

ESP32 trINKet Install Instructions

Windows 10

-install the latest Arduino IDE

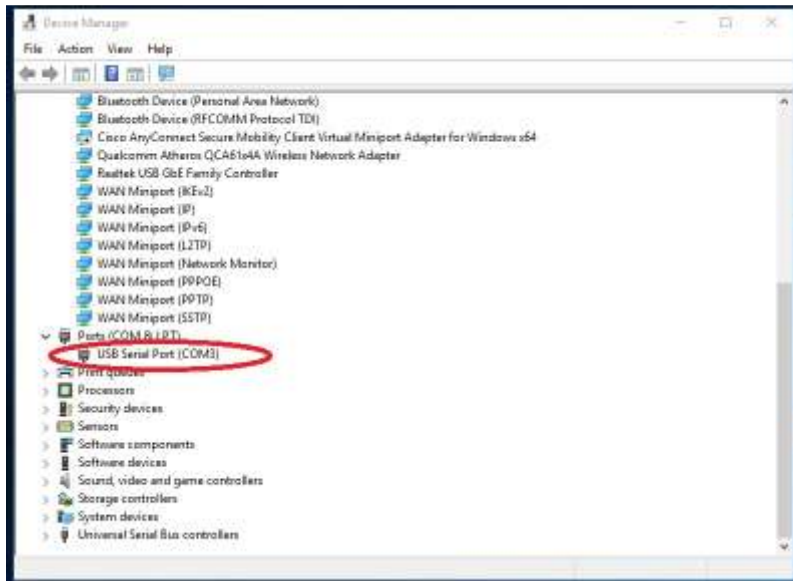
-in File/Preferences enter:

http://arduino.esp8266.com/versions/2.3.0/package_esp8266com_index.json

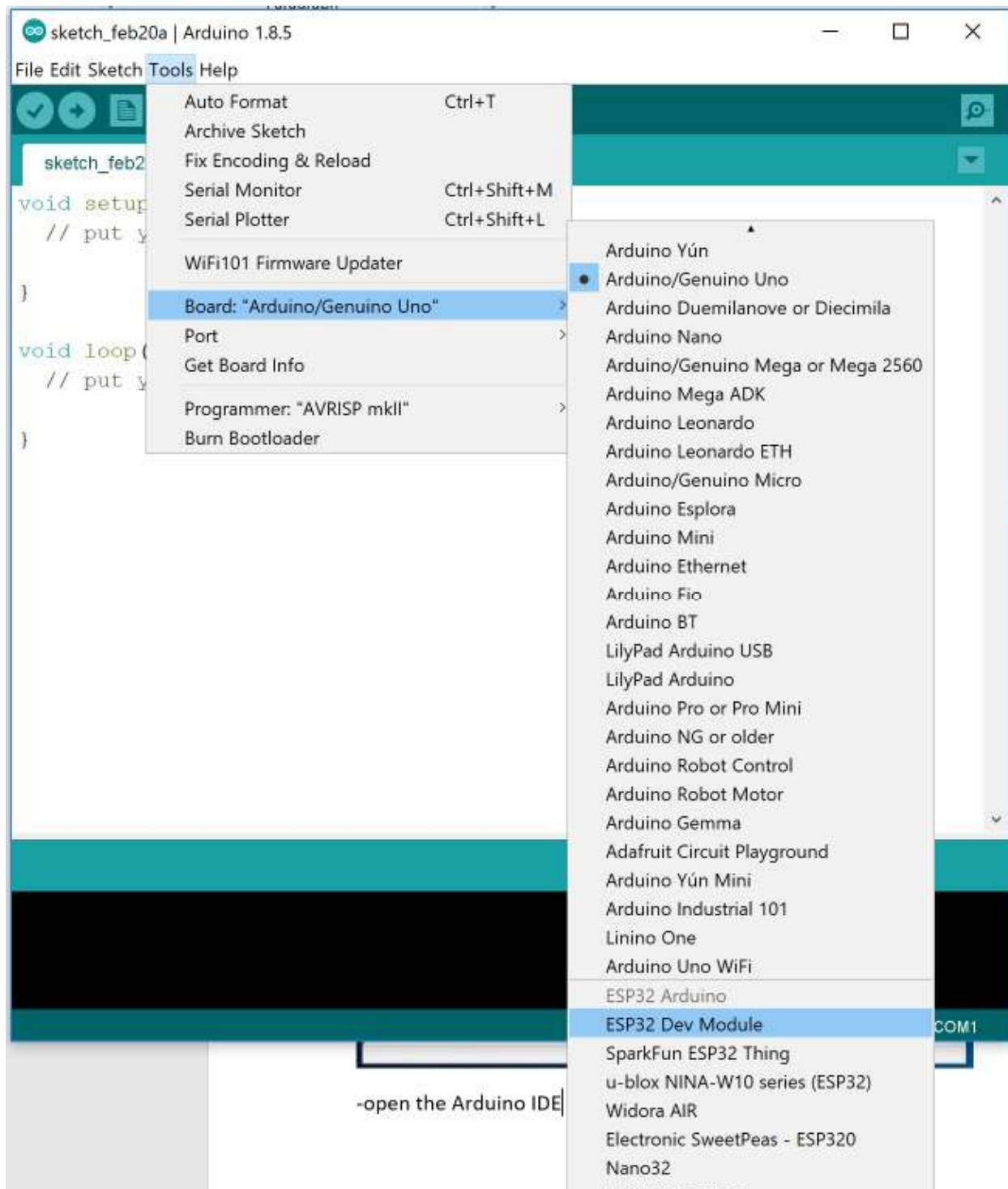
-close the Arduino IDE

-install the ESP32 Dev Module files under Install Instructions: <https://github.com/espressif/arduino-esp32/>

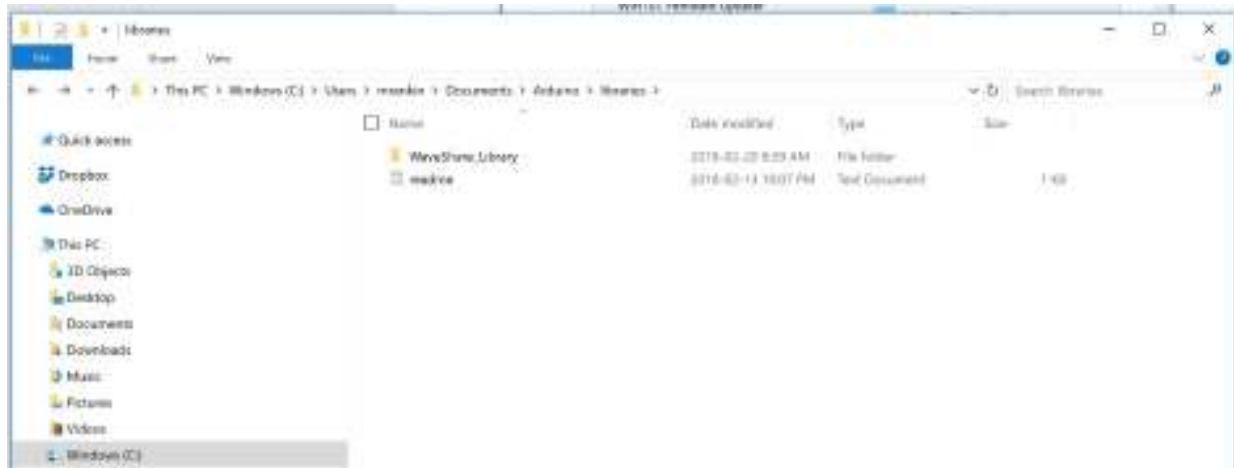
-plug in the ESP32 Programmer board and verify at Control Panel/Hardware & Sound/Device Manager that a USB Serial Port device appears under Ports.



-open the Arduino IDE and select the new Board



-at my Github link: https://github.com/mike-rankin/ESP_trINKet/tree/master/Code/WaveShare place the Waveshare library directory and place it where your regular libraries go.



-plug the ESP32 programmer onto a USB cable, select the new com port. Open the Sensor Test sketch and power up the trinket board, plug in the programmer and Verify the sketch compiles before clicking Upload.

-you may also have to install the ClosedCube_HDC1080 library by going to Sketch/Include Library and entering: ClosedCube_HDC1080

-then enter in your wifi SSID & PASSWORD

-when compiling I see the error: Multiple libraries were found for "WiFi.h". After entering in the wifi SSID & Password, compiling again the error did not show again.?

-had trouble on my new laptop when trying to Upload the sketch: serial.serialutil.SerialException: could not open port 'COM3': WindowsError(5, 'Access is denied.')

-to fix went to Control Panel/Hardware & Sound/Device Manager/Ports and disabled the new COM Port. Unplugged and plugged in the programmer and then successfully Uploaded the sketch.

Custom Splashscreen Instructions

-open the Original_DK_Logo.jpg in microsoft paint. If click Resize and see the pixel size is 313 x 161 which is too large.

-click Resize, Pixels, de-select Maintain aspect ratio

-enter Horizontal=212 and Vertical=104

-open Resized_DK_Logo.jpg, Resize and you can see the pixel size is correct.

-File, Open, Resized_DK_Logo.jpg and Save As Black.bmp and as a Monochrome Bitmap

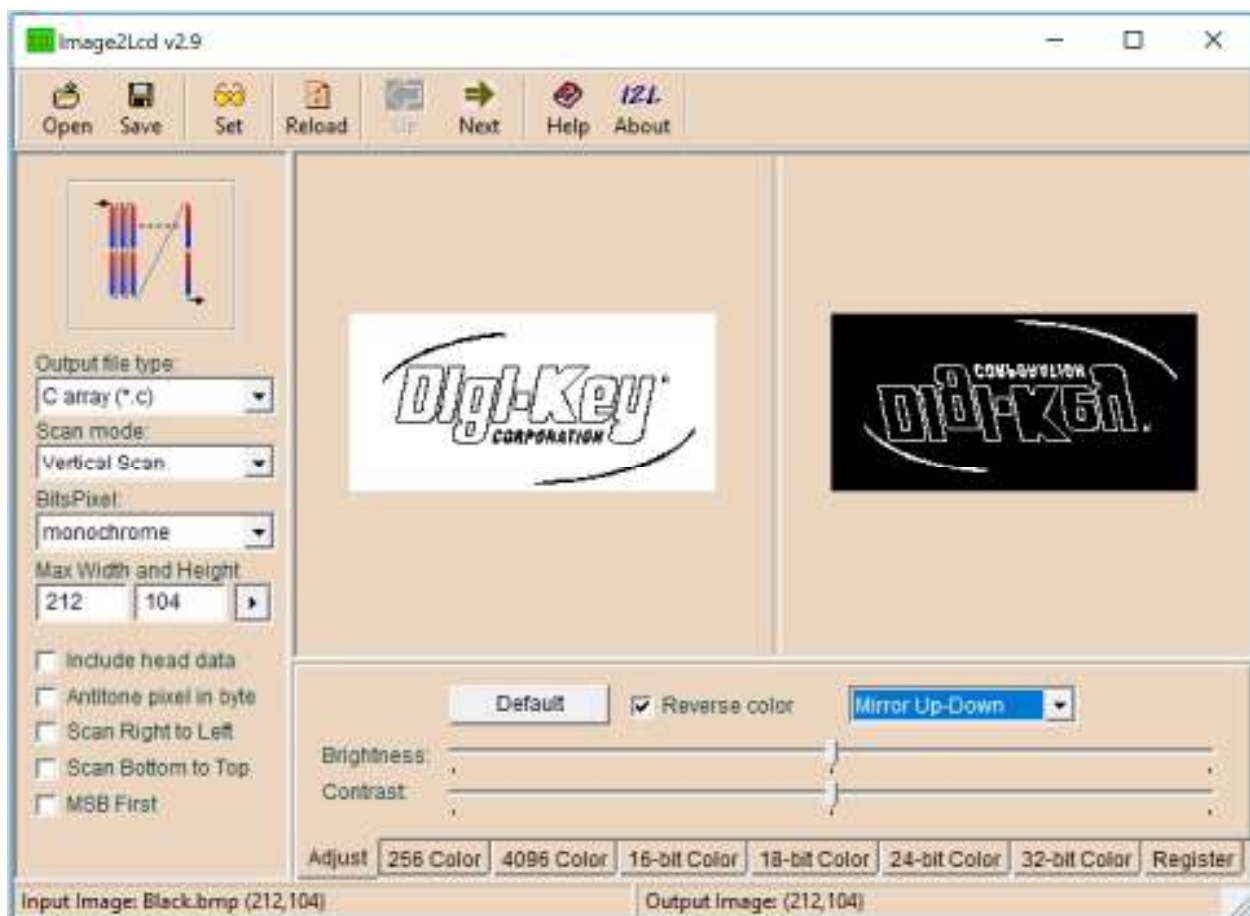
Use Paint to erase all the red pixels that you remember seeing and save again as Black.bmp

Sometimes when you zoom in and make a pixel white it stays black. Save the image to 256 Monochrome and it works properly

-File, Open Resized_DK_Logo.jpg and Save As Red.bmp and as a Monochrome Bitmap

Use Paint to erase all the black pixels that you remember seeing and save again as Red.bmp

Open Image2Lcd



Scan mode: Vertical Scan

BitsPixel: monochrome

Max Width and Height: 212 104

Open the Black image, click Reverse Color, Mirror Up-Down, Save as Black.h, copy the hex code to your Documents/Arduino/Libraries/GxEPD/GxGDEW0213Z16/BitmapWaveshare.h file

```
under const unsigned char BitmapWaveshare_black[] PROGMEM = {
```

Do the same with the Red

Now upload the sketch to the board.