

## ESP32 trINKet Install Instructions for Windows 10

-install the latest Arduino IDE

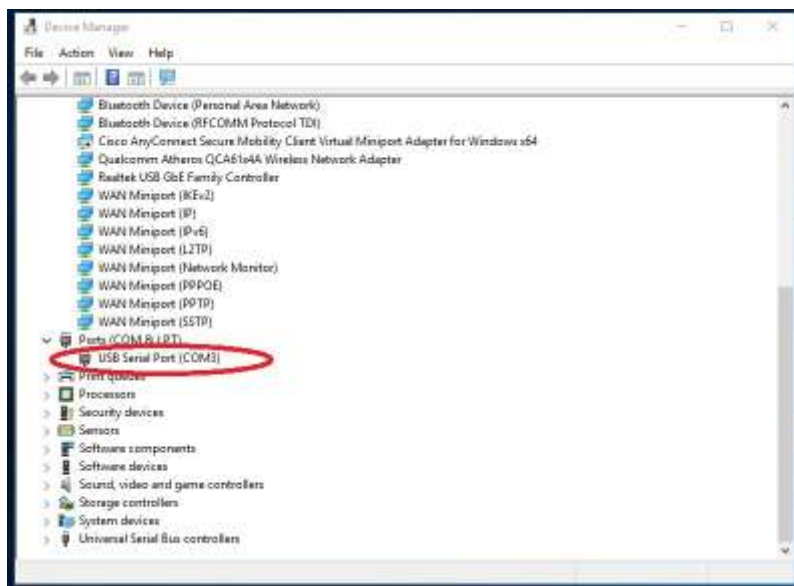
-in File/Preferences enter:

[http://arduino.esp8266.com/versions/2.3.0/package\\_esp8266com\\_index.json](http://arduino.esp8266.com/versions/2.3.0/package_esp8266com_index.json)

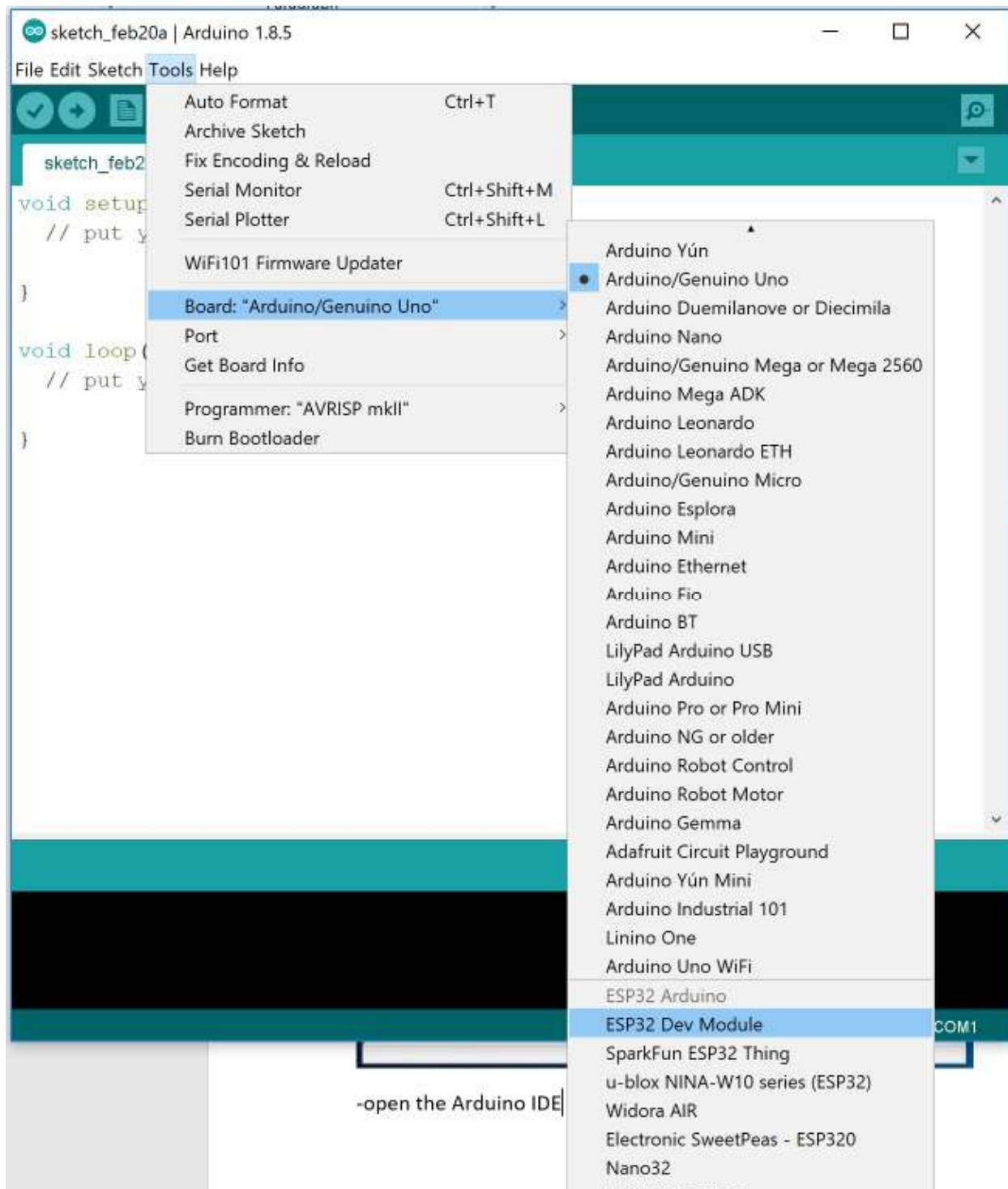
-close the Arduino IDE

-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



Install the GxEPD library from: <https://github.com/ZinggJM/GxEPD>

Open my GxEPD\_Sleep sketch from: [https://github.com/mike-rankin/ESP\\_trINKet](https://github.com/mike-rankin/ESP_trINKet)

-plug the ESP32 programmer onto a USB cable, select the new com port. Open the GxEPD\_Sleep 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 Adafruit\_GFX and ClosedCube\_HDC1080 library by going to Sketch/Include Library and entering: ClosedCube\_HDC1080

-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

-I've provided the Digi-Key example images

-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

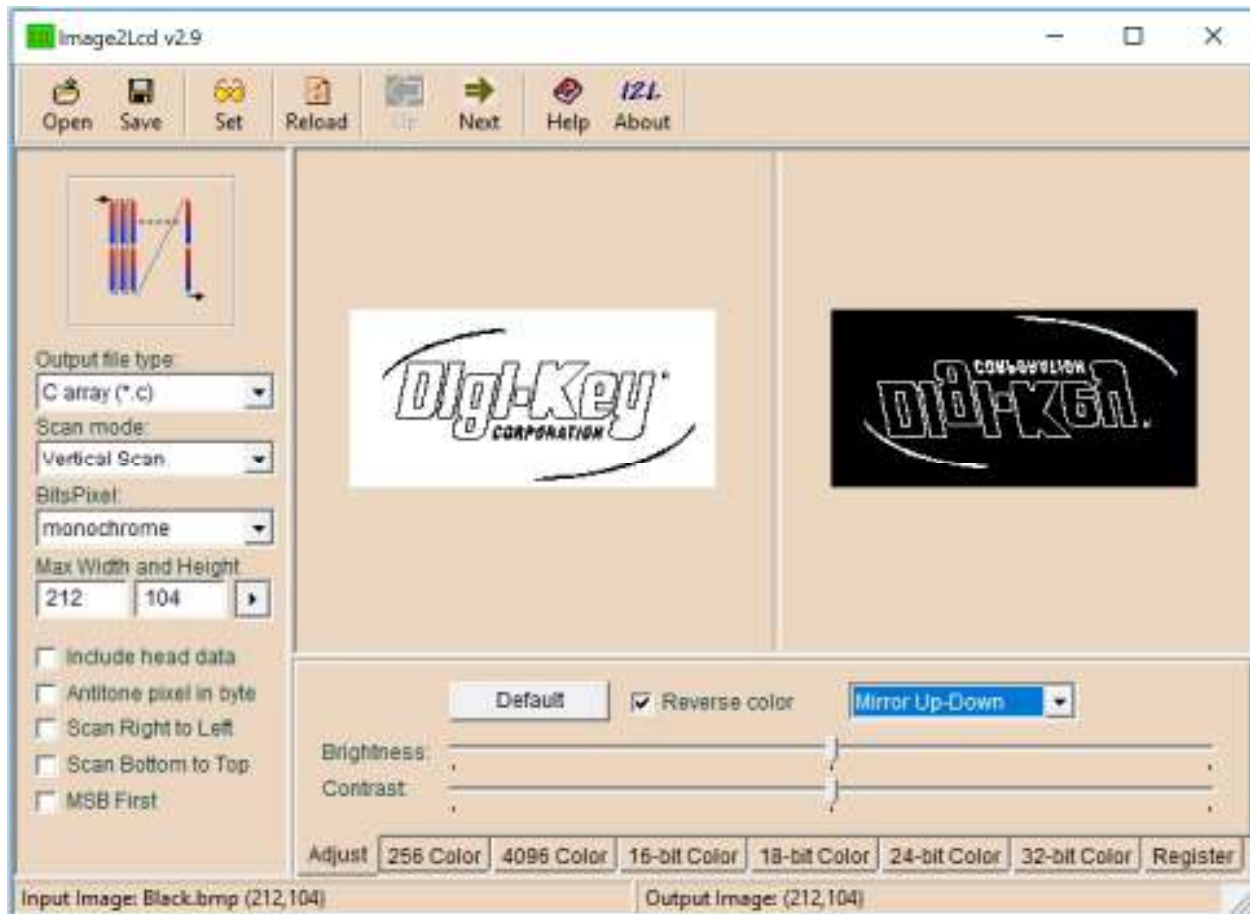
Use Paint to erase all the red pixels that you remember seeing and save again as Black.bmp

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.