

OG0FA1B

640 x 640 Product Brief



1/9.040" Global Shutter CMOS Image Sensor with PureCel®Plus-S and Nyxel® Technologies for Computing Applications

The OG0FA1B B&W CMOS image sensor is a low voltage, high performance, 1/9.040-inch optical format that provides the functionality of a single (640 x 640) camera using PureCel®Plus-S, Global Shutter, and Nyxel® technologies designed for the computing market including AR/VR, gaming, machine vision and biometric authentication applications.

The OG0FA1B provides full-frame, sub-sampled, and windowed 8/10-bit MIPI via the control of the I3C and serial camera control bus (SCCB) interface.

The OG0FA1B performs sophisticated camera functions on-chip controlled via the serial camera control bus (SCCB) interface. These functions include black level calibration (BLC) and defect pixel cancellation (DPC).

Applications

- Augmented and virtual reality
- Gaming
- Machine vision
- Industrial automation
- Drones
- Biometric authentication
- 3D imaging
- Industrial bar code scanning

Features

- **Active array size:** 640 x 640
- **Maximum image transfer rate:**
  - 640 x 640: 240 fps
- **Power supply:**
  - Analog: 2.8V (nominal)
  - Digital: 1.1V
  - I/O pads: 1.2V/1.8V
- **Output interfaces:** 1-lane MIPI D-PHY @ 1.5 Gbps / MIPI C-PHY @ 1 Gsps / 2-lane SPI @ 70 Mbps per lane
- **Output formats:** 8/10-bit RAW (8/10-bit RAW for SPI)
- **Lens size:** 1/9.040"
- **Pixel size:** 2.2 µm x 2.2 µm

Version 1.0, May 2026

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