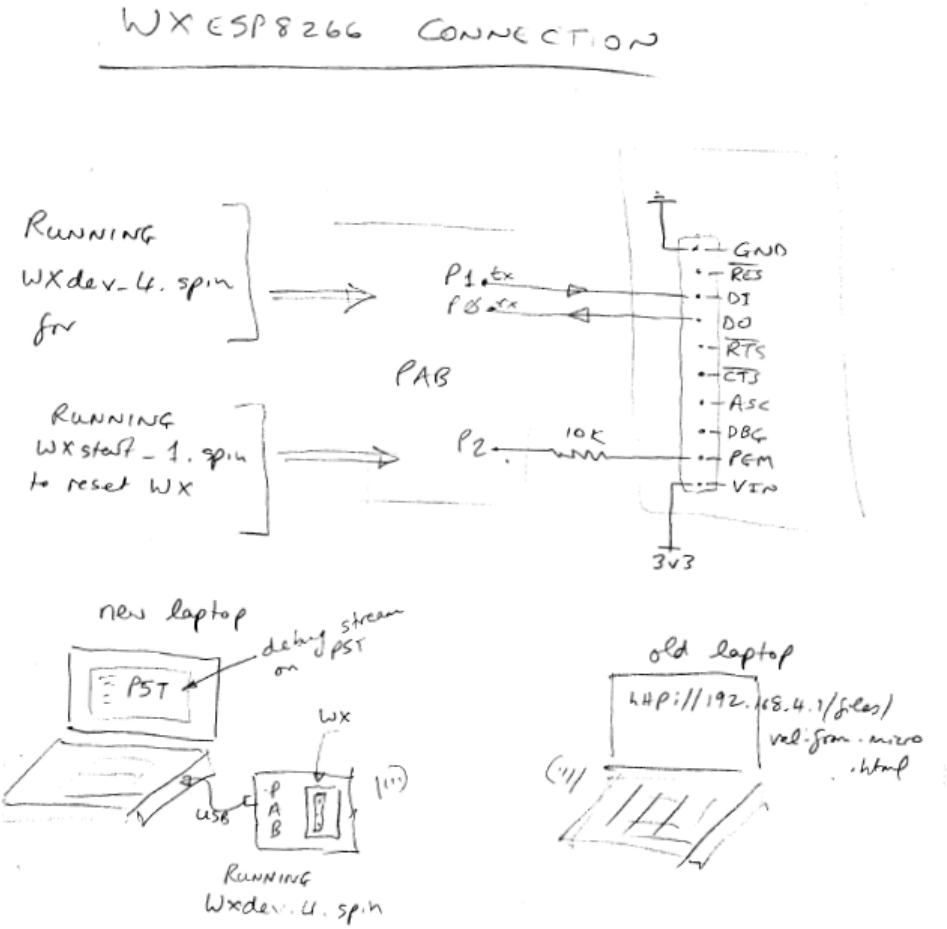
1. WX_SPIN_Setup Iss1

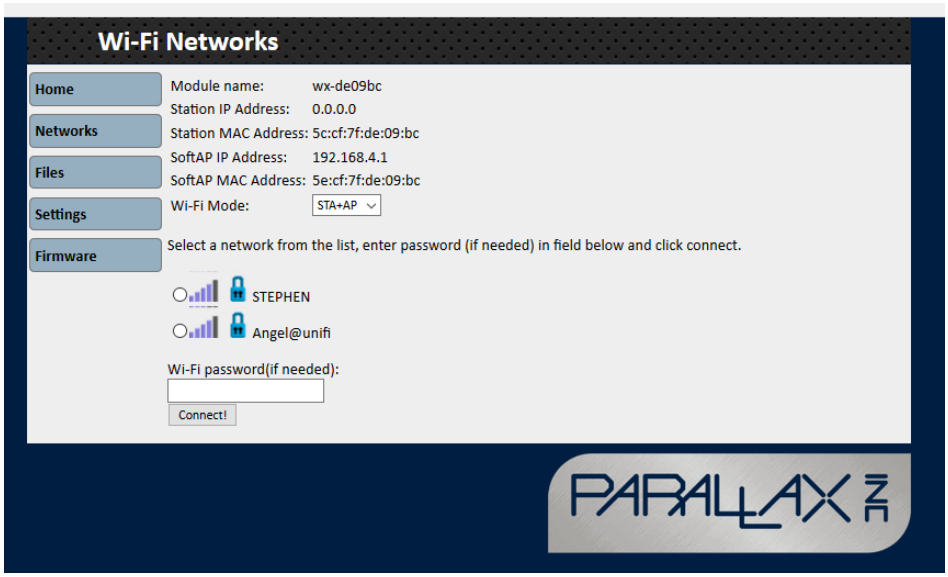
The objective of this project is to assist SPIN coders to access the WX ESP8266 module. Please refer to Parallax Learn tutorials for comprehensive resources and tutorials

2. **Schematic. It is easier to debug the WX using two computers as per schematic below;**

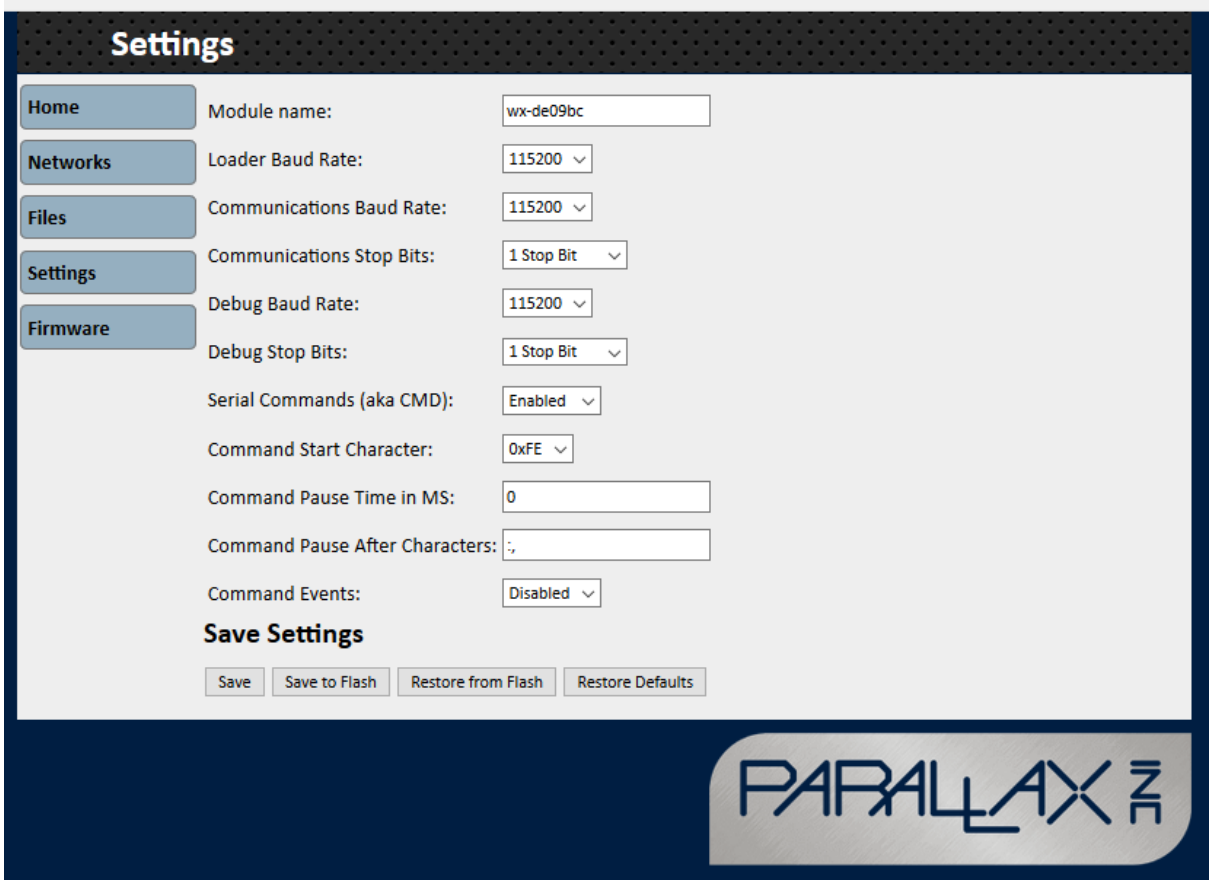


3. **Set the WX parameters for Serial CMD and Prop. Hook up the WX and connect to the WX wifi. Set the parameters as below;**

Wi-Fi Networks – do not join any other networks yet. The WX pin ASC light should be slowly flashing Blue (see explanation below). Remain in STA+AP mode for serial commands.



Settings – I find these settings enable the WX for stable serial commands from the Prop.



4. **The ASC light should be flashing slowly for an IP (refer to API document). This can be reset by toggling, or by a SPIN program**

- The WX came up with an IP when I initially started it, and then somehow with my experimentation it slipped into a STA(no IP) mode with ASC led off.
- I did not help matters by toggling the WX board RES pin 4 times in 2 secs – that is why the ASC light was wrongly flashing – as you point out.
- In my defence, I read the API and it says ;
- In a situation where there is no wireless connection (STA mode with no IP address) the module can be forced to turn on its AP (SoftAP) interface by toggling its RES pin low/high four times within two seconds.
- However, I realised this API RES pin is not the RES pin on the WX board, but is actually the PGM pin on the WX board.
- So I tried toggling the correct WX pin, but I could not reset the WX by grounding the WX PGM pin 4 times in 2 secs using a button (correctly shown in the BS2 learn schematic).
- To do this toggling more precisely, I wrote a trivial SPIN program to do the toggling through Prop Pin via a 10K resistor to the WX PGM pin – much to my surprise it worked first time and now I have a slow blink STA(with IP) mode and I can continue. You may suggest to other users to do the toggling via a program if it does not work by grounding button. I attach the SPIN code as WXstart_1.SPIN.
- If there is problem with no IP on startup, there may be an issue with the EEPROM Prop program interfering with the WX-connected pins. See the Learn tutorial. I got clean startups if WXstart_1.SPIN was uploaded to the EEPROM.

5. Upload the html files for the WX demo programs

Now is a good time to upload into the WX module memory the html files required for the first three WX demo programs.

The files are

- val-from-micro.html
- text-page-to-micro.html
- page-controls-light.html

To load the files to the WX module memory click on the Files Tab on the WX module home page;

Parallax Wi-Fi Module Con
Andy
192.168.4.1/update-ffs.html
File Uploads
Home
Networks
Files
Settings
Firmware
Here, you can upload files for the ESP8266 micro web server. For example, if your ESP module's IP address is 192.168.4.1 and your file is mypage.html, use this page to upload the file. To view the page, just send your web browser to http://192.168.4.1/files/mypage.html.
Choose File
No file chosen
Empty the Filesystem
Empty
Progress