

INDUSTRIAL PRODUCT DATASHEET

ESP32-CAM Development Board-Micro Camera Module OV2640 With WIFI + Bluetooth

ESP32-CAM Development Board with OV2640 camera enables smart home, automatic control, smart Bluetooth speaker, industrial wireless control, QR wireless identification, and wireless positioning system applications.

SKU

113990580

UPDATED

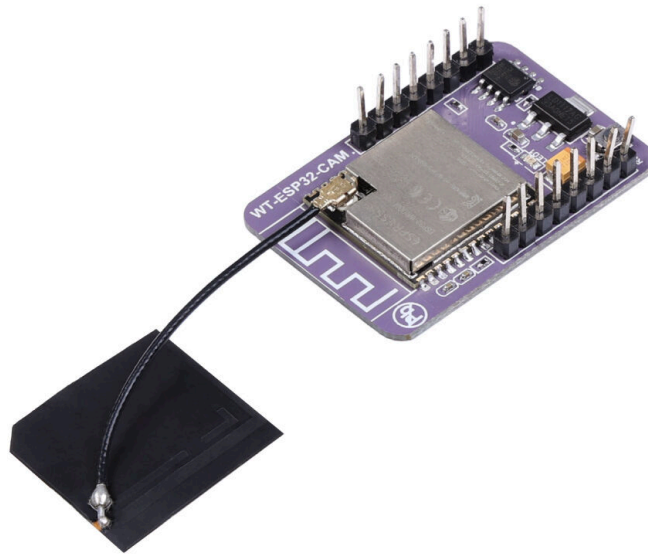
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PRICE

\$9.90(Excl. VAT)



Overview

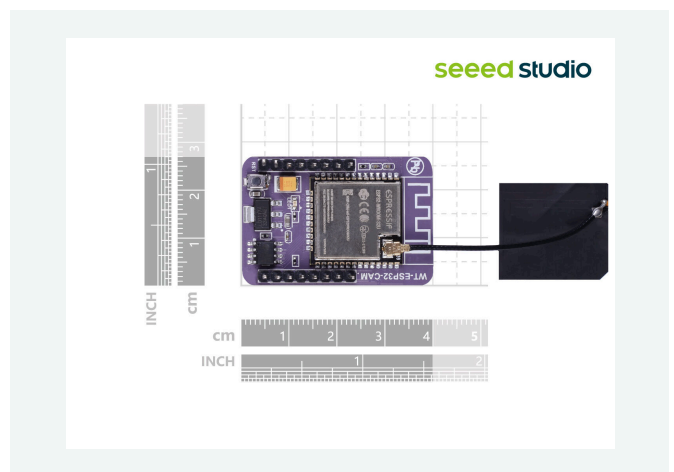
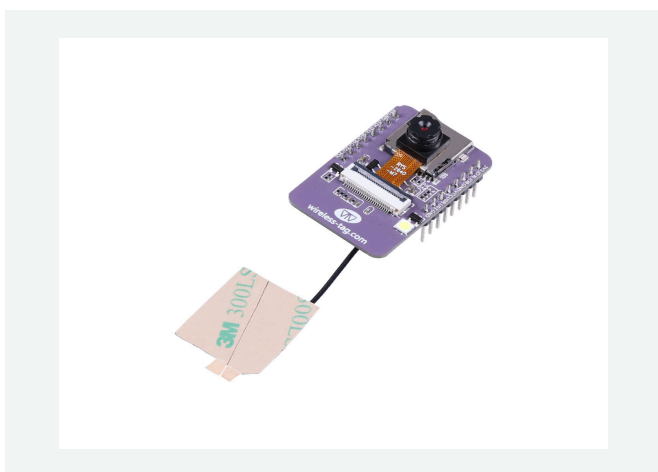
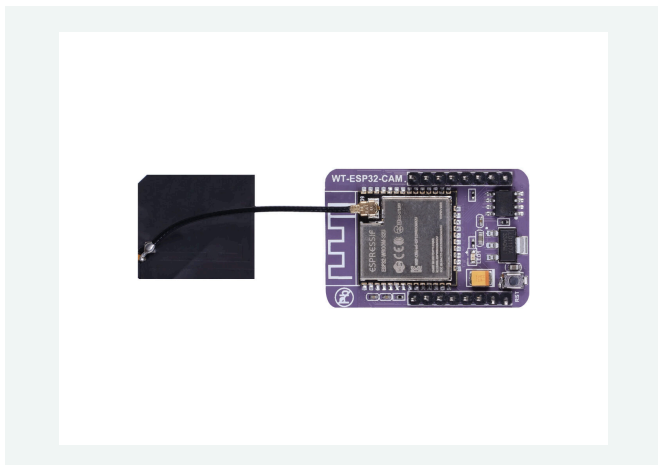


The ESP32-CAM Development Board-Micro Camera Module OV2640 With WIFI + Bluetooth is an ultra-small 802.11b/g/n Wi-Fi+BT/BLE SOC module with a camera, delivering up to 240MHz and 600 DMIPS. It supports JPEG, BMP, and grayscale image output, fast Wi-Fi upload, FOTA upgrades, and interfaces like UART/SPI/I2C/PWM/ADC/DAC for IoT development using LwIP and FreeRTOS.

Key Features

- **Highly integrated and powerful products:** As an ultra-small 802.11b /g/n WI-FI+BT/BLE SOC module, its dominant frequency speed is up to 240MHz and summary computing power is up to 600 DMIPS.
- **Easy and Convenient Image Export and Upload:** Supports multiple image formats JPEG(OV2640 only)/BMP/ gray output, fast WI-FI picture upload speed.
- **Easy Upgrade and Maintain:** Support for serial port local and remote firmware upgrades (FOTA).
- **Rich Interfaces:** It supports UART/SPI/I2C/PWM/ADC/DAC and other interfaces, allowing developers to use their imagination for secondary development fully.
- **Embedded development & IoT terminal hardware:** the ESP-32CAM minimum system board supports Embedded Lwip and FreeRTOS to development, which can be used in various IoT hardware terminals.

Product Gallery



Specification

Product Model	WT-ESP32-CAM
Chip	ESP32-D0WD
Camera	OV2640
Antenna	Onboard PCB antenna, gain 2dBi
Wi-Fi	802.11 b/g/n/e/i
Bluetooth	Bluetooth 4.2BR/EDR and BLE standards
AMM	520KB SRAM +4M PSRAM
Module Interface	UART、SPI、I2C、PWM
GPIO	9
Image output format	JPEG(OV2640 only),BMP,GRAYSCALE
TF cards supportive	Maximum support for 4G
SPI Flash	32Mbit
Operating Voltage	4.75-5.25V
Operating Temperature	-20 °C ~ 85 °C
Dimensions	27*40.5*4.5 (±0.2) mm
Battery	Exclude

Applications

- **Smart Home**
- **Automatic control**
- **Smart Bluetooth speaker**
- **Industrial wireless control**
- **QR wireless identification**
- **wireless positioning system**

Part List

ESP32-CAM Development Board	x1
Camera Module-OV2640-FPC-24P-0.5mm-21mm- 2 Megapixel	x1
Antenna	x1

Compliance & Logistics



HSCODE	8517180050
USHSCODE	8517180050
UPC	841454121077
EUHSCODE	8543709099
COO	CHINA

Resource Links

- <https://www.seeedstudio.com/ESP32-CAM-Development-Board-with-camer-p-3153.html>
- [OV2640 Camera Datasheet](#)

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