

OV2640 Camera Module for ESP32-CAM and TTGO Series Boards 24Pin, 0.5mm, 75mm, 66 Degree



Sensor Model:	OV2640
Communication Interface	DVP (24 PIN)
Resolution:	2 MP
Cable Length (M):	75MM
Field of View:	66°
Compatible With	ESP32-CAM, LilyGo TTGO T-Camera, TTGO T-Journal

Description:

The OV2640 is a 1/4-inch CMOS UXGA (1632*1232) image sensor. The sensor's small size and low operating voltage provide all the features of a single UXGA camera and image processor.

Through the SCCB bus control, it can output 8/10-bit image data of various resolutions such as full-frame, sub-sampling, zooming and windowing. The UXGA image of this product can reach up to 15 frames per second (up to 30 frames for SVGA and 60 frames for CIF). Users have complete control over image quality, data format and transmission.

All image processing functions including gamma curve, white balance, contrast, chroma, etc. can be programmed via the SCCB interface. Image [Sensors](#) use unique sensor technology to improve image quality and reduce sharp and stable color images by reducing or eliminating optical or electronic defects such as fixed pattern noise, smearing, and floating.

Specifications:

- Output support for Raw RGB, RGB (RGB565/555), GRB422, YUV (422/420) and YCbCr (4:2:2) formats
- Supports image sizes: UXGA, SXGA, SVGA, and any size scaling down from SXGA to 40x30
- Image quality controls including color saturation, gamma, sharpness (edge enhancement), lens correction, white pixel canceling, noise-canceling, and 50/60 Hz luminance detection
- Automatic image control functions including Automatic Exposure Control (AEC), Automatic Gain Control (AGC), Automatic White Balance (AWB), Automatic Band Filter (ABF), and Automatic Black-Level Calibration (ABLC)
- 66 degree
- High sensitivity for low-light operation
- Low operating voltage for embedded portable apps
- Standard SCCB interface
- Line optical black level output capability
- Video or snapshot operation
- Zooming, panning, and windowing functions
- Internal/external frame synchronization
- Variable frame rate control

- Supports LED and flash strobe mode
- Supports scaling
- Supports compression
- Embedded microcontroller

Applications:

- Cellular and Camera Phones
- Toys
- PC Multimedia
- Digital Still Cameras

Package Includes:

- 1 x OV2640 Camera Module for ESP32-CAM and TTGO Series Boards (24Pin, 0.5mm, 75mm, 66Degree)