixel OG0TC GS CMOS image sensor with patented DCG™ high dynamic range (HDR) technology.

With a z-height of just 1.7 millimeters (mm) and a net weight of 6.71 milligrams (mg), the OC0TC is the world's smallest and lightest GS camera for AR and smart glasses. It features 400 x 400 resolution and ultra-low power consumption at just 28 milliwatts (mW). A 940-nanometer (nm) coating is applied to the camera lenses to suppress outdoor sunlight and improve user comfort for all-day usability.

Applications

- AR / VR / MR
- Machine vision

Features

- **Active array size:** 400 x 400
- **Maximum image transfer rate:**
  - 400 x 400: 240 fps
- **Power supply:**
  - Analog: 2.8V (nominal)
  - Core: 1.0V (C-PHY), 1.1V (nominal, D-PHY)
- **Output interfaces:**
  1-lane MIPI D-PHY @ 1 Gbps /
  1-trio MIPI C-PHY @ 1 Gsps
- **Output formats:** 8/10/12/14-bit RAW
- **Lens size:** 1/14.464"
- **f no.:** 2.3
- **Diagonal field-of-view (DFOV):** 103°
- **Pixel size:** 2.2 µm x 2.2 µm

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