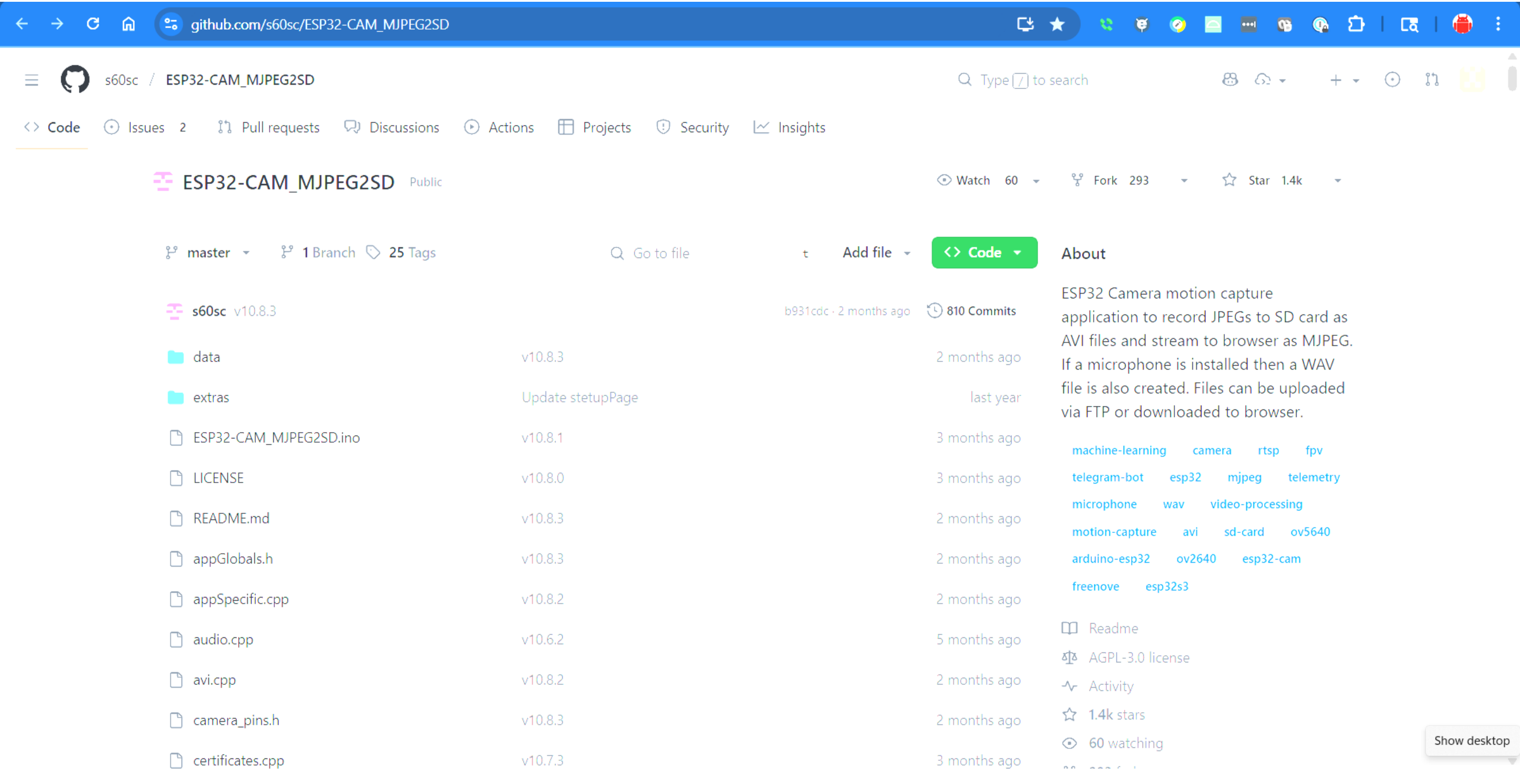
Download ESPCAM-32

https://github.com/s60sc/ESP32-CAM_MJPEG2SD


github.com/s60sc/ESP32-CAM_MJPEG2SD
s60sc / ESP32-CAM_MJPEG2SD
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Code
Issues 2
Pull requests
Discussions
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Security
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ESP32-CAM_MJPEG2SD.ino v10.8.1 3 months ago
LICENSE v10.8.0 3 months ago
README.md v10.8.3 2 months ago
appGlobals.h v10.8.3 2 months ago
appSpecific.cpp v10.8.2 2 months ago
audio.cpp v10.6.2 5 months ago
avi.cpp v10.8.2 2 months ago
camera_pins.h v10.8.3 2 months ago
certificates.cpp v10.7.3 3 months ago
About
ESP32 Camera motion capture application to record JPEGs to SD card as AVI files and stream to browser as MJPEG. If a microphone is installed then a WAV file is also created. Files can be uploaded via FTP or downloaded to browser.
machine-learning camera rtsp fpv telegram-bot esp32 mjpeg telemetry microphone wav video-processing motion-capture avi sd-card ov5640 arduino-esp32 ov2640 esp32-cam freenove esp32s3
Readme
AGPL-3.0 license
Activity
1.4k stars
60 watching
Show desktop

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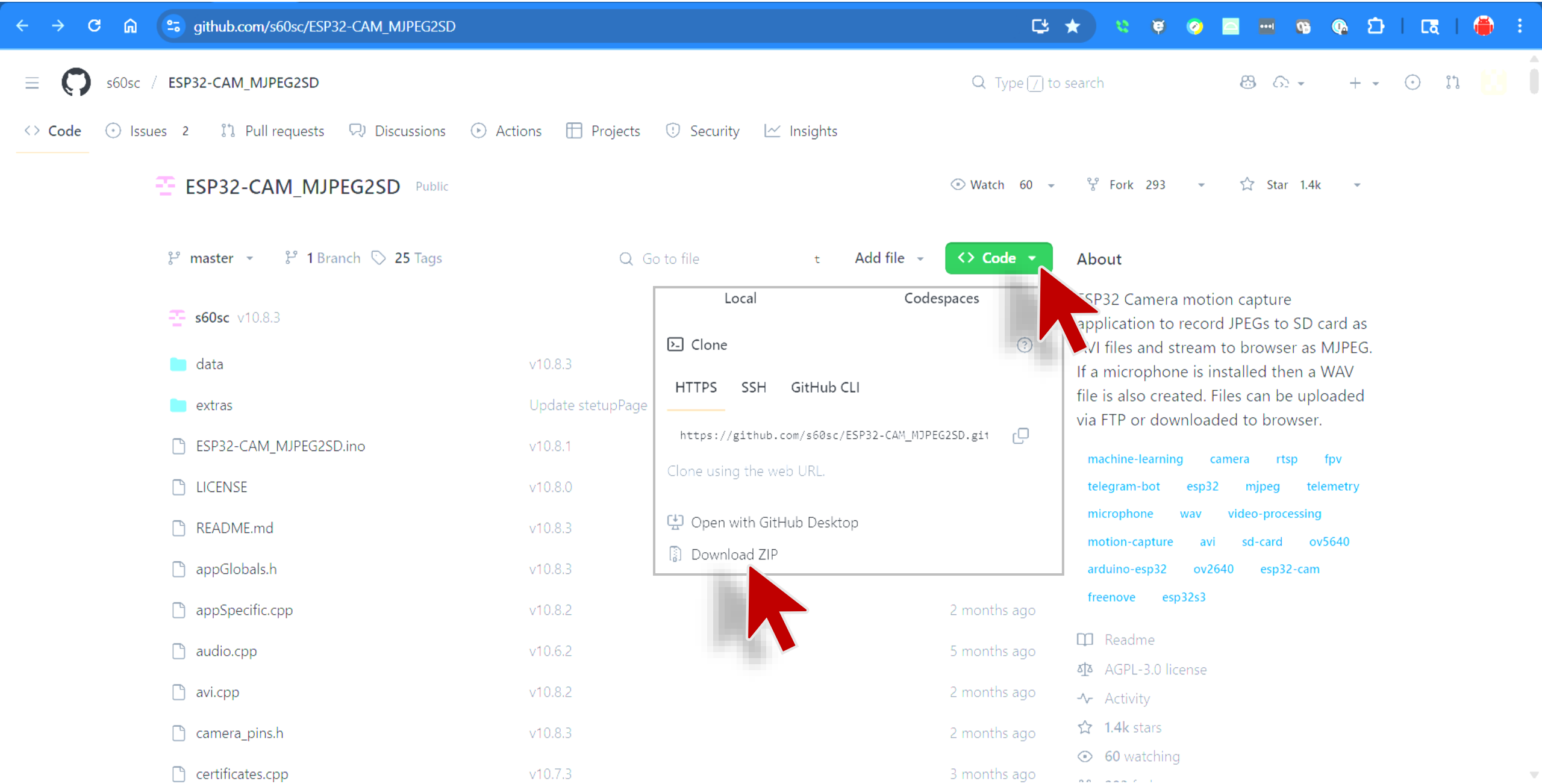
README AGPL-3.0 license

ESP32-CAM_MJPEG2SD

Application for ESP32 / ESP32S3 with OV2640 / OV3660 / OV5640 / PY260 camera to record JPEGs to SD card as AVI files and playback to browser as an MJPEG stream. The AVI format allows recordings to replay at correct frame rate on media players. If a microphone is installed then a WAV file is also created and stored in the AVI file.
The application supports:

- Motion detection by camera or PIR / radar sensor
- Continuous recording - Time lapse or dashcam style
- Audio Recording from I2S or PDM microphones
- Camera pan / tilt servos and lamp control
- RTSP Server stream Video, Audio and Subtitles
- Telemetry Recording during camera recording.
- Remote Control of camera mounted vehicle.
- Alert notification using Telegram or Email
- Concurrent streaming to web browser and remote NVR using HTTP or RTSP
- Transfer recordings using FTP, HTTPS, WebDAV, or download from browser
- MQTT control with Home Assistant integration.
- External Heartbeat support.
- Support for peripherals: SG90 servos, MX1508 H-bridge, 28BYJ-48 stepper, HW-504 joystick, BMP280, MPU9250, MY9221 / WS2812 / SK6812 Led
- Support for I2C devices: BMP280, BME280, MPU6050, MPU9350, SSD1306, LCD1602, etc.


github.com/s60sc/ESP32-CAM_MJPEG2SD
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Pull requests
Discussions
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ESP32-CAM_MJPEG2SD Public
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Codespaces
Clone
HTTPS
SSH
GitHub CLI
https://github.com/s60sc/ESP32-CAM_MJPEG2SD.git
Clone using the web URL.
Open with GitHub Desktop
Download ZIP
About
ESP32 Camera motion capture application to record JPEGs to SD card as AVI files and stream to browser as MJPEG. If a microphone is installed then a WAV file is also created. Files can be uploaded via FTP or downloaded to browser.
machine-learning
camera
rtsp
fpv
telegram-bot
esp32
mjpeg
telemetry
microphone
wav
video-processing
motion-capture
avi
sd-card
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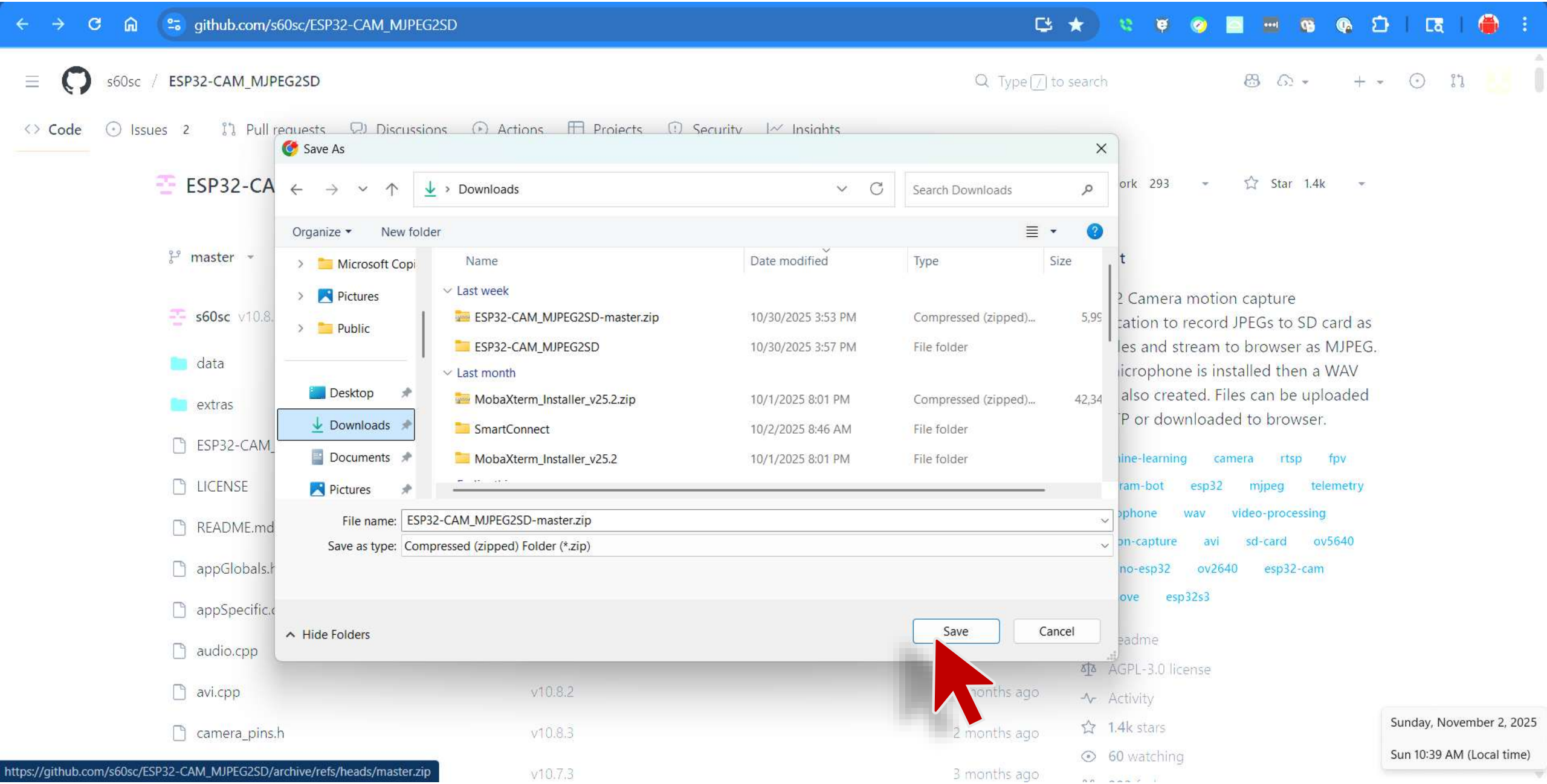
camera_pins.h v10.8.3 2 months ago
certificates.cpp v10.7.3 3 months ago


github.com/s60sc/ESP32-CAM_MJPEG2SD
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Activity
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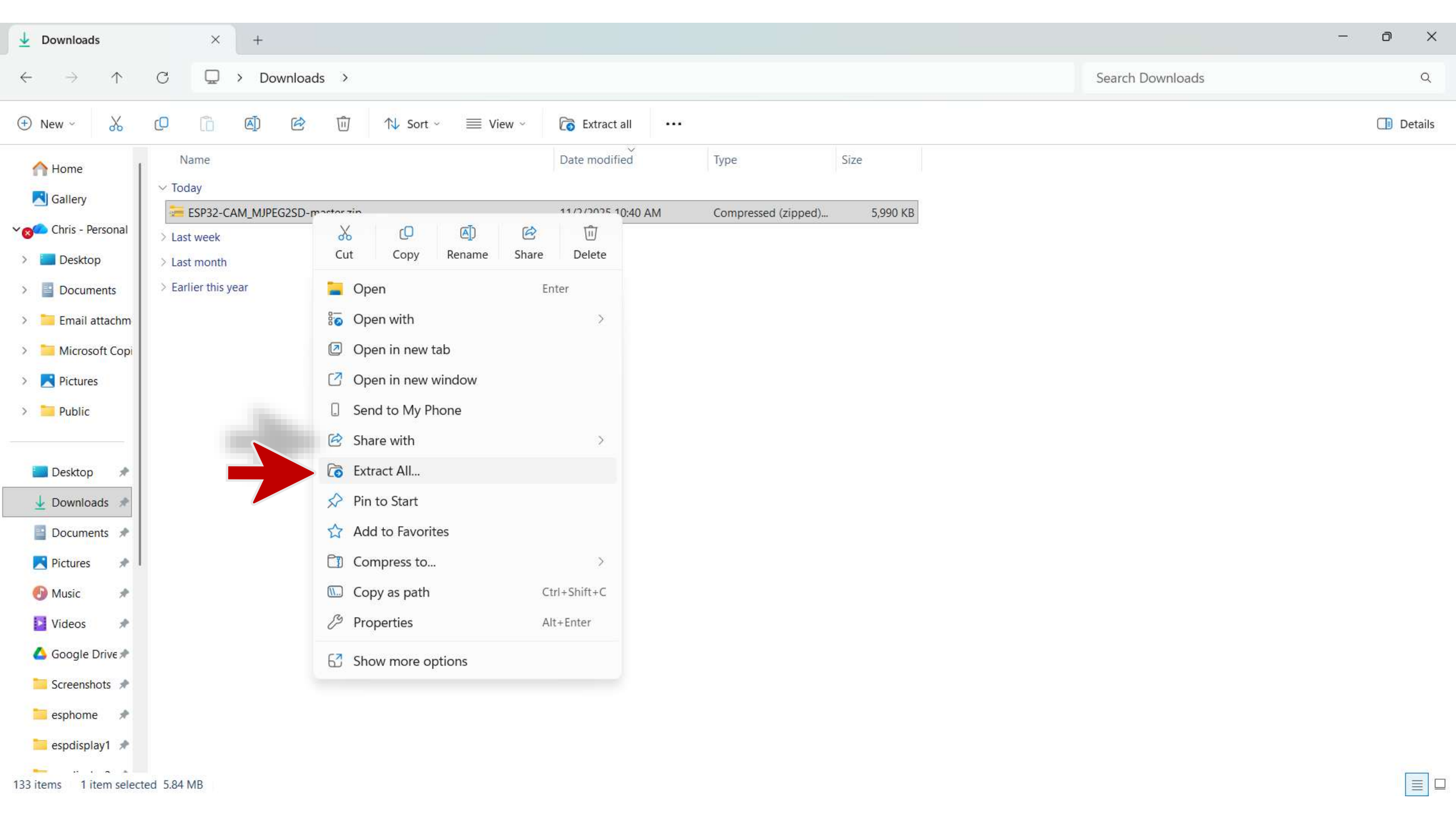
Sun 10:39 AM (Local time)
https://github.com/s60sc/ESP32-CAM_MJPEG2SD/archive/refs/heads/master.zip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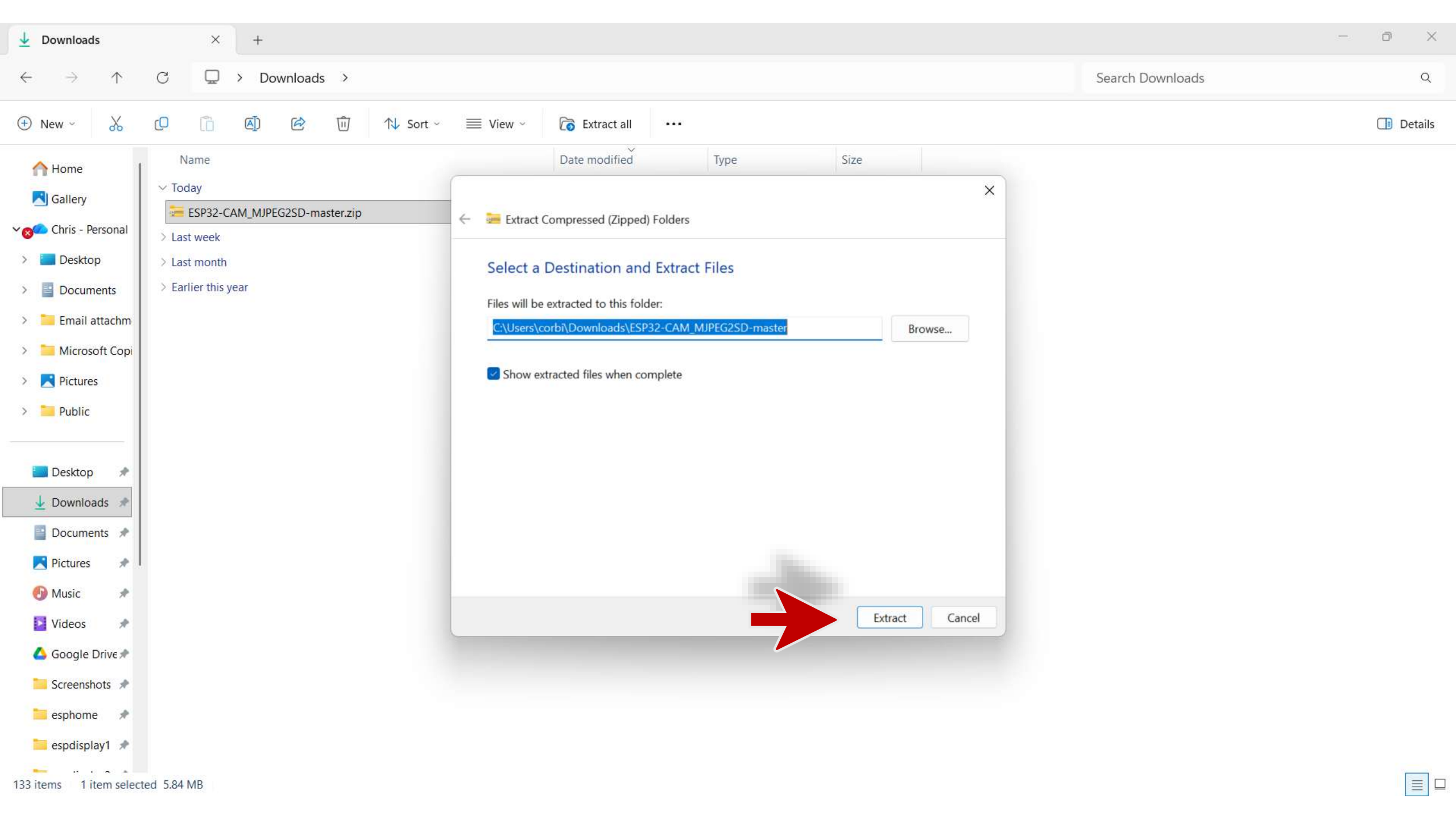
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Extract Compressed (Zipped) Folders
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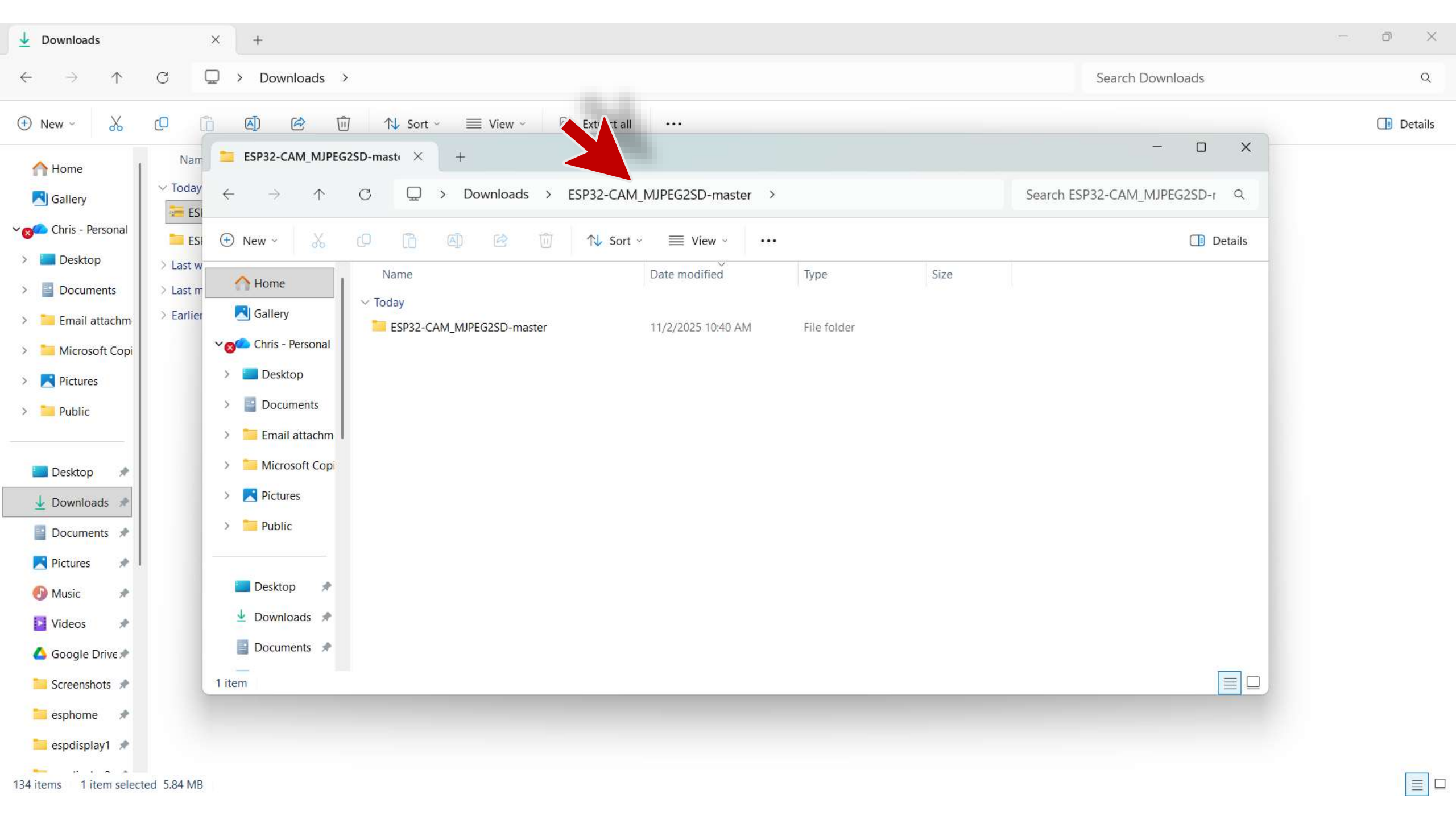
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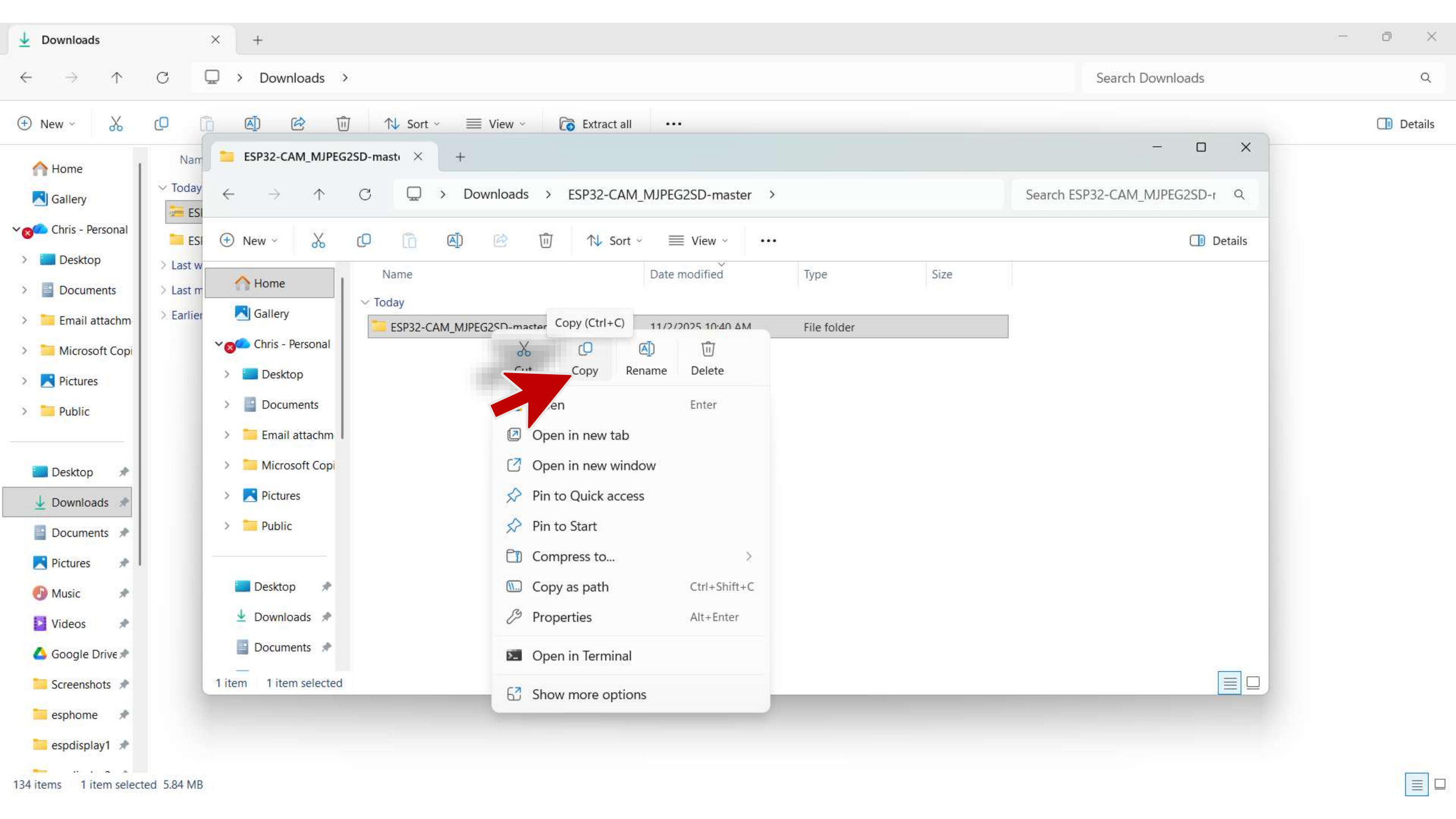
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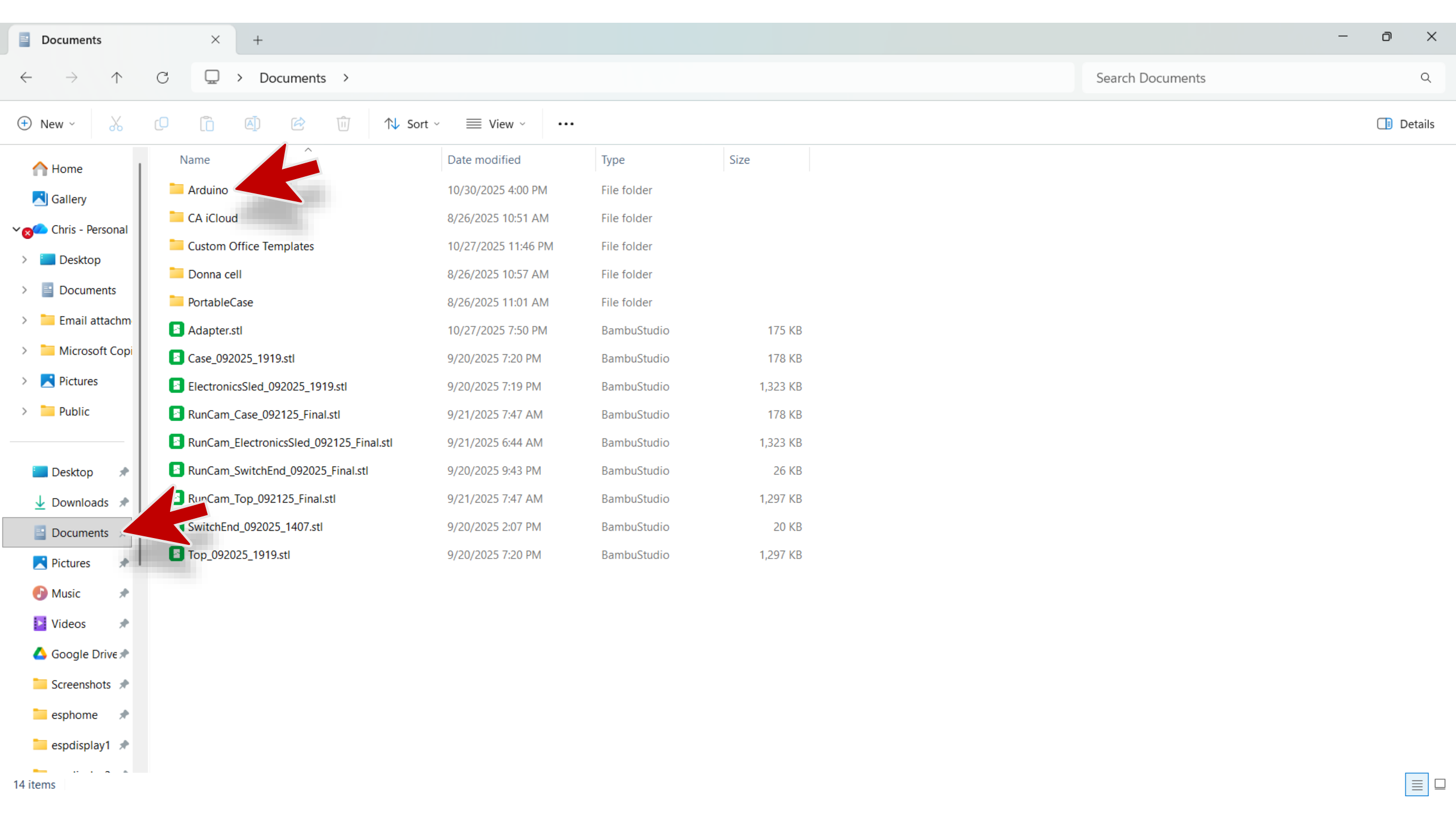
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Custom Office Templates 10/27/2025 11:46 PM File folder
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Adapter.stl 10/27/2025 7:50 PM BambuStudio 175 KB
Case_092025_1919.stl 9/20/2025 7:20 PM BambuStudio 178 KB
ElectronicsSled_092025_1919.stl 9/20/2025 7:19 PM BambuStudio 1,323 KB
RunCam_Case_092125_Final.stl 9/21/2025 7:47 AM BambuStudio 178 KB
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RunCam_SwitchEnd_092025_Final.stl 9/20/2025 9:43 PM BambuStudio 26 KB
RunCam_Top_092125_Final.stl 9/21/2025 7:47 AM BambuStudio 1,297 KB
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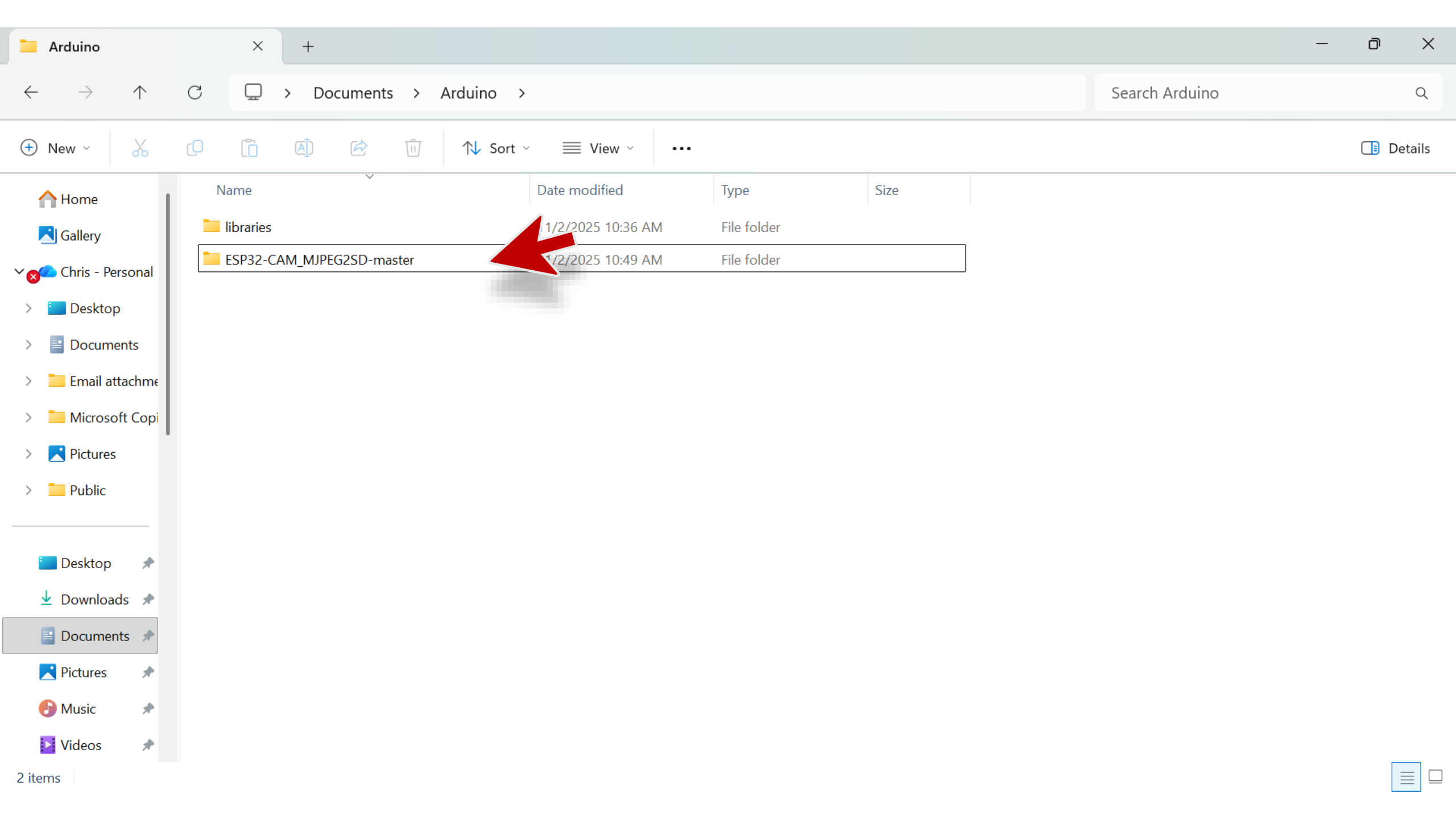
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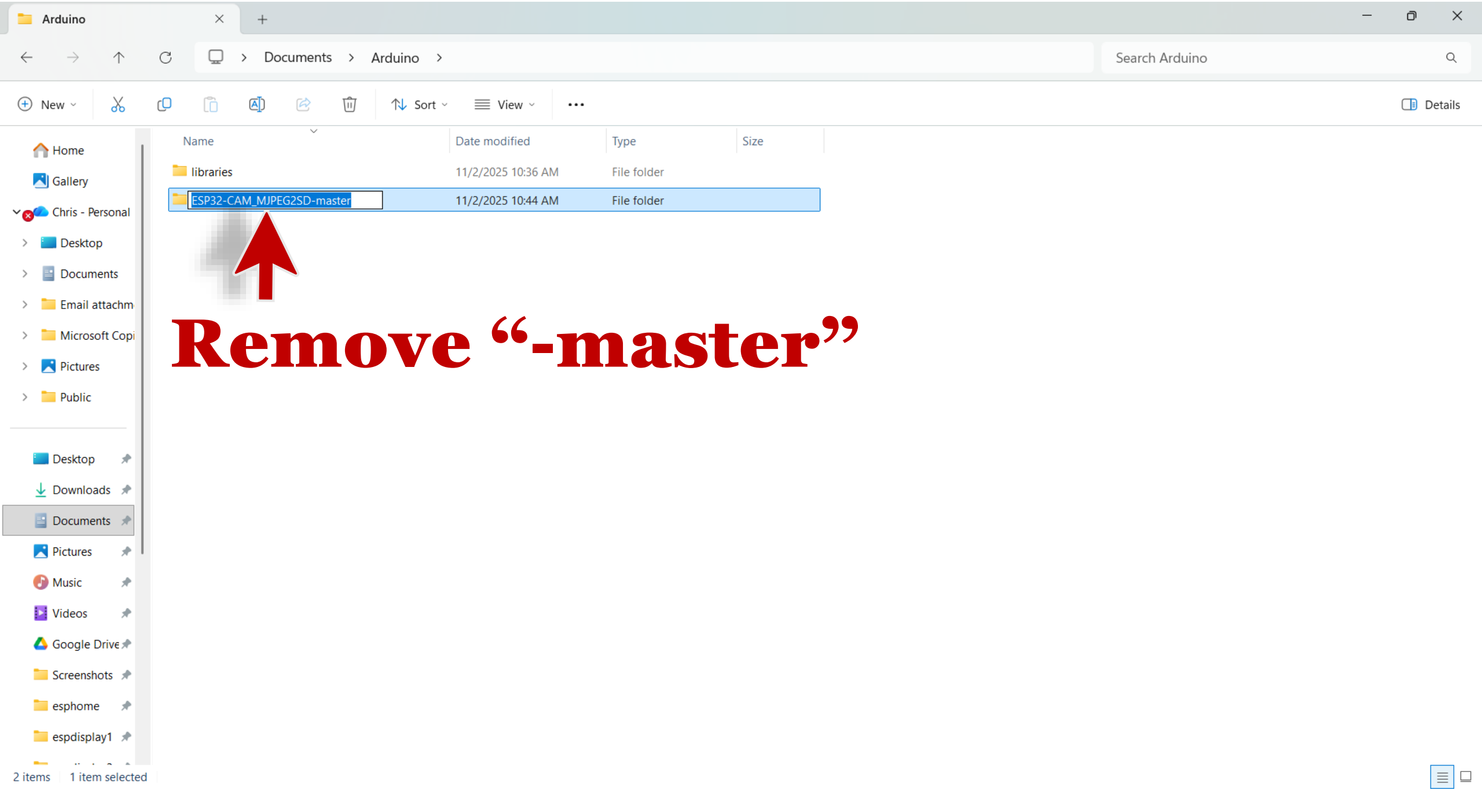
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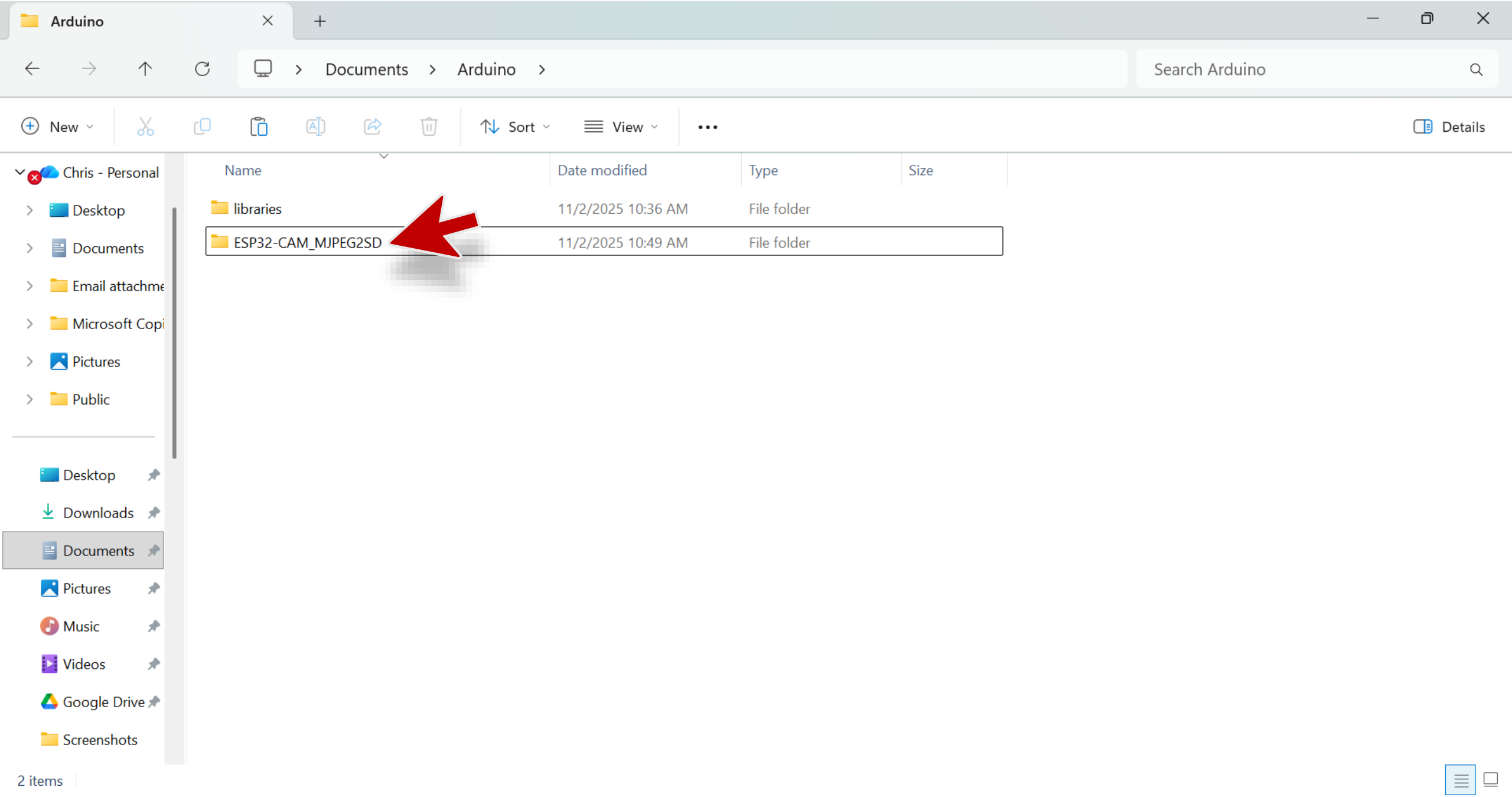
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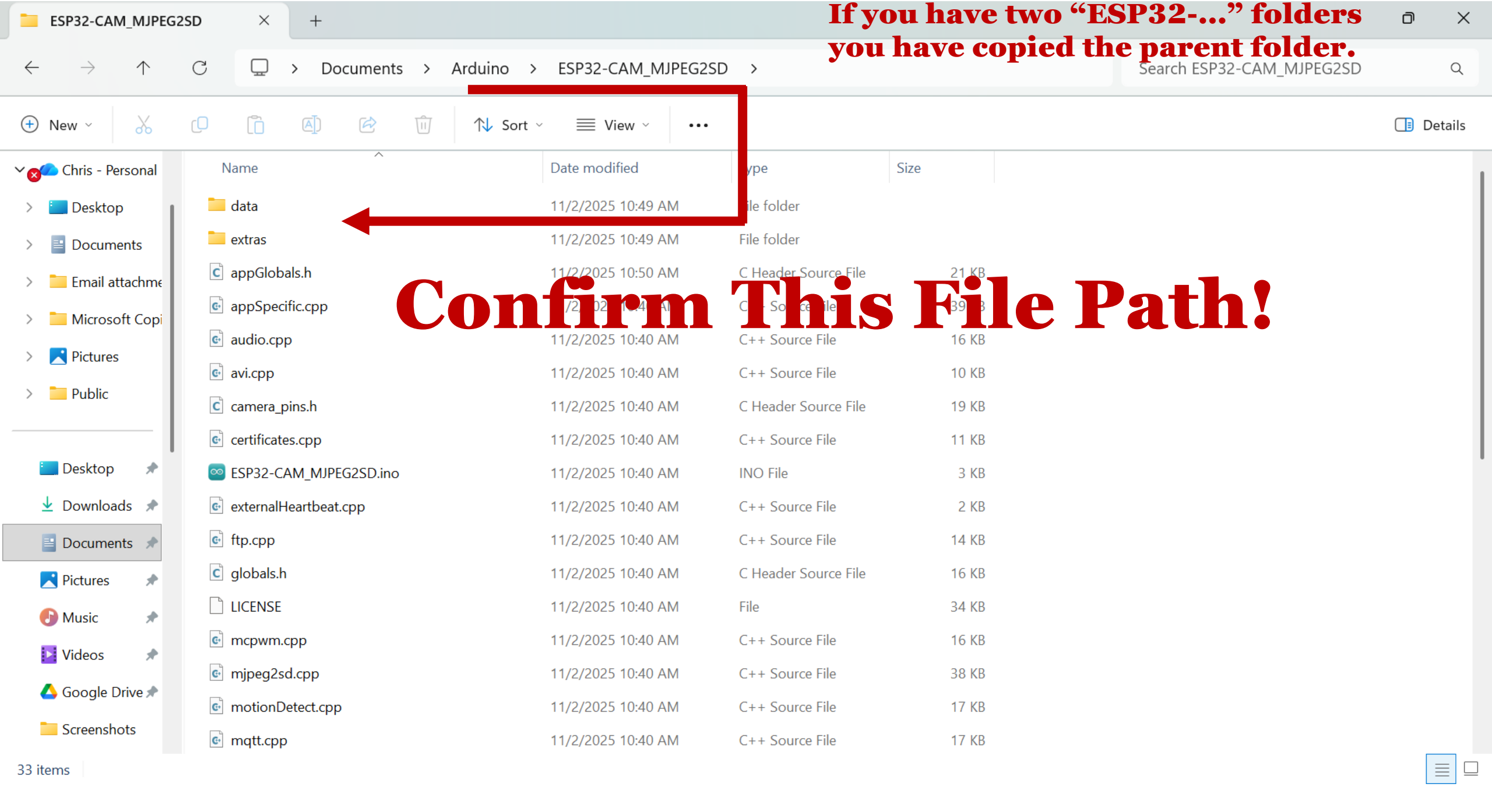
ESP32-CAM_MJPEG2SD
If you have two “ESP32-...” folders you have copied the parent folder.
Documents › Arduino › ESP32-CAM_MJPEG2SD ›
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audio.cpp 11/2/2025 10:40 AM C++ Source File 16 KB
avi.cpp 11/2/2025 10:40 AM C++ Source File 10 KB
camera_pins.h 11/2/2025 10:40 AM C Header Source File 19 KB
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LICENSE 11/2/2025 10:40 AM File 34 KB
mcpwm.cpp 11/2/2025 10:40 AM C++ Source File 16 KB
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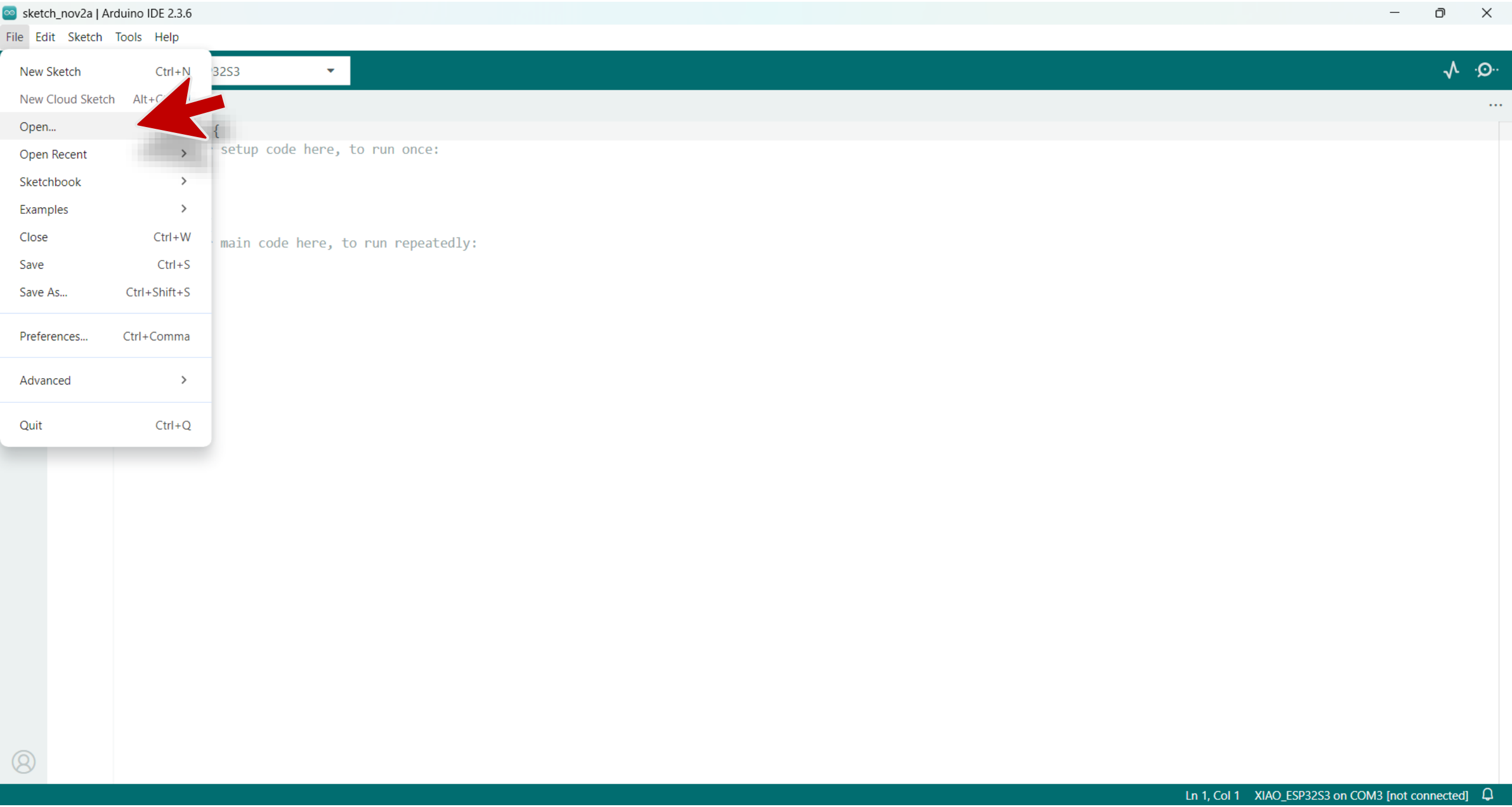
sketch_nov2a | Arduino IDE 2.3.6
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main code here, to run repeatedly:
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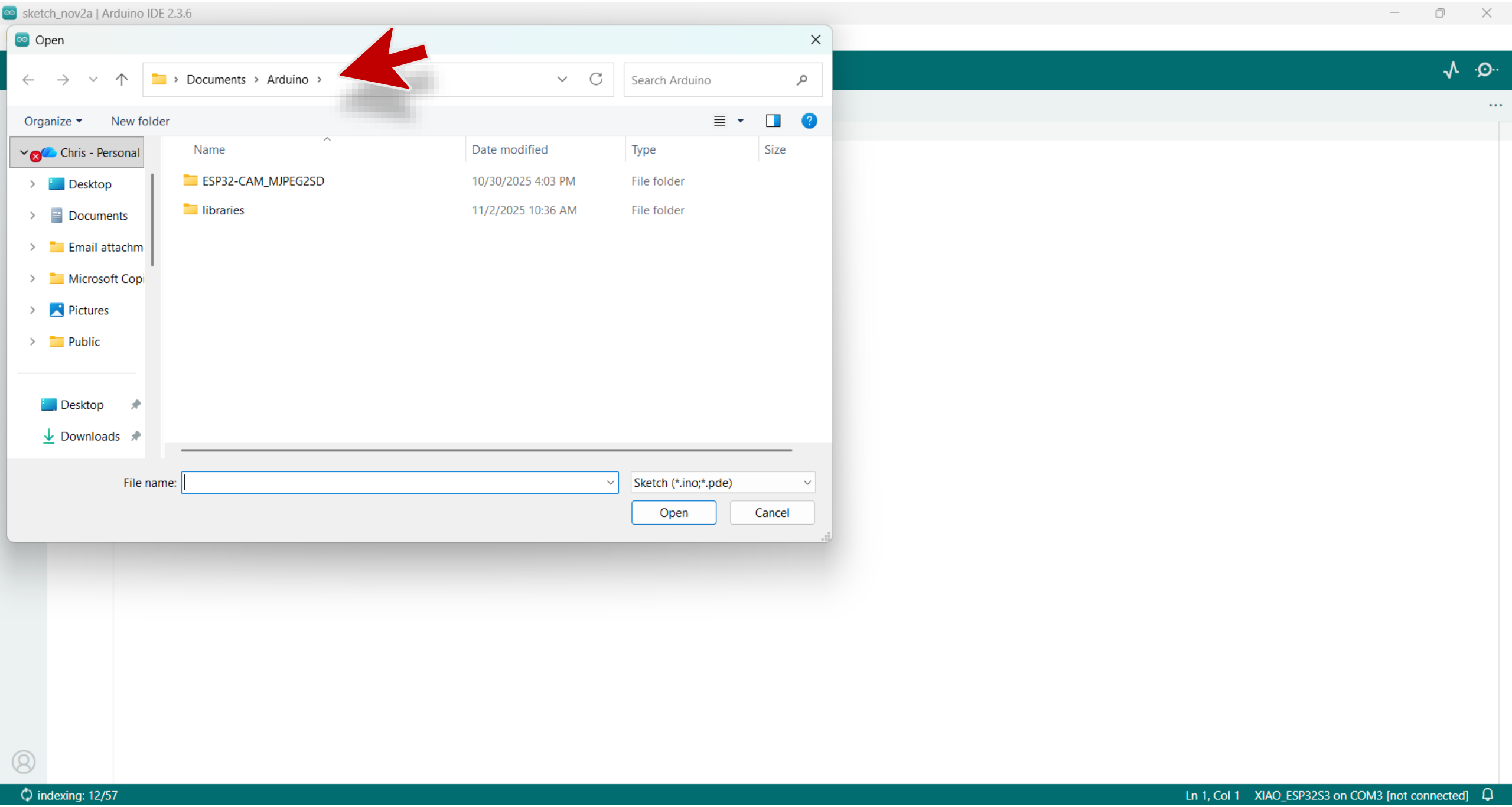
XIAO_ESP32S3 on COM3 [not connected]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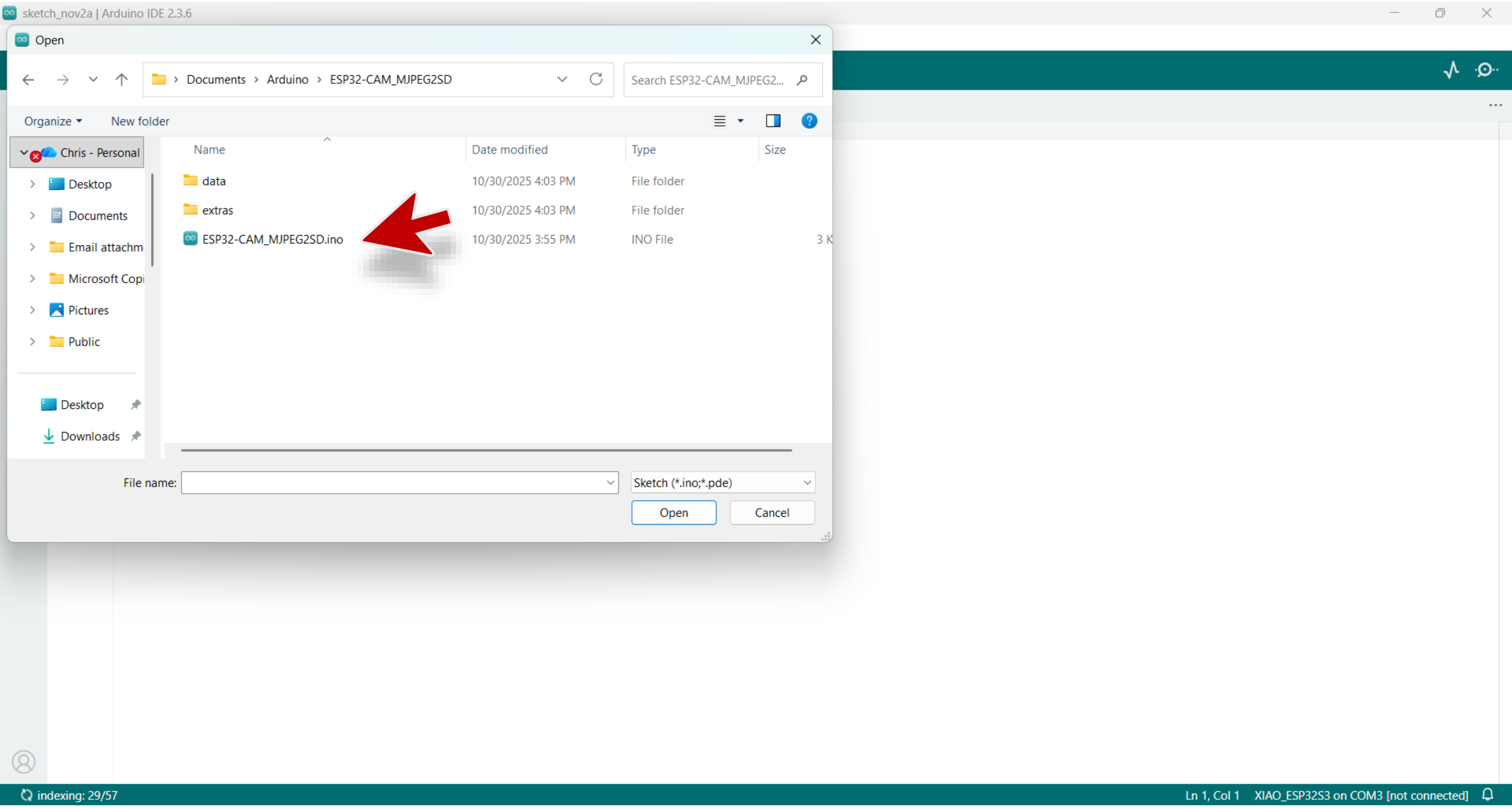
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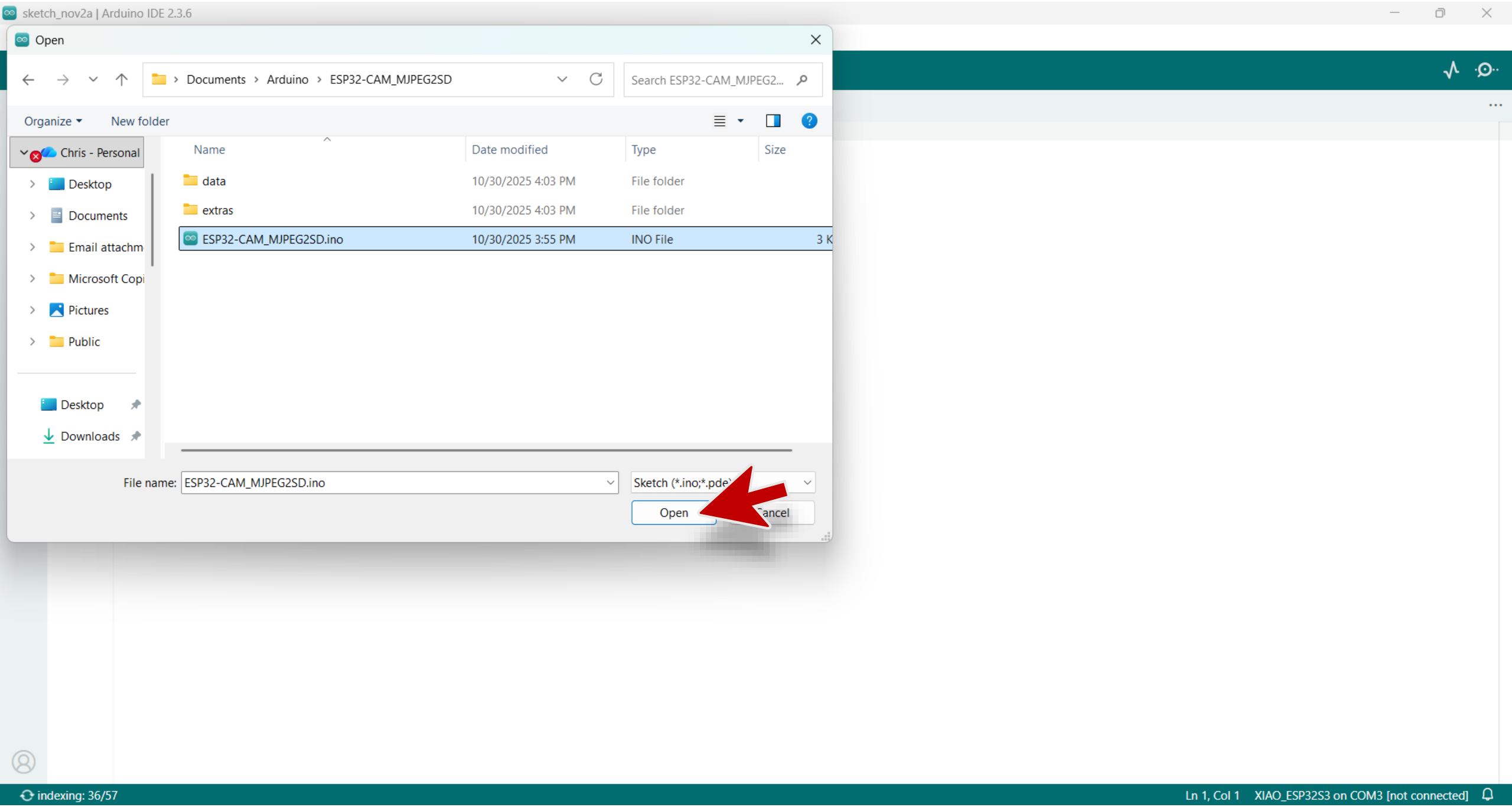
XIAO_ESP32S3 on COM3 [not connected]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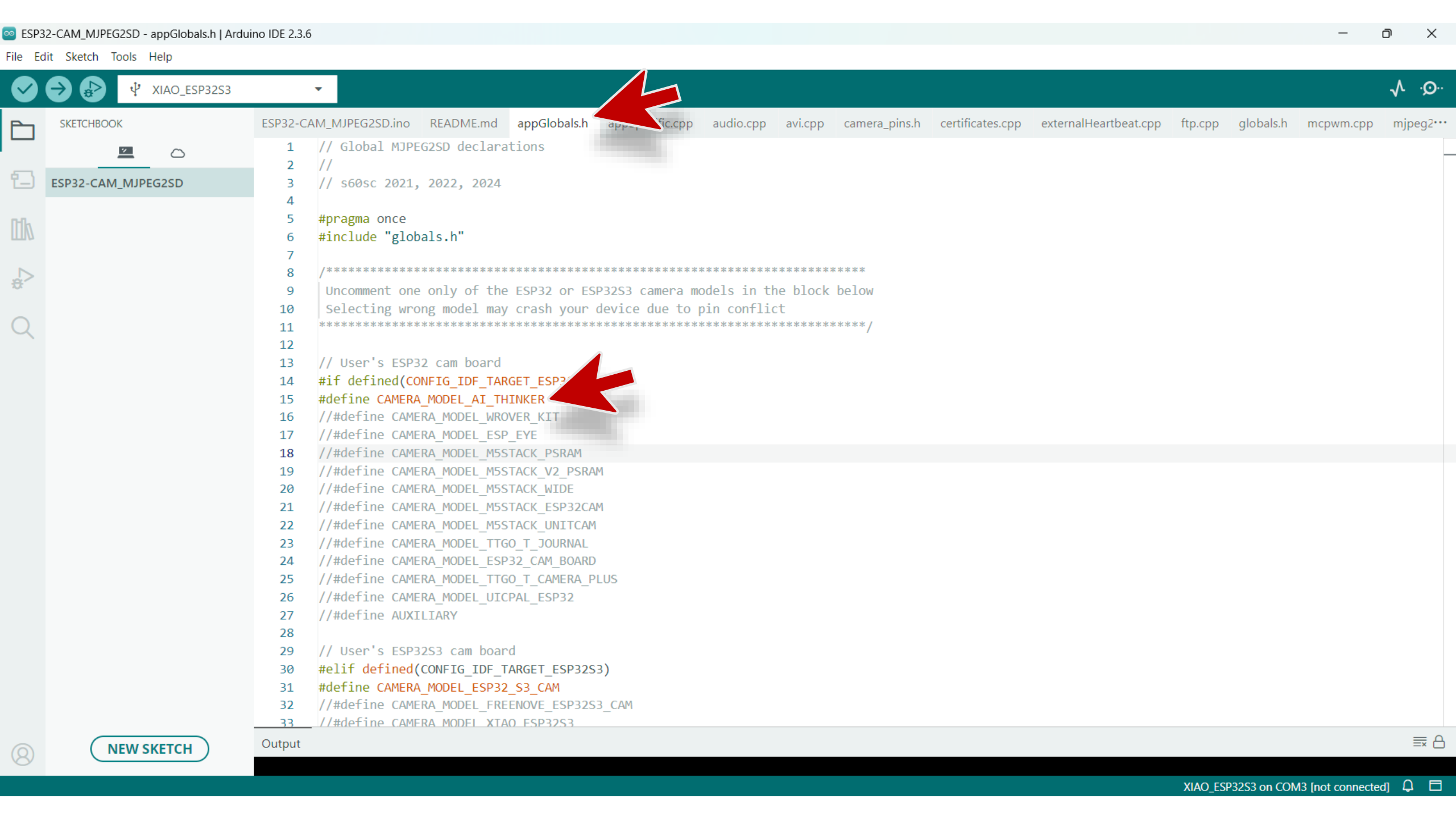

ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6
File Edit Sketch Tools Help
XIAO_ESP32S3
SKETCHBOOK
ESP32-CAM_MJPEG2SD
NEW SKETCH
ESP32-CAM_MJPEG2SD.ino
README.md
appGlobals.h
audio.cpp
avi.cpp
camera_pins.h
certificates.cpp
externalHeartbeat.cpp
ftp.cpp
globals.h
mcpwm.cpp
// Global MJPEG2SD declarations
//
// s60sc 2021, 2022, 2024
#pragma once
#include "globals.h"
/**
Uncomment one only of the ESP32 or ESP32S3 camera models in the block below
Selecting wrong model may crash your device due to pin conflict
**/
// User's ESP32 cam board
#if defined(CONFIG_IDF_TARGET_ESP32
#define CAMERA_MODEL_AI_THINKER
//#define CAMERA_MODEL_WROVER_KIT
//#define CAMERA_MODEL_ESP_EYE
//#define CAMERA_MODEL_M5STACK_PSRAM
//#define CAMERA_MODEL_M5STACK_V2_PSRAM
//#define CAMERA_MODEL_M5STACK_WIDE
//#define CAMERA_MODEL_M5STACK_ESP32CAM
//#define CAMERA_MODEL_M5STACK_UNITCAM
//#define CAMERA_MODEL_TTGO_T_JOURNAL
//#define CAMERA_MODEL_ESP32_CAM_BOARD
//#define CAMERA_MODEL_TTGO_T_CAMERA_PLUS
//#define CAMERA_MODEL_UICPAL_ESP32
//#define AUXILIARY
// User's ESP32S3 cam board
#elif defined(CONFIG_IDF_TARGET_ESP32S3)
#define CAMERA_MODEL_ESP32_S3_CAM
//#define CAMERA_MODEL_FREENOVE_ESP32S3_CAM
Output
XIAO_ESP32S3 on COM3 [not connected]

ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6

File Edit Sketch Tools Help

XIAO_ESP32S3

SKETCHBOOK

ESP32-CAM_MJPEG2SD

NEW SKETCH

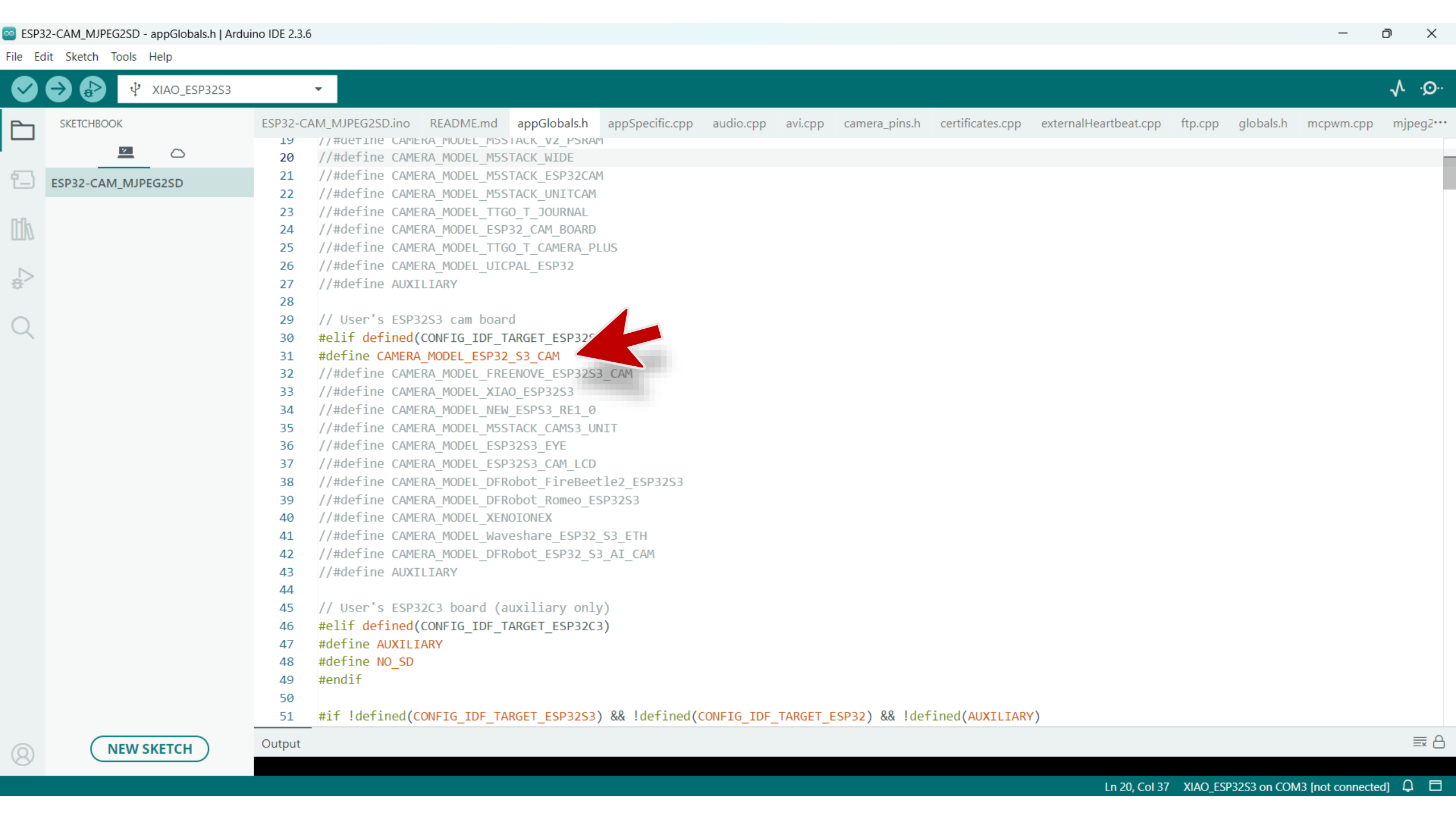
ESP32-CAM_MJPEG2SD.ino | README.md | appGlobals.h | appSpecific.cpp | audio.cpp | avi.cpp | camera_pins.h | certificates.cpp | externalHeartbeat.cpp | ftp.cpp | globals.h | mcpwm.cpp | mjpeg2...

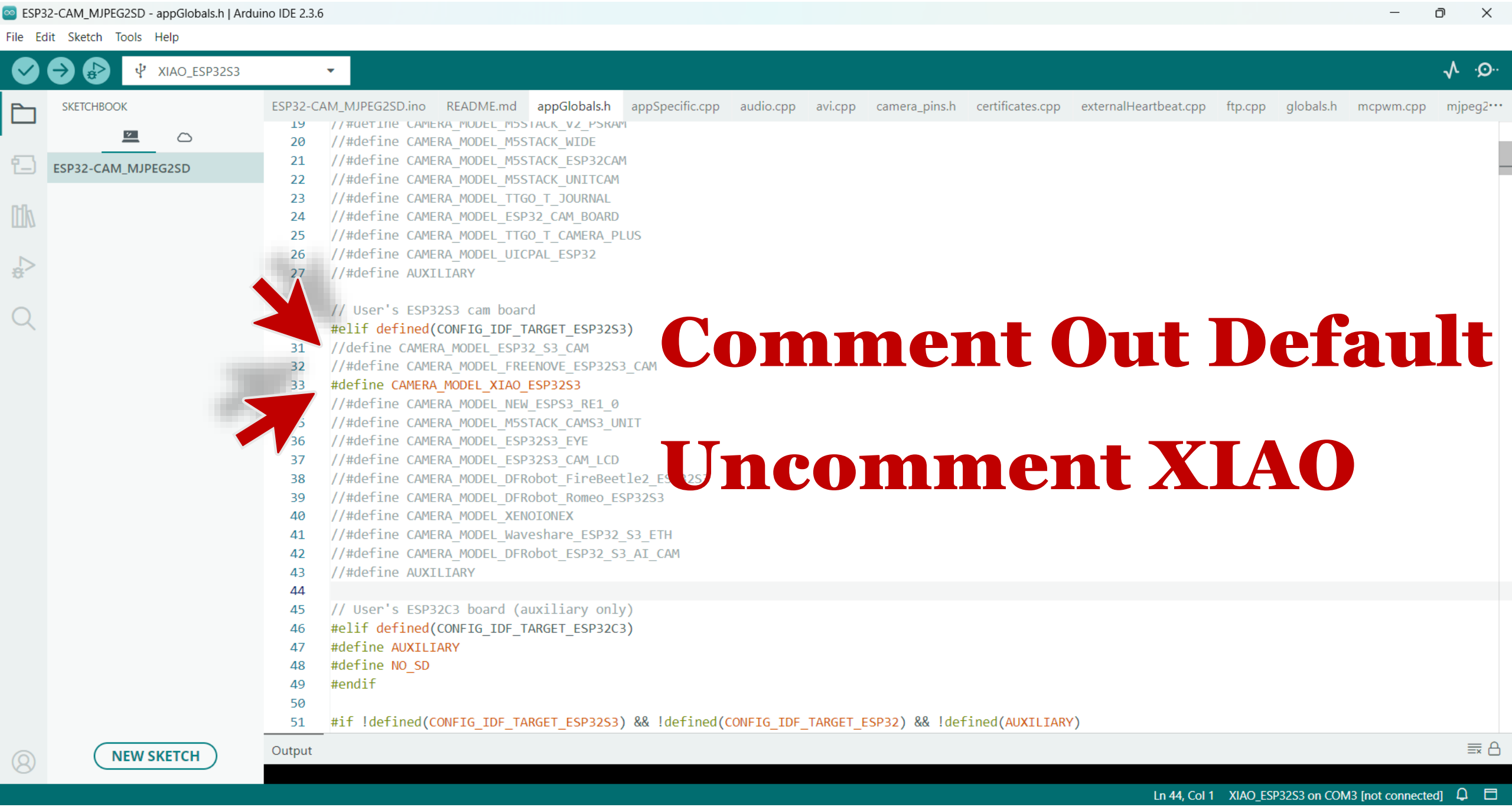
```
1  // Global MJPEG2SD declarations
2  //
3  // s60sc 2021, 2022, 2024
4
5  #pragma once
6  #include "globals.h"
7
8  /**********************************************************************
9   Uncomment one only of the ESP32 or ESP32S3 camera models in the block below
10  Selecting wrong model may crash your device due to pin conflict
11 **********************************************************************/
12
13 // User's ESP32 cam board
14 #if defined(CONFIG_IDF_TARGET_ESP32)
15 //define CAMERA_MODEL_AI_THINKER
16 //#define CAMERA_MODEL_WROVER_KIT
17 //#define CAMERA_MODEL_ESP_EYE
18 //#define CAMERA_MODEL_M5STACK_PSRAM
19 //#define CAMERA_MODEL_M5STACK_V2_PSRAM
20 //#define CAMERA_MODEL_M5STACK_WIDE
21 //#define CAMERA_MODEL_M5STACK_ESP32CAM
22 //#define CAMERA_MODEL_M5STACK_UNITCAM
23 //#define CAMERA_MODEL_TTGO_T_JOURNAL
24 //#define CAMERA_MODEL_ESP32_CAM_BOARD
25 //#define CAMERA_MODEL_TTGO_T_CAMERA_PLUS
26 //#define CAMERA_MODEL_UICPAL_ESP32
27 //#define AUXILIARY
28
29 // User's ESP32S3 cam board
30 #elif defined(CONFIG_IDF_TARGET_ESP32S3)
31 #define CAMERA_MODEL_ESP32_S3_CAM
32 //#define CAMERA_MODEL_FREENOVE_ESP32S3_CAM
33 //#define CAMERA_MODEL_XIAO_ESP32S3
```

Comment Out Default

Output

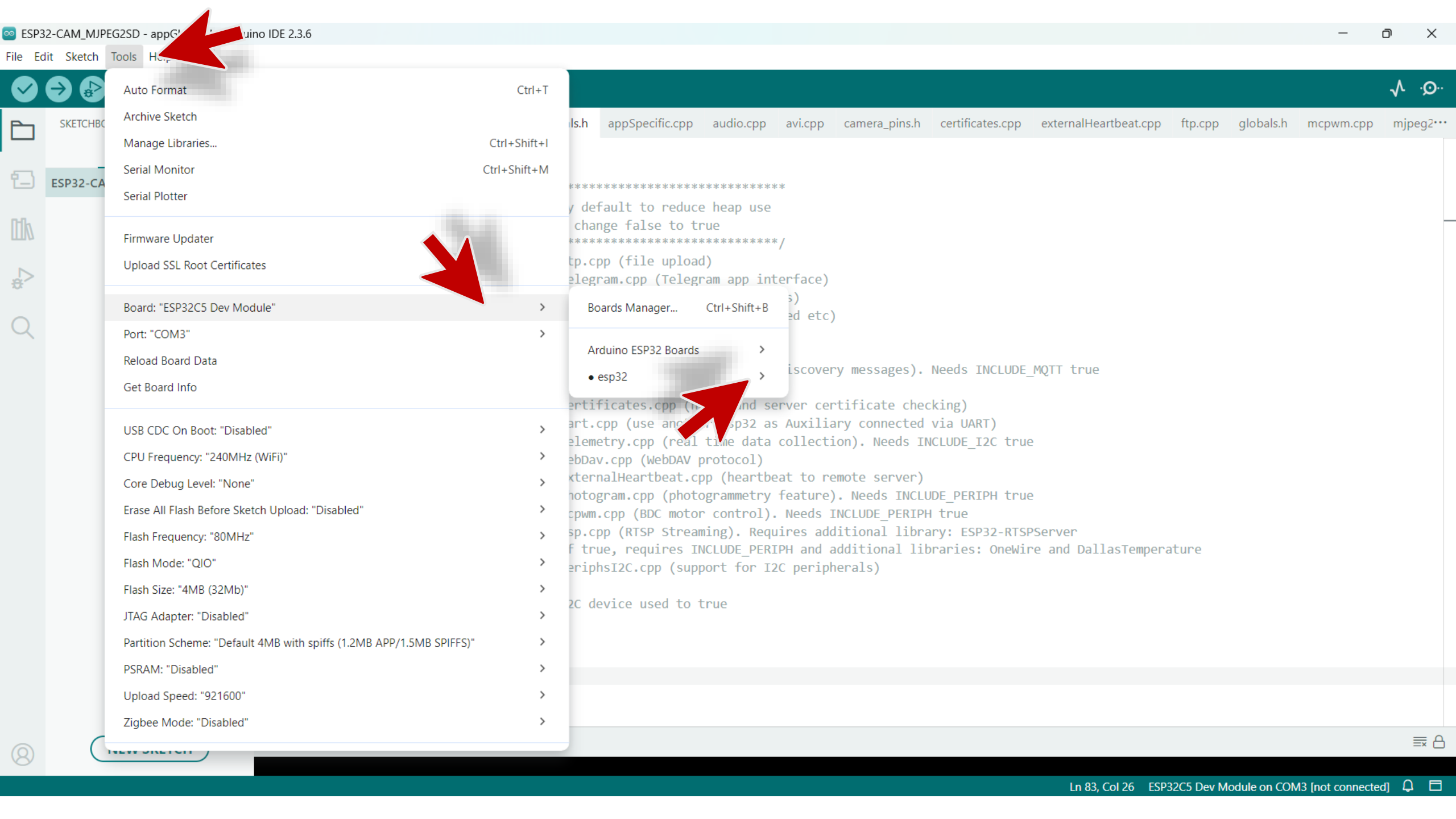
Ln 20, Col 37 XIAO_ESP32S3 on COM3 [not connected]

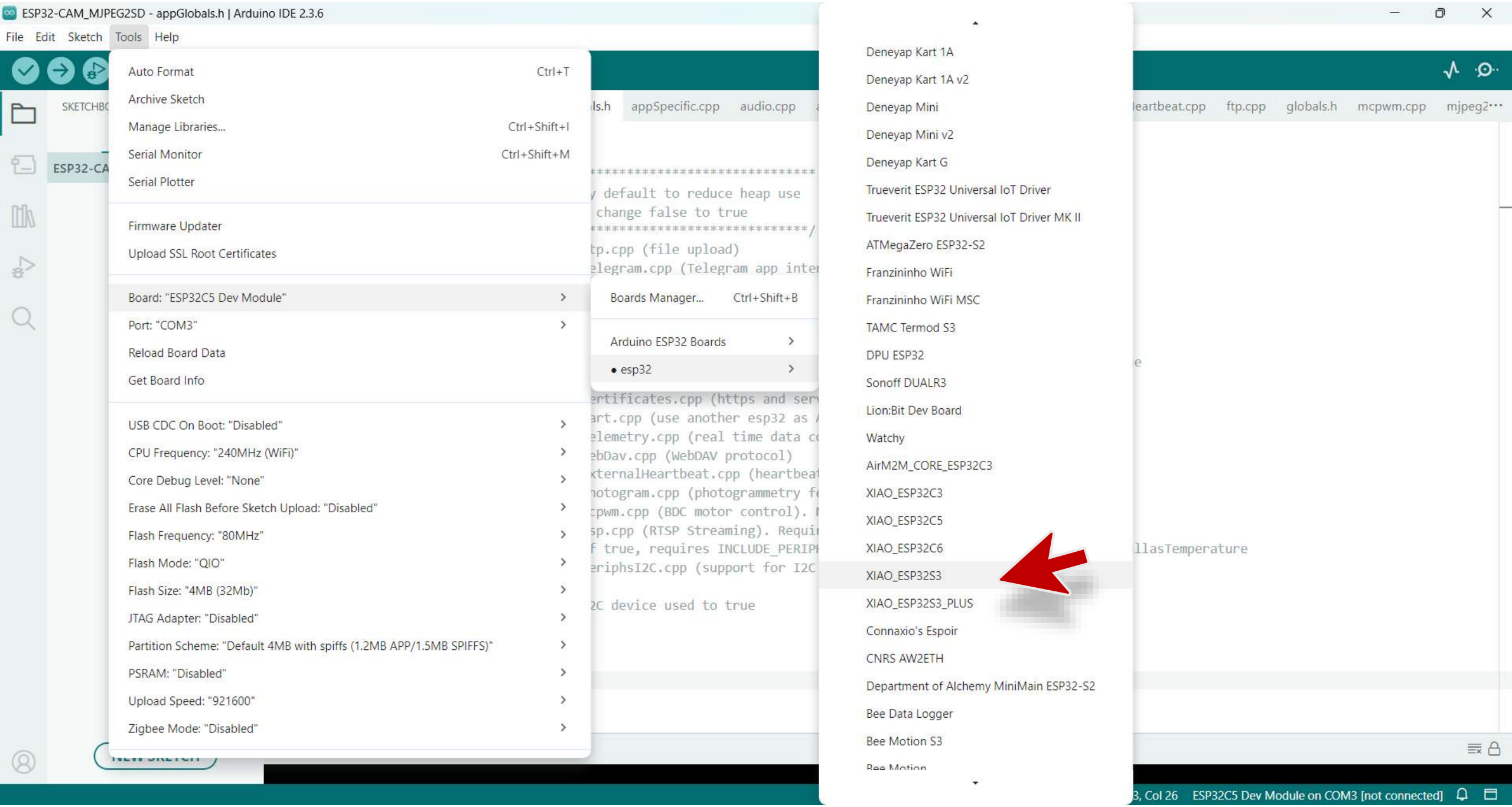

ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6
File Edit Sketch Tools Help
XIAO_ESP32S3
SKETCHBOOK
ESP32-CAM_MJPEG2SD
NEW SKETCH
ESP32-CAM_MJPEG2SD.ino README.md appGlobals.h appSpecific.cpp audio.cpp avi.cpp camera_pins.h certificates.cpp externalHeartbeat.cpp ftp.cpp globals.h mcpwm.cpp mjpeg2
//#define CAMERA_MODEL_M5STACK_V2_PSRAM
//#define CAMERA_MODEL_M5STACK_WIDE
//#define CAMERA_MODEL_M5STACK_ESP32CAM
//#define CAMERA_MODEL_M5STACK_UNITCAM
//#define CAMERA_MODEL_TTGO_T_JOURNAL
//#define CAMERA_MODEL_ESP32_CAM_BOARD
//#define CAMERA_MODEL_TTGO_T_CAMERA_PLUS
//#define CAMERA_MODEL_UICPAL_ESP32
//#define AUXILIARY
// User's ESP32S3 cam board
#elif defined(CONFIG_IDF_TARGET_ESP32S
#define CAMERA_MODEL_ESP32_S3_CAM
//#define CAMERA_MODEL_FREENOVE_ESP32S3_CAM
//#define CAMERA_MODEL_XIAO_ESP32S3
//#define CAMERA_MODEL_NEW_ESPS3_RE1_0
//#define CAMERA_MODEL_M5STACK_CAMS3_UNIT
//#define CAMERA_MODEL_ESP32S3_EYE
//#define CAMERA_MODEL_ESP32S3_CAM_LCD
//#define CAMERA_MODEL_DFRobot_FireBeetle2_ESP32S3
//#define CAMERA_MODEL_DFRobot_Romeo_ESP32S3
//#define CAMERA_MODEL_XENOIONEX
//#define CAMERA_MODEL_Waveshare_ESP32_S3_ETH
//#define CAMERA_MODEL_DFRobot_ESP32_S3_AI_CAM
//#define AUXILIARY
// User's ESP32C3 board (auxiliary only)
#elif defined(CONFIG_IDF_TARGET_ESP32C3)
#define AUXILIARY
#define NO_SD
#endif
#if !defined(CONFIG_IDF_TARGET_ESP32S3) && !defined(CONFIG_IDF_TARGET_ESP32) && !defined(AUXILIARY)
Output
Ln 20, Col 37 XIAO_ESP32S3 on COM3 [not connected]

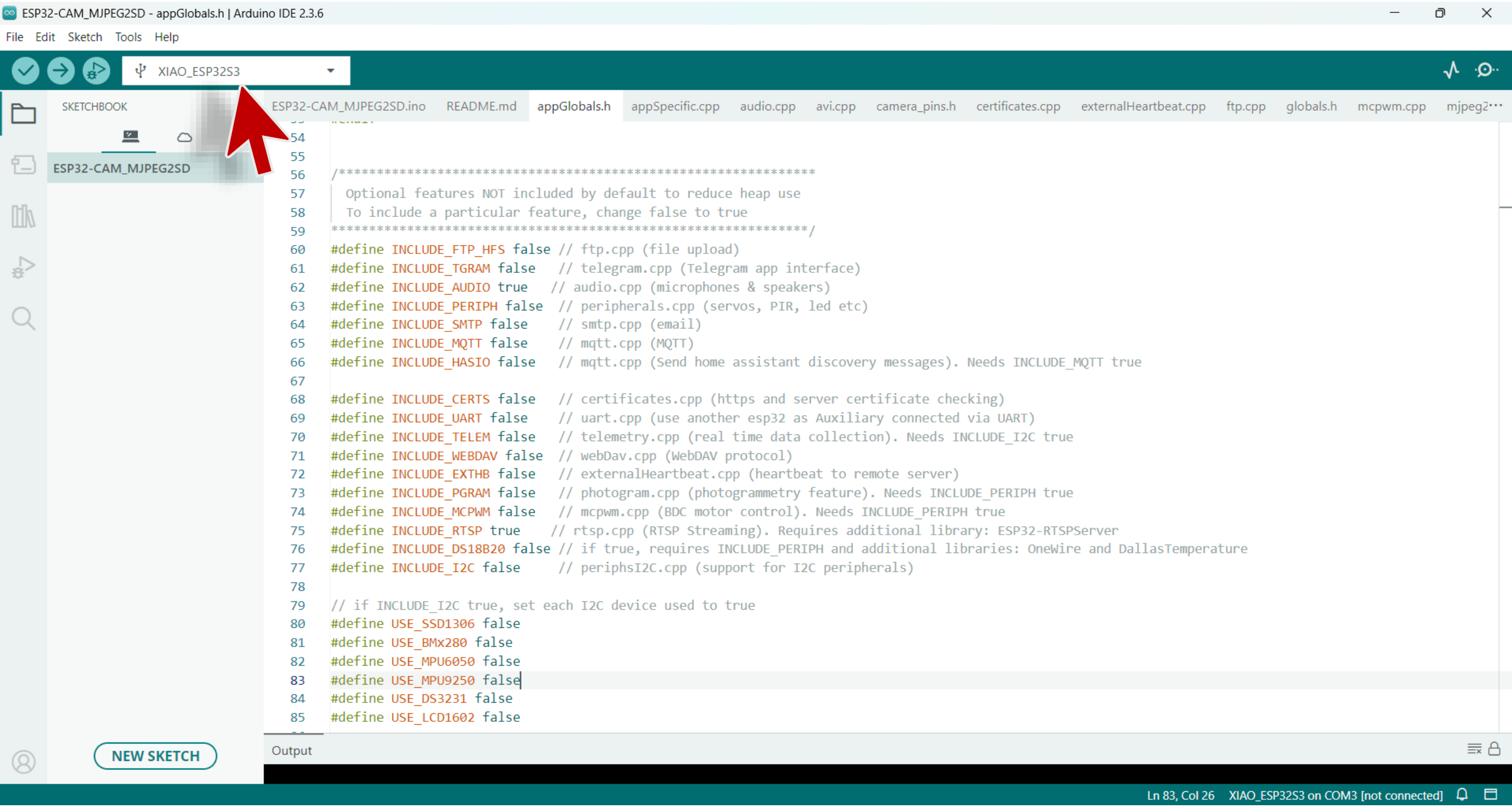


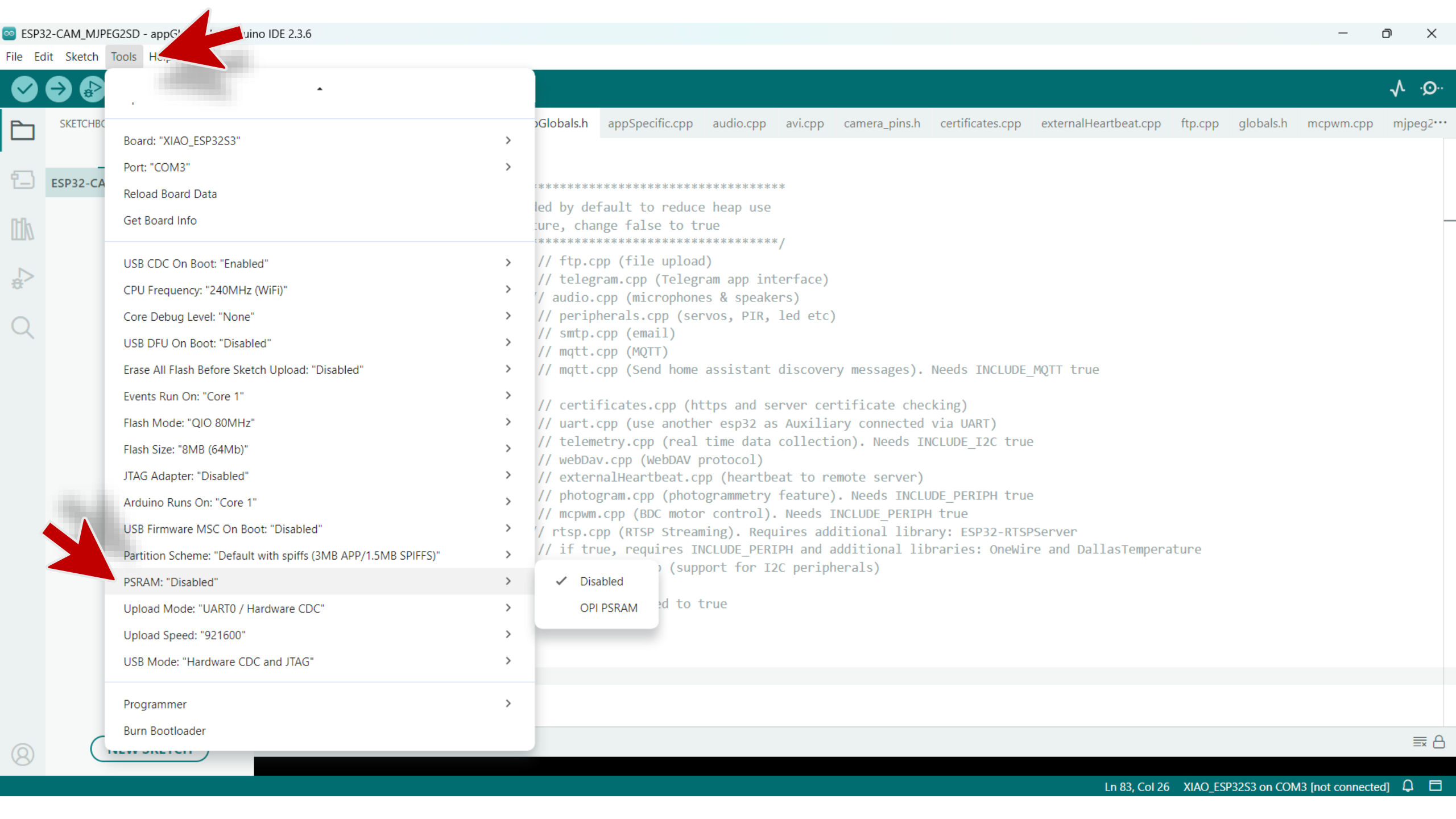
Comment Out Default

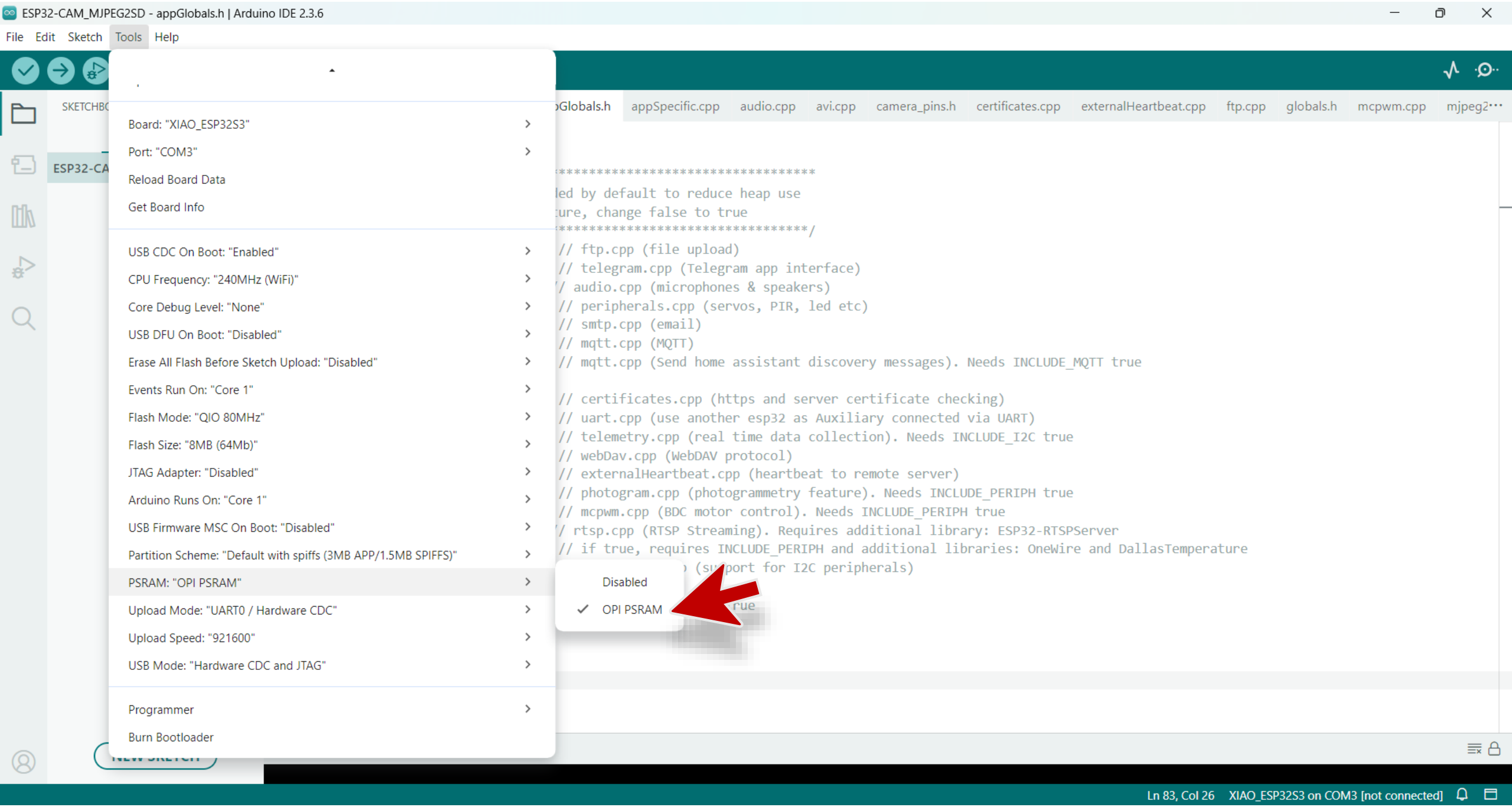
Uncomment XIAO

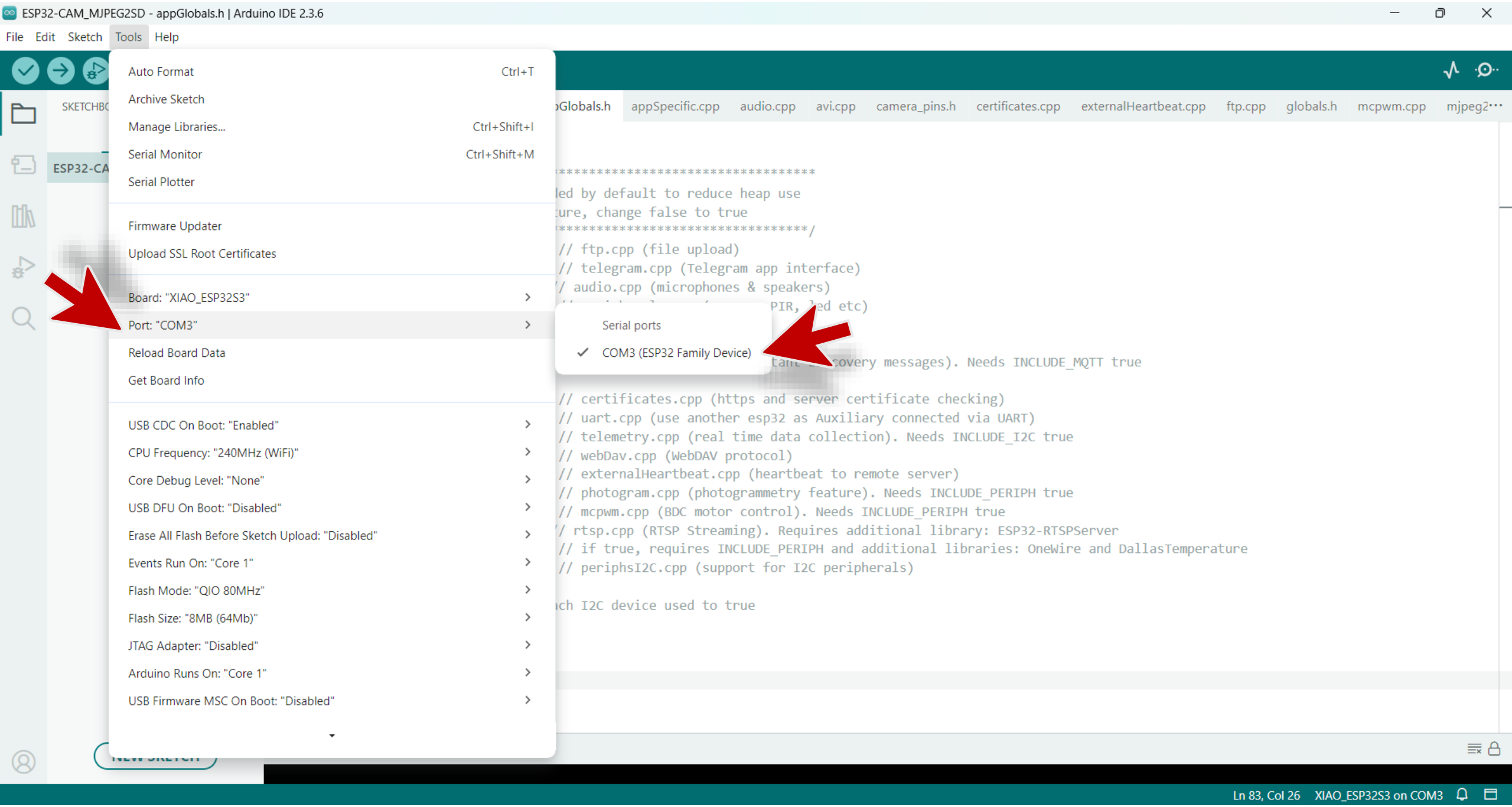

ESP32-CAM_MJPEG2SD - appG uino IDE 2.3.6
File Edit Sketch Tools Help
Auto Format Ctrl+T
Archive Sketch
Manage Libraries... Ctrl+Shift+I
Serial Monitor Ctrl+Shift+M
Serial Plotter
Firmware Updater
Upload SSL Root Certificates
Board: "ESP32C5 Dev Module"
Port: "COM3"
Reload Board Data
Get Board Info
USB CDC On Boot: "Disabled"
CPU Frequency: "240MHz (WiFi)"
Core Debug Level: "None"
Erase All Flash Before Sketch Upload: "Disabled"
Flash Frequency: "80MHz"
Flash Mode: "QIO"
Flash Size: "4MB (32Mb)"
JTAG Adapter: "Disabled"
Partition Scheme: "Default 4MB with spiffs (1.2MB APP/1.5MB SPIFFS)"
PSRAM: "Disabled"
Upload Speed: "921600"
Zigbee Mode: "Disabled"
Boards Manager... Ctrl+Shift+B
Arduino ESP32 Boards
esp32
appSpecific.cpp
audio.cpp
avi.cpp
camera_pins.h
certificates.cpp
externalHeartbeat.cpp
ftp.cpp
globals.h
mcpwm.cpp
default to reduce heap use
change false to true
tp.cpp (file upload)
elegram.cpp (Telegram app interface)
art.cpp (use an
elemetry.cpp (real time data collection). Needs INCLUDE_I2C true
ebDav.cpp (WebDAV protocol)
xternalHeartbeat.cpp (heartbeat to remote server)
hotogram.cpp (photogrammetry feature). Needs INCLUDE_PERIPH true
cpwm.cpp (BDC motor control). Needs INCLUDE_PERIPH true
sp.cpp (RTSP Streaming). Requires additional library: ESP32-RTSPServer
f true, requires INCLUDE_PERIPH and additional libraries: OneWire and DallasTemperature
eriphsI2C.cpp (support for I2C peripherals)
2C device used to true
Ln 83, Col 26
ESP32C5 Dev Module on COM3 [not connected]

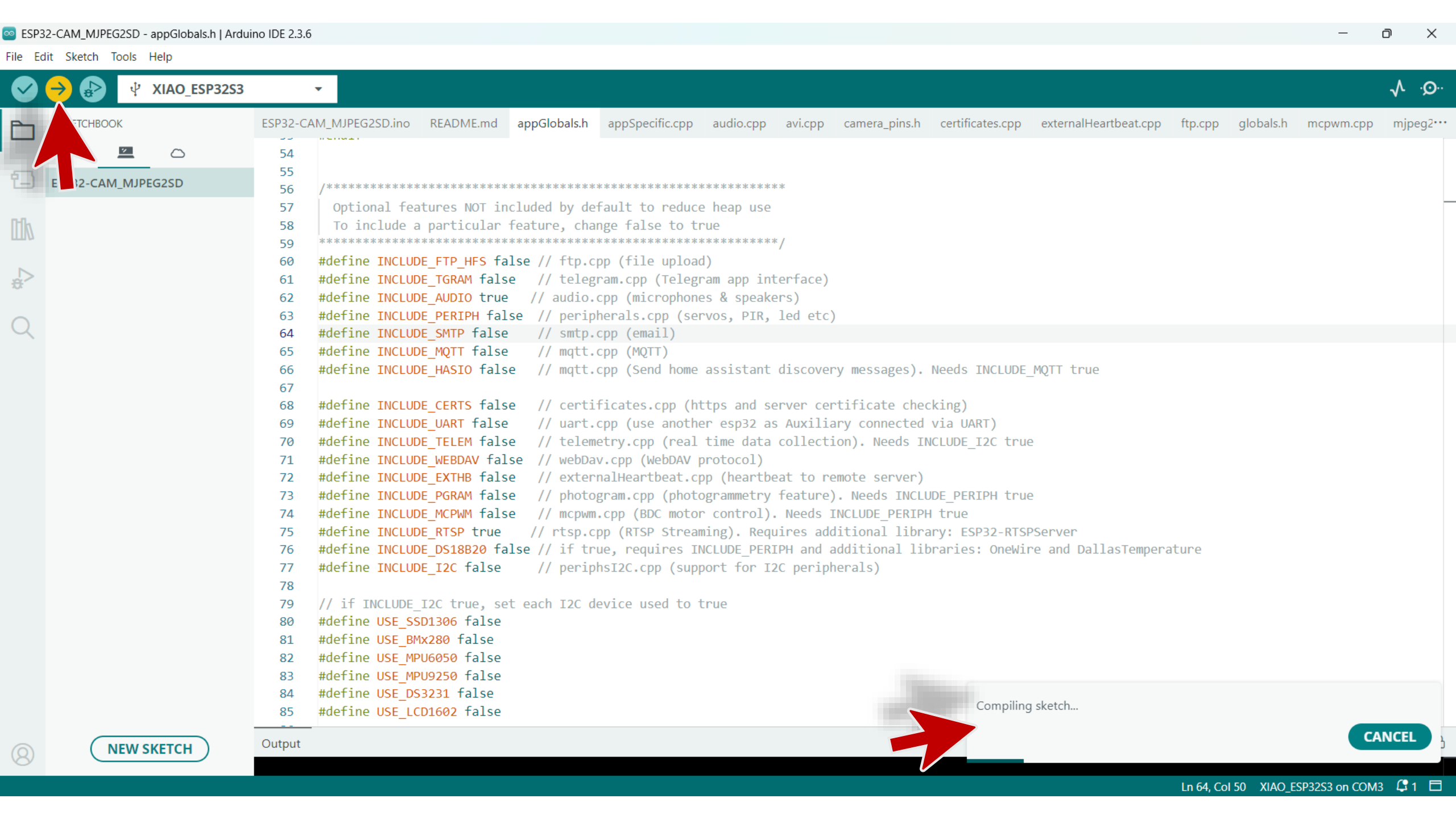

ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6
File Edit Sketch Tools Help
Auto Format Ctrl+T
Archive Sketch
Manage Libraries... Ctrl+Shift+I
Serial Monitor Ctrl+Shift+M
Serial Plotter
Firmware Updater
Upload SSL Root Certificates
Board: "ESP32C5 Dev Module"
Port: "COM3"
Reload Board Data
Get Board Info
USB CDC On Boot: "Disabled"
CPU Frequency: "240MHz (WiFi)"
Core Debug Level: "None"
Erase All Flash Before Sketch Upload: "Disabled"
Flash Frequency: "80MHz"
Flash Mode: "QIO"
Flash Size: "4MB (32Mb)"
JTAG Adapter: "Disabled"
Partition Scheme: "Default 4MB with spiffs (1.2MB APP/1.5MB SPIFFS)"
PSRAM: "Disabled"
Upload Speed: "921600"
Zigbee Mode: "Disabled"
Boards Manager... Ctrl+Shift+B
Arduino ESP32 Boards
• esp32
Deneyap Kart 1A
Deneyap Kart 1A v2
Deneyap Mini
Deneyap Mini v2
Deneyap Kart G
Trueverit ESP32 Universal IoT Driver
Trueverit ESP32 Universal IoT Driver MK II
ATMegaZero ESP32-S2
Franzininho WiFi
Franzininho WiFi MSC
TAMC Termod S3
DPU ESP32
Sonoff DUALR3
Lion:Bit Dev Board
Watchy
AirM2M_CORE_ESP32C3
XIAO_ESP32C3
XIAO_ESP32C5
XIAO_ESP32C6
XIAO_ESP32S3
XIAO_ESP32S3_PLUS
Connaxio's Espoir
CNRS AW2ETH
Department of Alchemy MiniMain ESP32-S2
Bee Data Logger
Bee Motion S3
appSpecific.cpp
audio.cpp
ftp.cpp
globals.h
mcpwm.cpp
ESP32C5 Dev Module on COM3 [not connected]


ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6
File Edit Sketch Tools Help
XIAO_ESP32S3
SKETCHBOOK
ESP32-CAM_MJPEG2SD
NEW SKETCH
ESP32-CAM_MJPEG2SD.ino
README.md
appGlobals.h
appSpecific.cpp
audio.cpp
avi.cpp
camera_pins.h
certificates.cpp
externalHeartbeat.cpp
ftp.cpp
globals.h
mcpwm.cpp
54
55
56 /***
57 Optional features NOT included by default to reduce heap use
58 To include a particular feature, change false to true
59 ***/
60 #define INCLUDE_FTP_HFS false // ftp.cpp (file upload)
61 #define INCLUDE_TGRAM false // telegram.cpp (Telegram app interface)
62 #define INCLUDE_AUDIO true // audio.cpp (microphones & speakers)
63 #define INCLUDE_PERIPH false // peripherals.cpp (servos, PIR, led etc)
64 #define INCLUDE_SMTP false // smtp.cpp (email)
65 #define INCLUDE_MQTT false // mqtt.cpp (MQTT)
66 #define INCLUDE_HASIO false // mqtt.cpp (Send home assistant discovery messages). Needs INCLUDE_MQTT true
67
68 #define INCLUDE_CERTS false // certificates.cpp (https and server certificate checking)
69 #define INCLUDE_UART false // uart.cpp (use another esp32 as Auxiliary connected via UART)
70 #define INCLUDE_TELEM false // telemetry.cpp (real time data collection). Needs INCLUDE_I2C true
71 #define INCLUDE_WEBDAV false // webDav.cpp (WebDAV protocol)
72 #define INCLUDE_EXTHB false // externalHeartbeat.cpp (heartbeat to remote server)
73 #define INCLUDE_PGRAM false // photogram.cpp (photogrammetry feature). Needs INCLUDE_PERIPH true
74 #define INCLUDE_MCPWM false // mcpwm.cpp (BDC motor control). Needs INCLUDE_PERIPH true
75 #define INCLUDE_RTSP true // rtsp.cpp (RTSP Streaming). Requires additional library: ESP32-RTSPServer
76 #define INCLUDE_DS18B20 false // if true, requires INCLUDE_PERIPH and additional libraries: OneWire and DallasTemperature
77 #define INCLUDE_I2C false // periphsI2C.cpp (support for I2C peripherals)
78
79 // if INCLUDE_I2C true, set each I2C device used to true
80 #define USE_SSD1306 false
81 #define USE_BMx280 false
82 #define USE_MPU6050 false
83 #define USE_MPU9250 false
84 #define USE_DS3231 false
85 #define USE_LCD1602 false
Output
Ln 83, Col 26
XIAO_ESP32S3 on COM3 [not connected]


ESP32-CAM_MJPEG2SD - appG
uino IDE 2.3.6
File
Edit
Sketch
Tools
Board: "XIAO_ESP32S3"
Port: "COM3"
Reload Board Data
Get Board Info
USB CDC On Boot: "Enabled"
CPU Frequency: "240MHz (WiFi)"
Core Debug Level: "None"
USB DFU On Boot: "Disabled"
Erase All Flash Before Sketch Upload: "Disabled"
Events Run On: "Core 1"
Flash Mode: "QIO 80MHz"
Flash Size: "8MB (64Mb)"
JTAG Adapter: "Disabled"
Arduino Runs On: "Core 1"
USB Firmware MSC On Boot: "Disabled"
Partition Scheme: "Default with spiffs (3MB APP/1.5MB SPIFFS)"
PSRAM: "Disabled"
Upload Mode: "UART0 / Hardware CDC"
Upload Speed: "921600"
USB Mode: "Hardware CDC and JTAG"
Programmer
Burn Bootloader
Disabled
OPI PSRAM
Globals.h
appSpecific.cpp
audio.cpp
avi.cpp
camera_pins.h
certificates.cpp
externalHeartbeat.cpp
ftp.cpp
globals.h
mcpwm.cpp
// ftp.cpp (file upload)
// telegram.cpp (Telegram app interface)
// audio.cpp (microphones & speakers)
// peripherals.cpp (servos, PIR, led etc)
// smtp.cpp (email)
// mqtt.cpp (MQTT)
// mqtt.cpp (Send home assistant discovery messages). Needs INCLUDE_MQTT true
// certificates.cpp (https and server certificate checking)
// uart.cpp (use another esp32 as Auxiliary connected via UART)
// telemetry.cpp (real time data collection). Needs INCLUDE_I2C true
// webDav.cpp (WebDAV protocol)
// externalHeartbeat.cpp (heartbeat to remote server)
// photogram.cpp (photogrammetry feature). Needs INCLUDE_PERIPH true
// mcpwm.cpp (BDC motor control). Needs INCLUDE_PERIPH true
// rtsp.cpp (RTSP Streaming). Requires additional library: ESP32-RTSPServer
// if true, requires INCLUDE_PERIPH and additional libraries: OneWire and DallasTemperature
(support for I2C peripherals)
to true
Ln 83, Col 26
XIAO_ESP32S3 on COM3 [not connected]


ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6
File Edit Sketch Tools Help
Board: "XIAO_ESP32S3"
Port: "COM3"
Reload Board Data
Get Board Info
USB CDC On Boot: "Enabled"
CPU Frequency: "240MHz (WiFi)"
Core Debug Level: "None"
USB DFU On Boot: "Disabled"
Erase All Flash Before Sketch Upload: "Disabled"
Events Run On: "Core 1"
Flash Mode: "QIO 80MHz"
Flash Size: "8MB (64Mb)"
JTAG Adapter: "Disabled"
Arduino Runs On: "Core 1"
USB Firmware MSC On Boot: "Disabled"
Partition Scheme: "Default with spiffs (3MB APP/1.5MB SPIFFS)"
PSRAM: "OPI PSRAM"
Upload Mode: "UART0 / Hardware CDC"
Upload Speed: "921600"
USB Mode: "Hardware CDC and JTAG"
Programmer
Burn Bootloader
Disabled
OPI PSRAM
appSpecific.cpp
audio.cpp
avi.cpp
camera_pins.h
certificates.cpp
externalHeartbeat.cpp
ftp.cpp
globals.h
mcpwm.cpp
// ftp.cpp (file upload)
// telegram.cpp (Telegram app interface)
// audio.cpp (microphones & speakers)
// peripherals.cpp (servos, PIR, led etc)
// smtp.cpp (email)
// mqtt.cpp (MQTT)
// mqtt.cpp (Send home assistant discovery messages). Needs INCLUDE_MQTT true
// certificates.cpp (https and server certificate checking)
// uart.cpp (use another esp32 as Auxiliary connected via UART)
// telemetry.cpp (real time data collection). Needs INCLUDE_I2C true
// webDav.cpp (WebDAV protocol)
// externalHeartbeat.cpp (heartbeat to remote server)
// photogram.cpp (photogrammetry feature). Needs INCLUDE_PERIPH true
// mcpwm.cpp (BDC motor control). Needs INCLUDE_PERIPH true
// rtsp.cpp (RTSP Streaming). Requires additional library: ESP32-RTSPServer
// if true, requires INCLUDE_PERIPH and additional libraries: OneWire and DallasTemperature
Ln 83, Col 26
XIAO_ESP32S3 on COM3 [not connected]


ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6
File Edit Sketch Tools Help
Auto Format Ctrl+T
Archive Sketch
Manage Libraries... Ctrl+Shift+I
Serial Monitor Ctrl+Shift+M
Serial Plotter
Firmware Updater
Upload SSL Root Certificates
Board: "XIAO_ESP32S3"
Port: "COM3"
Reload Board Data
Get Board Info
USB CDC On Boot: "Enabled"
CPU Frequency: "240MHz (WiFi)"
Core Debug Level: "None"
USB DFU On Boot: "Disabled"
Erase All Flash Before Sketch Upload: "Disabled"
Events Run On: "Core 1"
Flash Mode: "QIO 80MHz"
Flash Size: "8MB (64Mb)"
JTAG Adapter: "Disabled"
Arduino Runs On: "Core 1"
USB Firmware MSC On Boot: "Disabled"
Serial ports
COM3 (ESP32 Family Device)
appSpecific.cpp
audio.cpp
avi.cpp
camera_pins.h
certificates.cpp
externalHeartbeat.cpp
ftp.cpp
globals.h
mcpwm.cpp
// ftp.cpp (file upload)
// telegram.cpp (Telegram app interface)
// audio.cpp (microphones & speakers)
// certificates.cpp (https and server certificate checking)
// uart.cpp (use another esp32 as Auxiliary connected via UART)
// telemetry.cpp (real time data collection). Needs INCLUDE_I2C true
// webDav.cpp (WebDAV protocol)
// externalHeartbeat.cpp (heartbeat to remote server)
// photogram.cpp (photogrammetry feature). Needs INCLUDE_PERIPH true
// mcpwm.cpp (BDC motor control). Needs INCLUDE_PERIPH true
// rtsp.cpp (RTSP Streaming). Requires additional library: ESP32-RTSPServer
// if true, requires INCLUDE_PERIPH and additional libraries: OneWire and DallasTemperature
// periphsI2C.cpp (support for I2C peripherals)
Ln 83, Col 26 XIAO_ESP32S3 on COM3


ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6
File Edit Sketch Tools Help
XIAO_ESP32S3
ESP32-CAM_MJPEG2SD.ino
README.md
appGlobals.h
appSpecific.cpp
audio.cpp
avi.cpp
camera_pins.h
certificates.cpp
externalHeartbeat.cpp
ftp.cpp
globals.h
mcpwm.cpp
54
55
56 /***
57 Optional features NOT included by default to reduce heap use
58 To include a particular feature, change false to true
59 ***/
60 #define INCLUDE_FTP_HFS false // ftp.cpp (file upload)
61 #define INCLUDE_TGRAM false // telegram.cpp (Telegram app interface)
62 #define INCLUDE_AUDIO true // audio.cpp (microphones & speakers)
63 #define INCLUDE_PERIPH false // peripherals.cpp (servos, PIR, led etc)
64 #define INCLUDE_SMTP false // smtp.cpp (email)
65 #define INCLUDE_MQTT false // mqtt.cpp (MQTT)
66 #define INCLUDE_HASIO false // mqtt.cpp (Send home assistant discovery messages). Needs INCLUDE_MQTT true
67
68 #define INCLUDE_CERTS false // certificates.cpp (https and server certificate checking)
69 #define INCLUDE_UART false // uart.cpp (use another esp32 as Auxiliary connected via UART)
70 #define INCLUDE_TELEM false // telemetry.cpp (real time data collection). Needs INCLUDE_I2C true
71 #define INCLUDE_WEBDAV false // webDav.cpp (WebDAV protocol)
72 #define INCLUDE_EXTHB false // externalHeartbeat.cpp (heartbeat to remote server)
73 #define INCLUDE_PGRAM false // photogram.cpp (photogrammetry feature). Needs INCLUDE_PERIPH true
74 #define INCLUDE_MCPWM false // mcpwm.cpp (BDC motor control). Needs INCLUDE_PERIPH true
75 #define INCLUDE_RTSP true // rtsp.cpp (RTSP Streaming). Requires additional library: ESP32-RTSPServer
76 #define INCLUDE_DS18B20 false // if true, requires INCLUDE_PERIPH and additional libraries: OneWire and DallasTemperature
77 #define INCLUDE_I2C false // periphsI2C.cpp (support for I2C peripherals)
78
79 // if INCLUDE_I2C true, set each I2C device used to true
80 #define USE_SSD1306 false
81 #define USE_BMx280 false
82 #define USE_MPU6050 false
83 #define USE_MPU9250 false
84 #define USE_DS3231 false
85 #define USE_LCD1602 false
Output
Compiling sketch...
CANCEL
NEW SKETCH
Ln 64, Col 50 XIAO_ESP32S3 on COM3

ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6

File Edit Sketch Tools Help

XIAO_ESP32S3

SKETCHBOOK

ESP32-CAM_MJPEG2SD

NEW SKETCH

ESP32-CAM_MJPEG2SD.ino | README.md | appGlobals.h | appSpecific.cpp | audio.cpp | avi.cpp | camera_pins.h | certificates.cpp | externalHeartbeat.cpp | ftp.cpp | globals.h | mcpwm.cpp | mjpeg2...

54

Output

```
Sketch uses 1761899 bytes (52%) of program storage space. Maximum is 3342336 bytes.
Global variables use 97468 bytes (29%) of dynamic memory, leaving 230212 bytes for local variables. Maximum is 327680 bytes.
esptool v5.1.0
Serial port COM3:
Connecting...
Connected to ESP32-S3 on COM3:
Chip type:          ESP32-S3 (QFN56) (revision v0.2)
Features:           Wi-Fi, BT 5 (LE), Dual Core + LP Core, 240MHz, Embedded PSRAM 8MB (AP_3v3)
Crystal frequency:  40MHz
USB mode:           USB-Serial/JTAG
MAC:                8c:bf:ea:8f:35:cc

Uploading stub flasher...
Running stub flasher...
Stub flasher running.
Changing baud rate to 921600...
Changed.

Configuring flash size...
Flash will be erased from 0x00000000 to 0x00004fff...
Flash will be erased from 0x00008000 to 0x00008fff...
Flash will be erased from 0x0000e000 to 0x0000ffff...
Flash will be erased from 0x00010000 to 0x001befff...
Compressed 20224 bytes to 13061...

Writing at 0x00000000 [                              ]   0.0% 0/13061 bytes...

Writing at 0x00004f00 [==============================] 100.0% 13061/13061 bytes...
Wrote 20224 bytes (13061 compressed) at 0x00000000 in 0.3 seconds (532.9 kbit/s).
Hash of data verified.
Compressed 3072 bytes to 146...

Writing at 0x00008000 [                              ]   0.0% 0/146 bytes...
```

Ln 64, Col 50 XIAO_ESP32S3 on COM3 2

ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6

File Edit Sketch Tools Help

XIAO_ESP32S3

SKETCHBOOK

ESP32-CAM_MJPEG2SD

ESP32-CAM_MJPEG2SD.ino | README.md | appGlobals.h | appSpecific.cpp | audio.cpp | avi.cpp | camera_pins.h | certificates.cpp | externalHeartbeat.cpp | ftp.cpp | globals.h | mcpwm.cpp | mjpeg2...

54

Output

```
Writing at 0x0016fc42 [=====================>      ]  81.0% 851968/1052351 bytes...

Writing at 0x00175f7c [=====================>      ]  82.5% 868352/1052351 bytes...

Writing at 0x0017b518 [======================>     ]  84.1% 884736/1052351 bytes...

Writing at 0x00180ebd [======================>     ]  85.6% 901120/1052351 bytes...

Writing at 0x00188fda [======================>     ]  87.2% 917504/1052351 bytes...

Writing at 0x00192293 [======================>     ]  88.7% 933888/1052351 bytes...

Writing at 0x001998e3 [======================>     ]  90.3% 950272/1052351 bytes...

Writing at 0x0019e8be [======================>     ]  91.9% 966656/1052351 bytes...

Writing at 0x001a43b4 [======================>     ]  93.4% 983040/1052351 bytes...

Writing at 0x001ab0fe [======================>     ]  95.0% 999424/1052351 bytes...

Writing at 0x001b0dd7 [======================>     ]  96.5% 1015808/1052351 bytes...

Writing at 0x001b67c0 [======================>     ]  98.1% 1032192/1052351 bytes...

Writing at 0x001bc97d [======================>     ]  99.6% 1048576/1052351 bytes...

Writing at 0x001be360 [==============================] 100.0% 1052351/1052351 bytes...
Wrote 1762144 bytes (1052351 compressed) at 0x00010000 in 11.5 seconds (1221.2 kbit/s).
Hash of data verified.

Hard resetting via RTS pin...
```

NEW SKETCH

Ln 64, Col 50 XIAO_ESP32S3 on COM3 2

ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6

File Edit Sketch Tools Help

XIAO_ESP32S3

SKETCHBOOK

ESP32-CAM_MJPEG2SD

NEW SKETCH

ESP32-CAM_MJPEG2SD.ino README.md appGlobals.h appSpecific.cpp audio.cpp avi.cpp camera_pins.h certificates.cpp externalHeartbeat.cpp ftp.cpp globals.h mcpwm.cpp mjpeg2

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Hash of data verified.

Hard resetting via RTS pin...
```

Wi-Fi

Wizzard Fi
Connected, secured

Disconnect

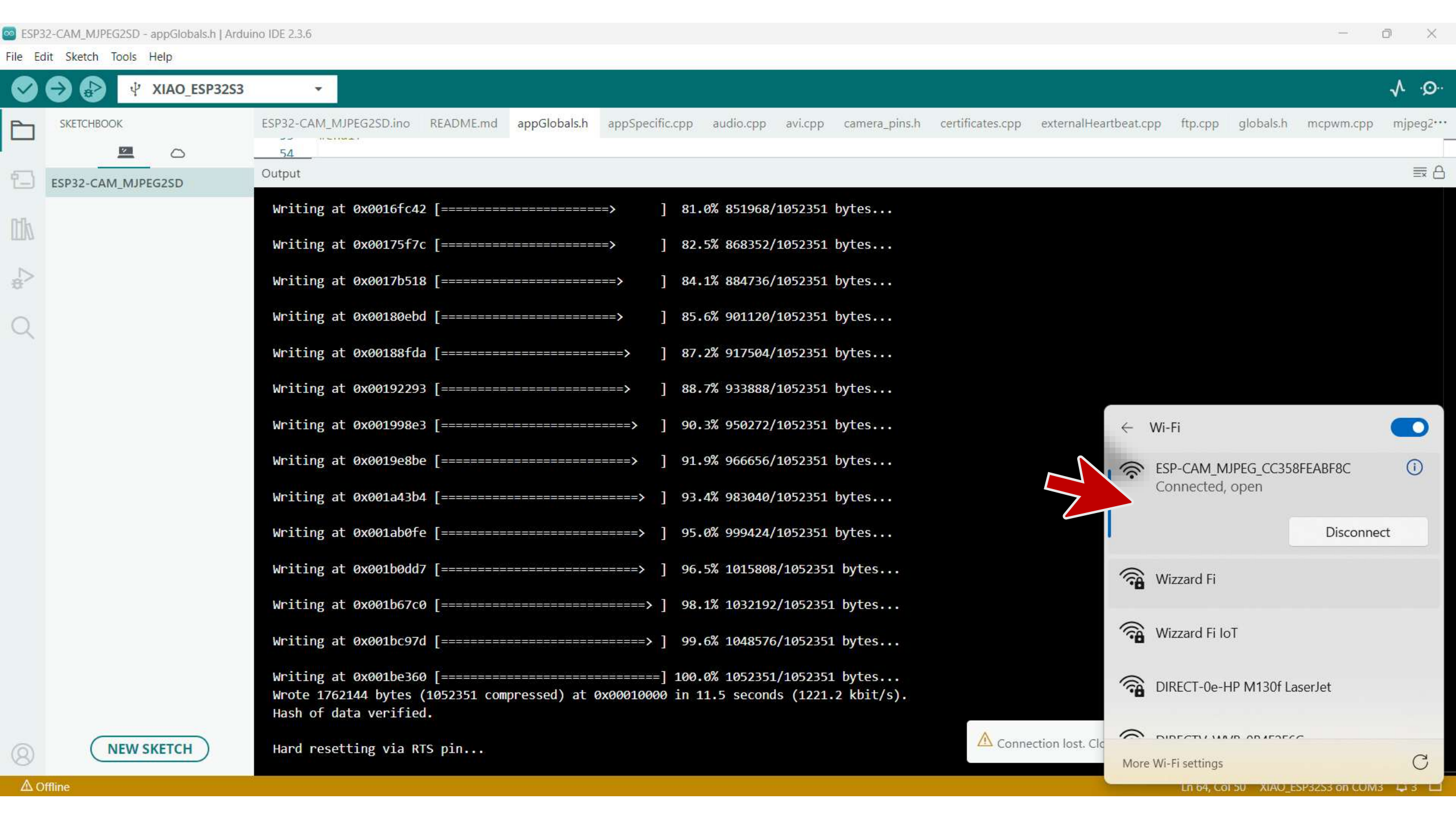
Wizzard Fi IoT

ESP-CAM_MJPEG_CC358FEABF8C

DIRECTV_WVB_0B4F2F6C

More Wi-Fi settings

Ln 64, Col 50 XIAO_ESP32S3 on COM3


ESP32-CAM_MJPEG2SD - appGlobals.h | Arduino IDE 2.3.6
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XIAO_ESP32S3
SKETCHBOOK
ESP32-CAM_MJPEG2SD
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Hard resetting via RTS pin...
Wi-Fi
ESP-CAM_MJPEG_CC358FEABF8C
Connected, open
Disconnect
Wizzard Fi
Wizzard Fi IoT
DIRECT-0e-HP M130f LaserJet
More Wi-Fi settings
Connection lost. Clo
Offline
Ln 64, Col 50 XIAO_ESP32S3 on COM3

Connect To ESP32 Server

http://192.168.4.1