



OV05C10

5.2-Megapixel Product Brief



16:10 Aspect Ratio, 5.2MP Resolution CMOS Image Sensor Designed for Laptops and IoT Devices

The OV05C10 CMOS image sensor features 5.2-megapixel (MP) resolution with 1.12 μm pixels and is specially developed for 16:10 aspect ratio notebooks, including mainstream and high-end laptops, tablets and IOT devices.

The backside illumination (BSI) image sensor is based on OMNIVISION's PureCel®Plus technology for higher sensitivity, less noise and better overall image quality.

The OV05C10 features two-exposure staggered HDR timing at 5.2MP and 60 frames per second (fps), allowing for improved image quality in bright or dark environments.

At 5.2MP resolution, the OV05C10 image sensor has ample pixels to support auto framing for video conferencing, which automatically adjusts the camera's field-of-view to keep the person speaking at the center of the image while cropping out distracting backgrounds.

The OV05C10 also supports human presence detection (HPD), which increases the efficiency of artificial intelligence (AI) applications and extends the battery life of portable devices.

Applications

- Laptop PCs
- Smartphones
- PC multimedia
- Tablets

Features

- **Active array size:** 2888 x 1808
- **Maximum image transfer rate:**
 - 2888 x 1808: 60 fps
 - 2888 x 1808: 30 fps (HDR mode)
- **Power supply:**
 - Core: 1.2V
 - Analog: 2.8V
 - I/O: 1.2V / 1.8V
- **Output interfaces:** 10-bit 2-lane MIPI TX
- **Output formats:** 10-bit RGB RAW / 8-bit RGB RAW for ULP
- **Lens size:** 1/4.734"
- **Pixel size:** 1.116 μm x 1.116 μm

Version 1.1, October 2026