Changing firmware: Onomondo Getting started device.

The device can easily be modified using the open source software from Arduino.

Installing Arduino IDE

The software can be found here. Pick the appropriate version (e.g. 'Windows' or Mac OS X). Do not pick the *Windows app* option.

Adding ESP-32 to Arduino.

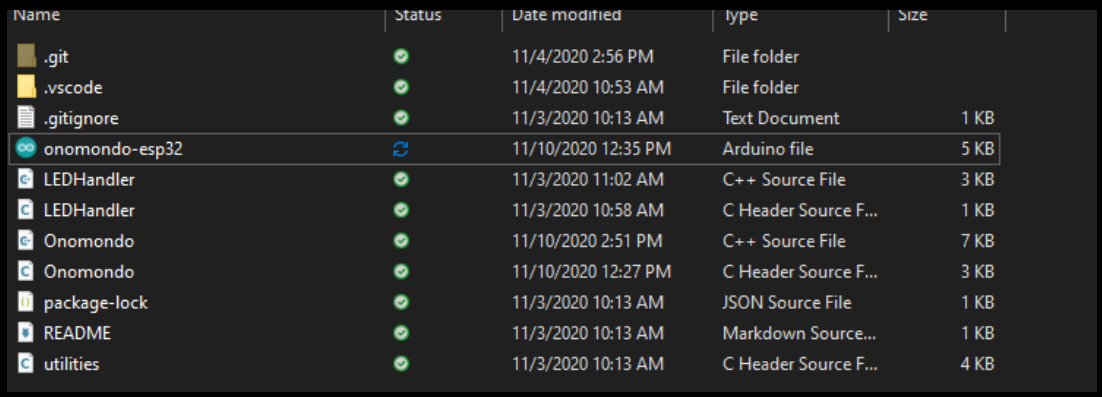
There is an excellent guide here.

Get the source code

An updated version of the source code can be found here.

Open the project

Open the onomondo-esp32 file in the folder. The Arduino IDE should open.



Name	Status	Date modified	Type	Size
.git		11/4/2020 2:56 PM	File folder	
.vscode		11/4/2020 10:53 AM	File folder	
.gitignore		11/3/2020 10:13 AM	Text Document	1 KB
onomondo-esp32		11/10/2020 12:35 PM	Arduino file	5 KB
LEDHandler		11/3/2020 11:02 AM	C++ Source File	3 KB
LEDHandler		11/3/2020 10:58 AM	C Header Source F...	1 KB
Onomondo		11/10/2020 2:51 PM	C++ Source File	7 KB
Onomondo		11/10/2020 12:27 PM	C Header Source F...	3 KB
package-lock		11/3/2020 10:13 AM	JSON Source File	1 KB
README		11/3/2020 10:13 AM	Markdown Source...	1 KB
utilities		11/3/2020 10:13 AM	C Header Source F...	4 KB

Under *Tools >> Board >> ESP32 Arduino* select *ESP32 Dev Module*

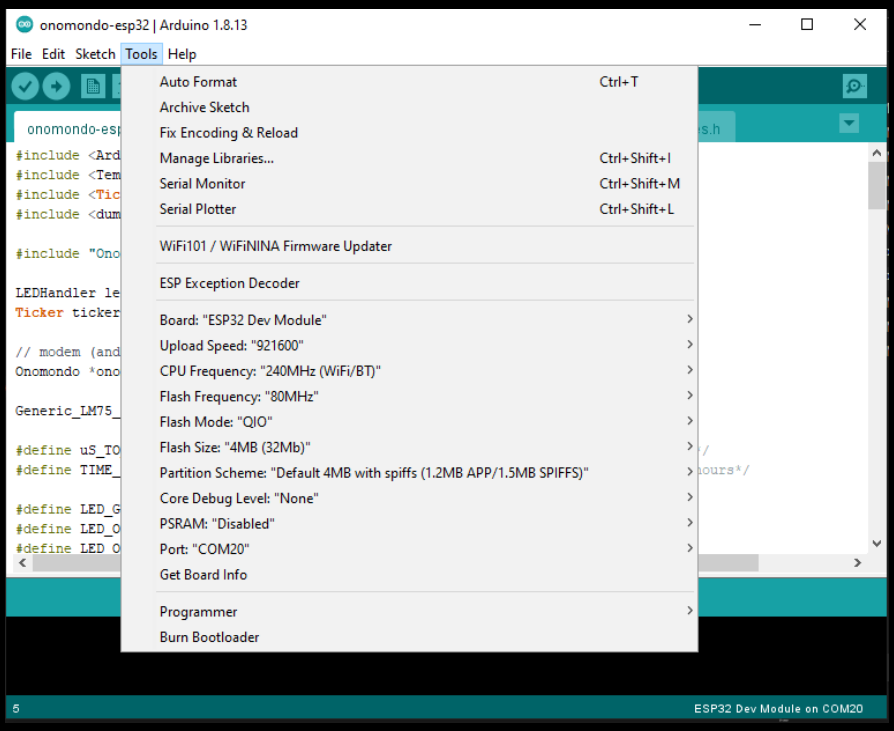
Under *Tools >> Port* select the correct port. In cases with multiple ports, the desired port can be identified by inspecting the list before and after the device is plugged in. Nothing can be broken by selecting the wrong port.

Adding required libraries.

Some external libraries are used. To add these simply go to *Tools >> library manager.* Add the following libraries:

- ArduinoJson (by Benoit)
- TinyGSM (by Volodymyr)

- Ticker (by Stefan Staub)
- I2C Temperature Sensors derived from the LM75 (by Jeremy Cole)
- StreamDebugger (by Volodymyr)



Program the device.

Finally, the device should be programmed. This is done by clicking the small check mark.

If the upload fails: Make sure the device is connected, the selected com port is correct AND that you are not already connected to the board (e.g. already reading the debug outputs).