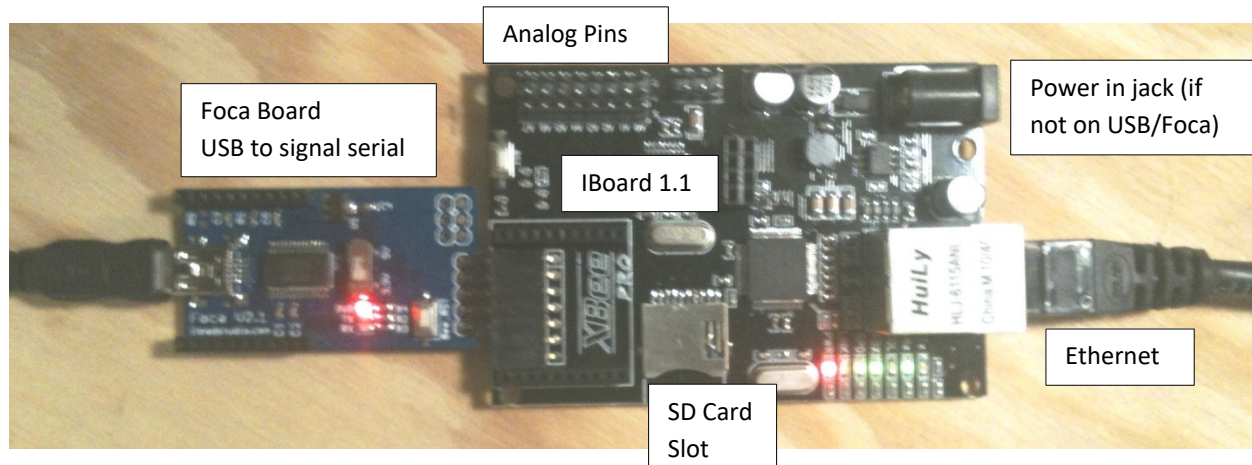
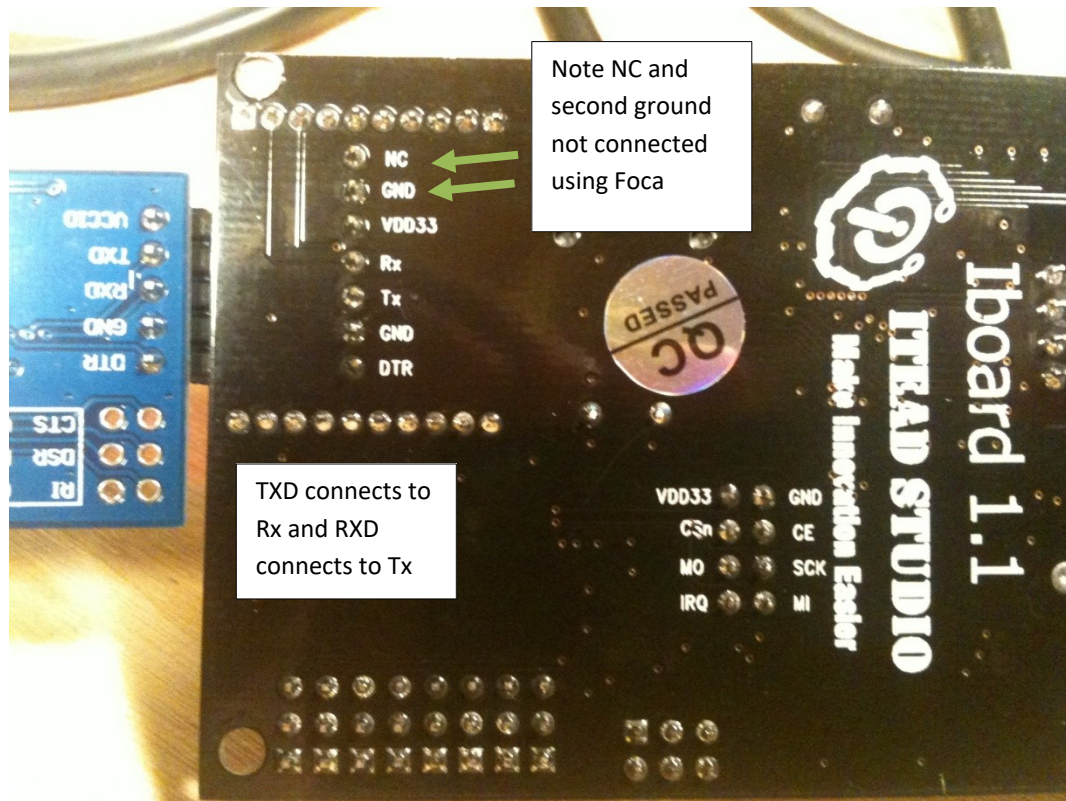


A Foca 2.1 USB communication board, **set to 3.3 volts**, is connected at left to the serial socket between xbee sockets. In the Arduino software, use “Nano 328” for the Arduino type (using Uno gives an avrdude error). The picture below has the IBoard getting power via the Foca – for standalone power, voltage via the jack is needed.

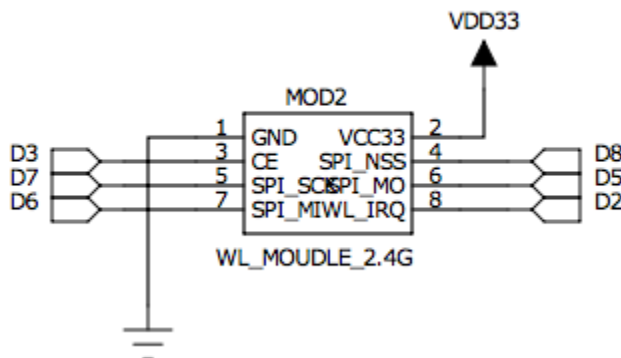


Rear of boards showing connection of Foca Board (RX->TX, TX->RX)

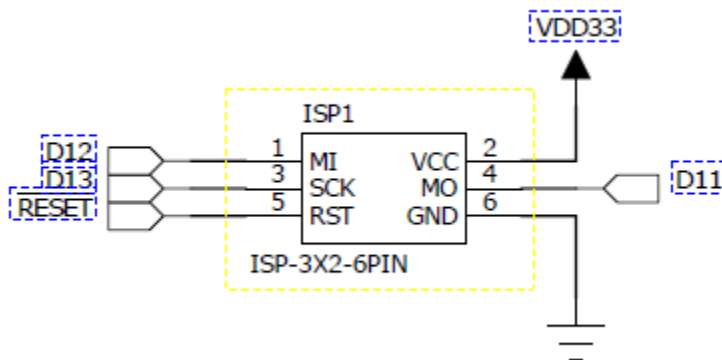


Operation: There is no “Pin 13 LED” so the standard “blink” sketch will not indicate operation. Suggest example “Arduino Ethernet – WebServer” sketch which echoes analog readings to the Ethernet port. It works without modification (the Ethernet LEDs will light). A simple modification is to change the analog pin display range from A0-A5 to A0-A7. To test, use a jumper to ground the A0 “S” (signal) to ground, the reading should go from a random number to zero.

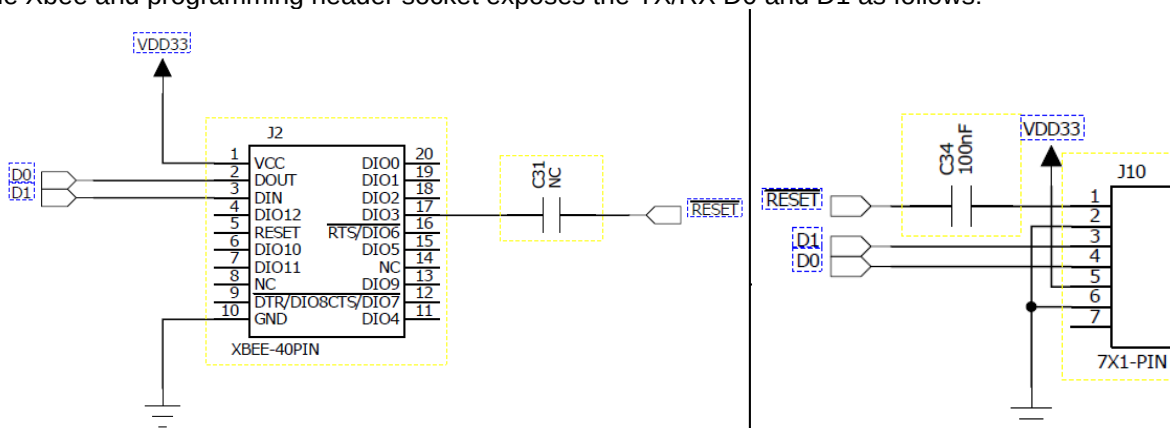
There is an 8 pin header in the middle of the board for the nRF24L01+ module. This may also be used to access D2, D3, D5, D6, D7, and D8 digital pins as follows (remember 3.3V levels):



The ICSP Programming Header exposes D11, D12, and D13:



The Xbee and programming header socket exposes the TX/RX D0 and D1 as follows:



D4 is used for chip select for the SD Card reader with D11, D12, and D12 shared

Software for the SD Card may be downloaded from <http://imall.iteadstudio.com/im120410001.html>

User software: <https://github.com/andykarpov/iBoardRF24> & <https://github.com/andykarpov/iBoardRF24Network> and <http://neophob.com/2012/06/make-stripinvaders-cheaper-use-an-iboard/>