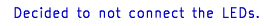
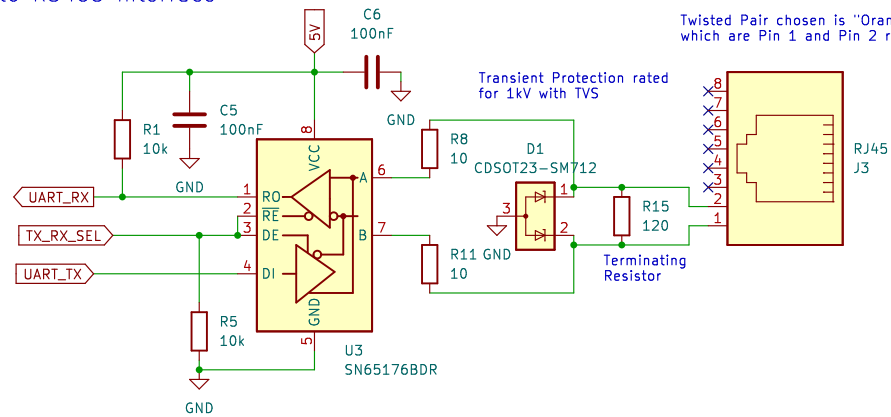


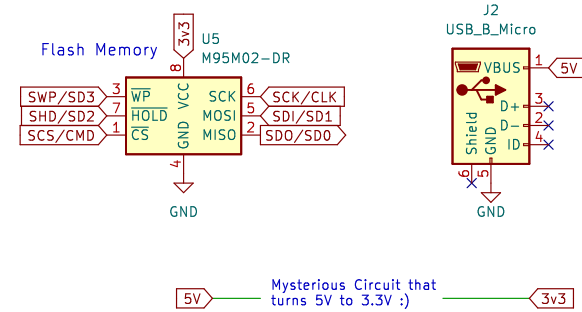
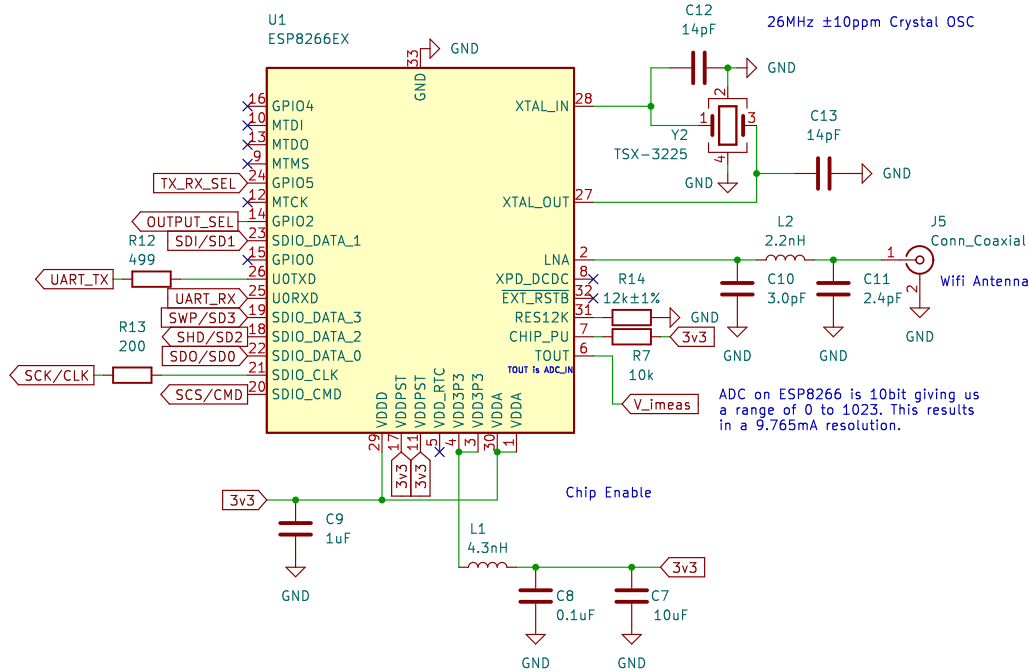
C5 Bypass CAP needed since only powering off BUS Voltage.



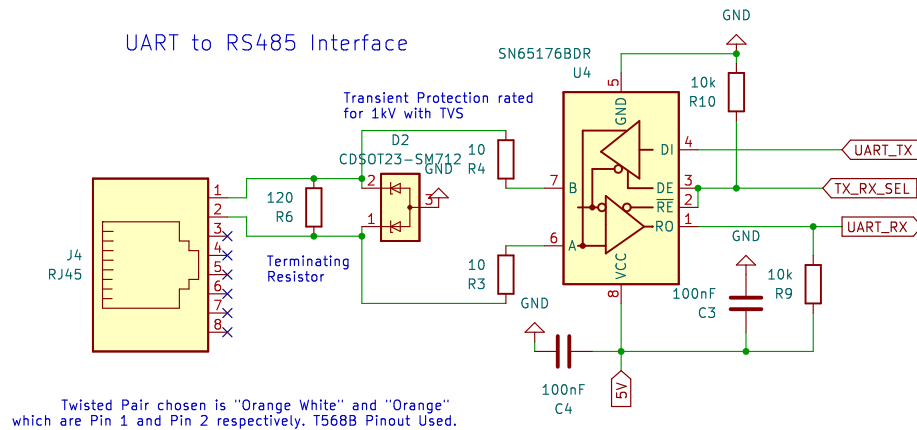
Twisted Pair chosen is "Orange White" and "Orange"
which are Pin 1 and Pin 2 respectively. T568B Pinout Used.



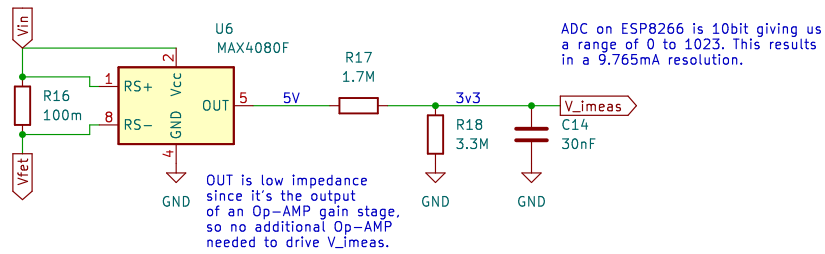
ESP8266 Microcontroller



UART to RS485 Interface



Current Measurement



High Side Switch

Switching Speed < 1Hz so decided not necessary to add gate driver. If switching speed was approaching or exceeding 100Hz I would choose to implement a gate driver.

