```
#include "esp_camera.h"

#include <WiFi.h>


//

// WARNING!!! Make sure that you have either selected ESP32 Wrover Module,

//          or another board which has PSRAM enabled

//


// Select camera model

#define CAMERA_MODEL_WROVER_KIT

//#define CAMERA_MODEL_ESP_EYE

//#define CAMERA_MODEL_M5STACK_PSRAM

//#define CAMERA_MODEL_M5STACK_WIDE

//#define CAMERA_MODEL_AI_THINKER


#include "camera_pins.h"


const char* ssid = "*********";  // ENTER NAME AND PASSWORD

const char* password = "*********";


void startCameraServer();


void setup() {

  Serial.begin(115200);

  Serial.setDebugOutput(true);
```

```cpp
  Serial.println();


  camera_config_t config;

  config.ledc_channel = LEDC_CHANNEL_0;

  config.ledc_timer = LEDC_TIMER_0;

  config.pin_d0 = Y2_GPIO_NUM;

  config.pin_d1 = Y3_GPIO_NUM;

  config.pin_d2 = Y4_GPIO_NUM;

  config.pin_d3 = Y5_GPIO_NUM;

  config.pin_d4 = Y6_GPIO_NUM;

  config.pin_d5 = Y7_GPIO_NUM;

  config.pin_d6 = Y8_GPIO_NUM;

  config.pin_d7 = Y9_GPIO_NUM;

  config.pin_xclk = XCLK_GPIO_NUM;

  config.pin_pclk = PCLK_GPIO_NUM;

  config.pin_vsync = VSYNC_GPIO_NUM;

  config.pin_href = HREF_GPIO_NUM;

  config.pin_sscb_sda = SIOD_GPIO_NUM;

  config.pin_sscb_scl = SIOC_GPIO_NUM;

  config.pin_pwdn = PWDN_GPIO_NUM;

  config.pin_reset = RESET_GPIO_NUM;

  config.xclk_freq_hz = 20000000;

  config.pixel_format = PIXFORMAT_JPEG;
  //init with high specs to pre-allocate larger buffers
  if(psramFound()){
```

```
    config.frame_size = FRAMESIZE_UXGA;

    config.jpeg_quality = 10;

    config.fb_count = 2;

  } else {

    config.frame_size = FRAMESIZE_SVGA;

    config.jpeg_quality = 12;

    config.fb_count = 1;

  }


#if defined(CAMERA_MODEL_ESP_EYE)

  pinMode(13, INPUT_PULLUP);

  pinMode(14, INPUT_PULLUP);

#endif


  // camera init

  esp_err_t err = esp_camera_init(&config);

  if (err != ESP_OK) {

    Serial.printf("Camera init failed with error 0x%x", err);

    return;

  }


  sensor_t * s = esp_camera_sensor_get();

  //initial sensors are flipped vertically and colors are a bit saturated

  if (s->id.PID == OV3660_PID) {

    s->set_vflip(s, 1);//flip it back
```

```arduino
    s->set_brightness(s, 1);//up the blightness just a bit

    s->set_saturation(s, -2);//lower the saturation

  }

  //drop down frame size for higher initial frame rate

  s->set_framesize(s, FRAMESIZE_QVGA);


#if defined(CAMERA_MODEL_M5STACK_WIDE)

  s->set_vflip(s, 1);

  s->set_hmirror(s, 1);

#endif


  WiFi.begin(ssid, password);


  while (WiFi.status() != WL_CONNECTED) {

    delay(500);

    Serial.print(".");

  }

  Serial.println("");

  Serial.println("WiFi connected");


  startCameraServer();


  Serial.print("Camera Ready! Use 'http://");

  Serial.print(WiFi.localIP());

  Serial.println("' to connect");
```

```
}


void loop() {

  // put your main code here, to run repeatedly:

  delay(10000);

}
```