ESP32-CAM-MB USB Programmer Board

USB Programming & Power Adapter for ESP32-CAM



The ESP32-CAM-MB is a USB programmer and power adapter designed specifically for ESP32-CAM boards. It provides an easy way to power and program the ESP32-CAM through a USB cable without requiring a separate USB-to-Serial adapter.

TOP USES

- ESP32-CAM Programming
- USB Power
- Serial Communication
- Easy Development Setup

KEY FEATURES

- Direct ESP32-CAM Connection
- Micro-USB Interface
- USB-to-Serial Programming
- 5 V Power Input
- Plug-and-Play Design
- Programming Mode Support

Technical Specifications

ESP32-CAM-MB USB Programmer Board

Parameter	Value
Interface	Micro-USB
Input Voltage	5 V USB
Function	Programming + Power
Connection	Direct ESP32-CAM Header
Serial	USB-to-Serial
Board Type	ESP32-CAM-MB

Pinout

ESP32-CAM-MB USB Programmer Board



PIN FUNCTIONS

Pin	Function	Notes
ESP32-CAM Header	Connects directly to ESP32-CAM	
Micro-USB	Connects to PC or USB power	
5V	Power supplied to ESP32-CAM	
GND	Ground	
TX / RX	Serial communication	
IO0	Programming mode control	

WIRING NOTES

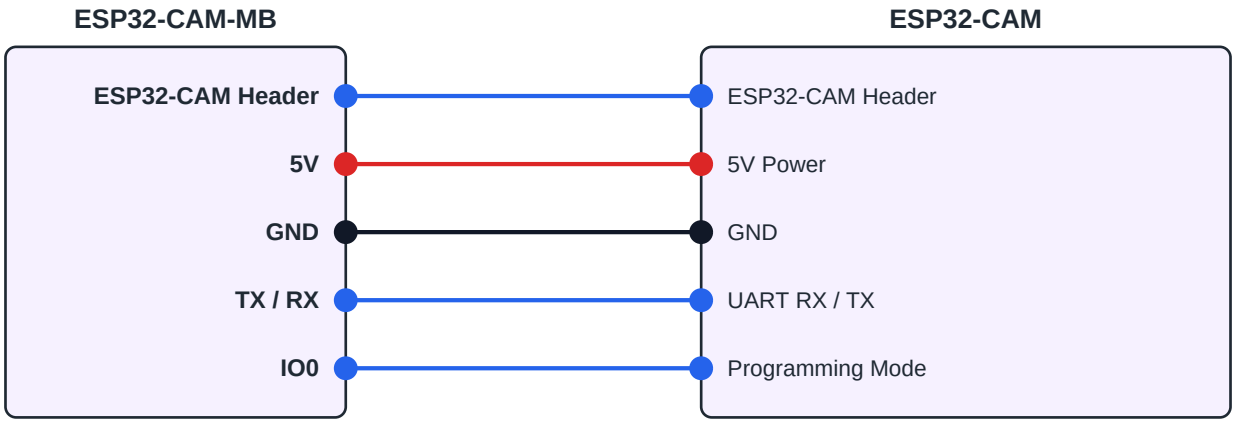
- Install the ESP32-CAM into the programmer header with the correct orientation.
- The programmer provides USB power and serial communication.
- GPIO0 is used to enter programming mode when required.
- After uploading, exit programming mode and reset the ESP32-CAM.

Example Project

ESP32-CAM USB Programming Setup

Connect the ESP32-CAM to the ESP32-CAM-MB to provide USB power and programming through a single Micro-USB cable.

CIRCUIT



EXAMPLE CODE

EXPECTED RESULT

- Insert the ESP32-CAM into the programmer board.
- Connect the Micro-USB cable to the ESP32-CAM-MB.
- The board provides power and USB serial communication.
- Use programming mode when uploading firmware.
- Reset the ESP32-CAM after programming to run the uploaded firmware.

Useful Links

ESP32-CAM-MB USB Programmer Board

Resource	Link
ESP32 Documentation	https://docs.espressif.com/projects/esp-idf/en/latest/esp32/
ESP32 Arduino Core	https://github.com/espressif/arduino-esp32
Arduino IDE	https://www.arduino.cc/en/software

COMPATIBLE COMPONENTS

- ESP32-CAM
- OV2640 Camera Module
- Micro-USB Cable

Need this component?

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https://techzoneegypt.com/p/esp32-cam-mb-usb-programmer-board