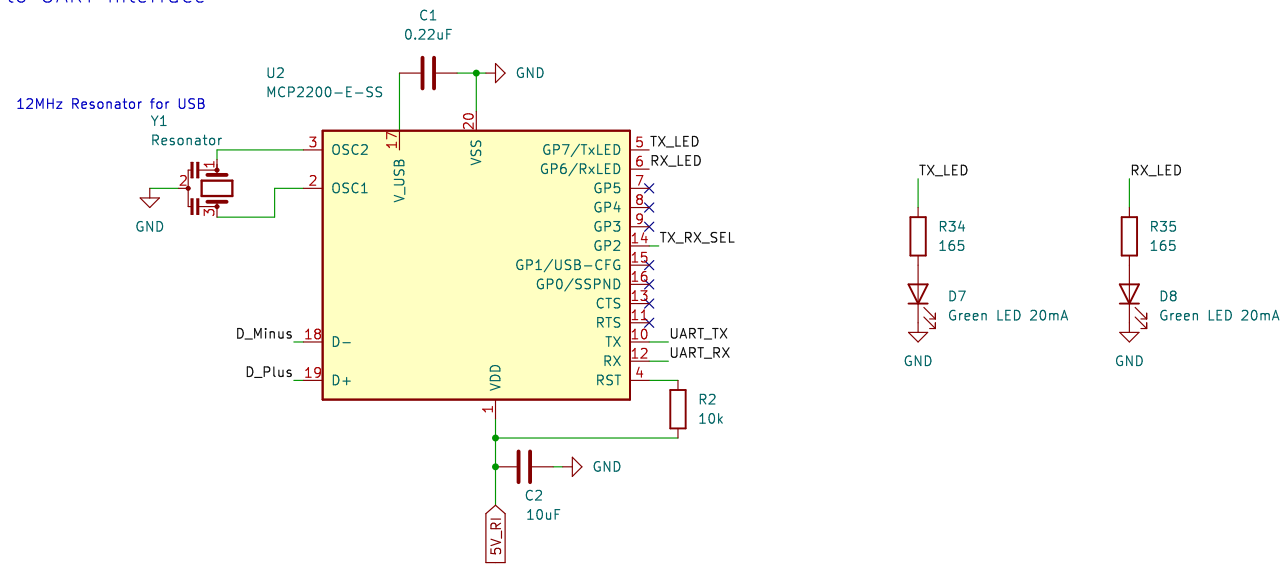


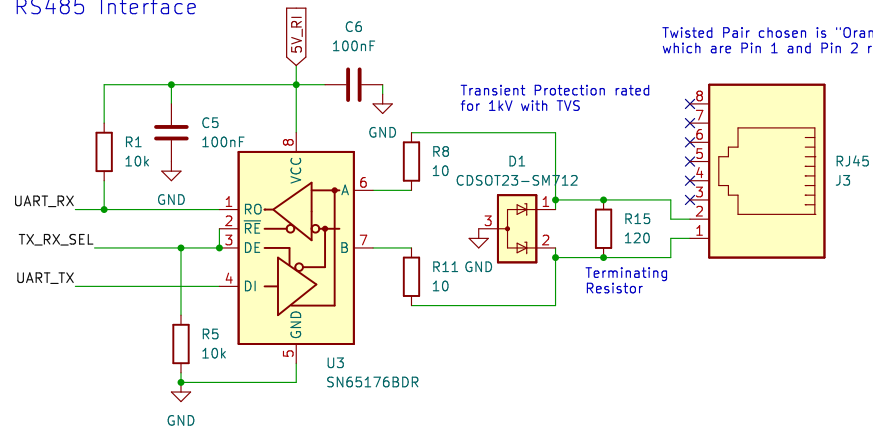
USB to UART Interface

C5 Bypass CAP needed since only powering off BUS Voltage.



UART to RS485 Interface

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



James Ewing
EE Design Challenge
Remote Current Sense and High Side Switch

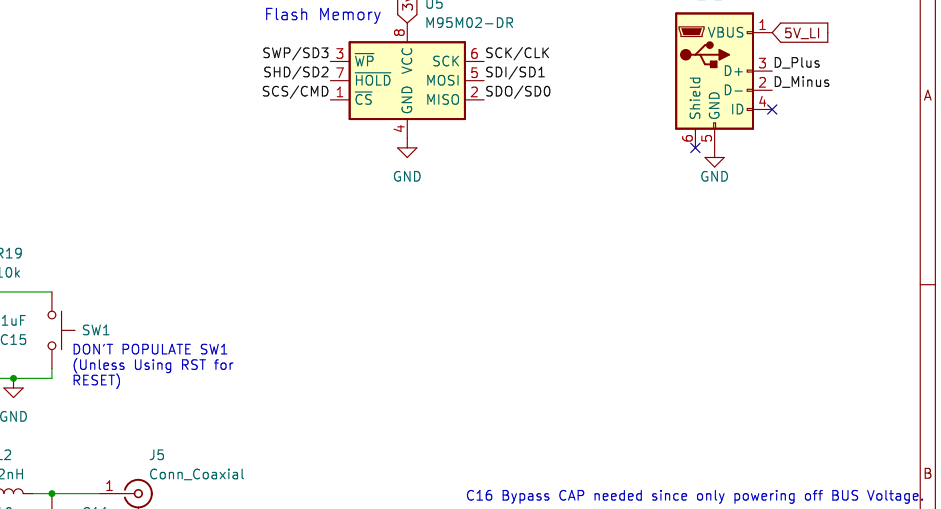
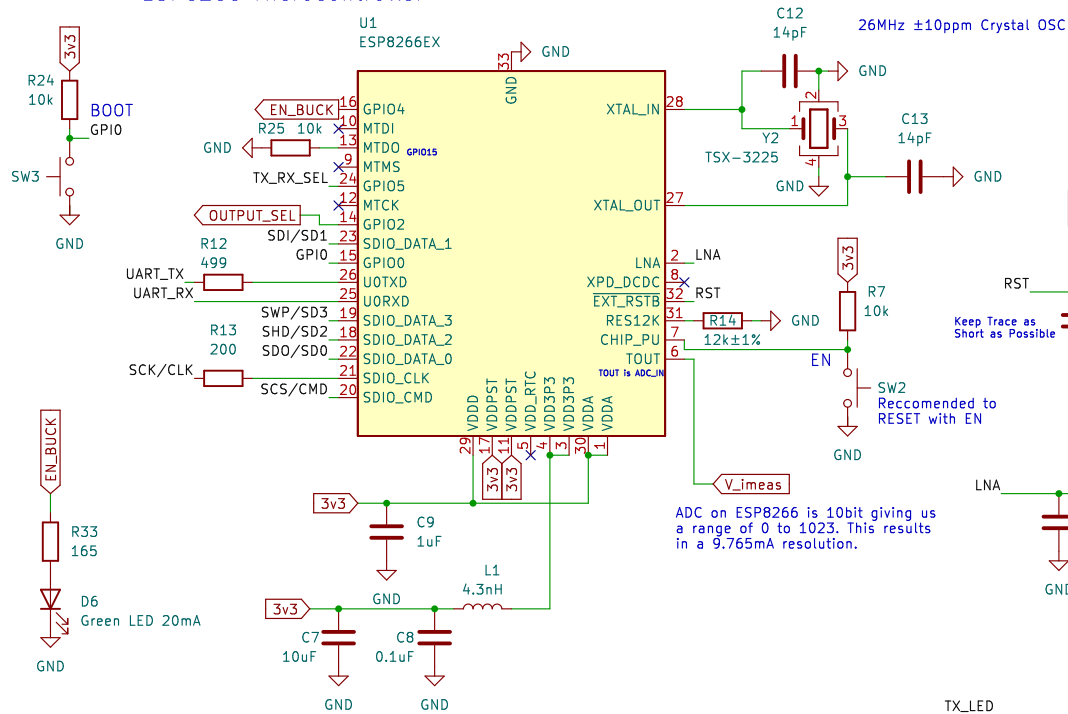
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File: Remote_RS485_Interface.kicad_sch.kicad_sch

Title: Remote Interface Communication Circuit

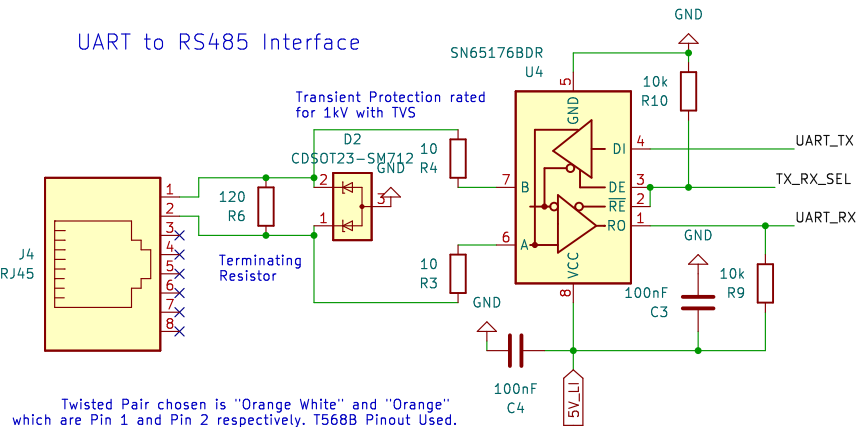
Size: A4	Date:
KiCad E.D.A. kicad 7.0.8	

Rev:
Id: 2/5

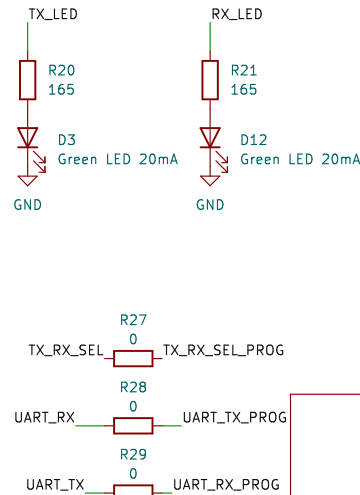
ESP8266 Microcontroller



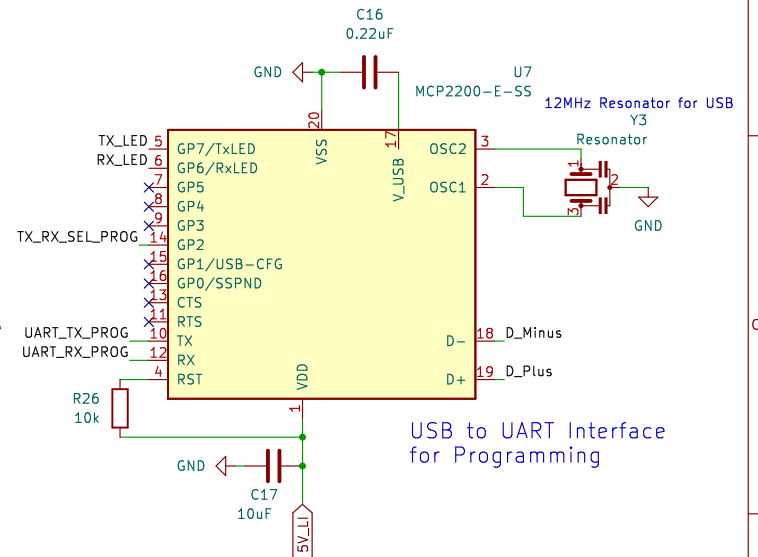
UART to RS485 Interface



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



Resistors Removeable after Programming. Needed because potential for node contention issues for UART having multiple devices on same channel.



USB to UART Interface for Programming

Sheet: /Local_RS485_Interface/
File: Local_RS485_Interface.kicad_sch

Title: Local Interface Communication Circuit

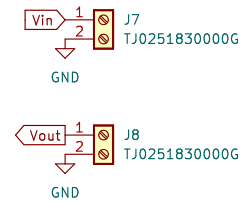
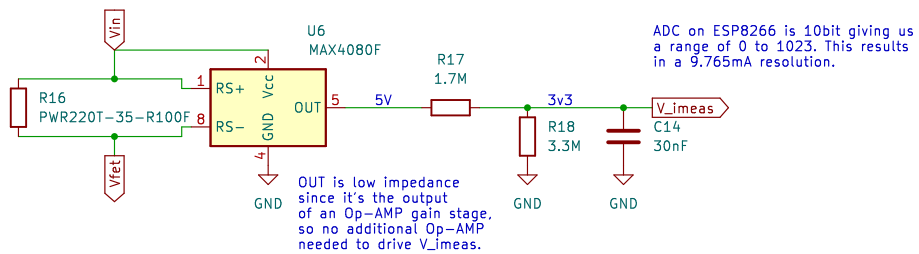
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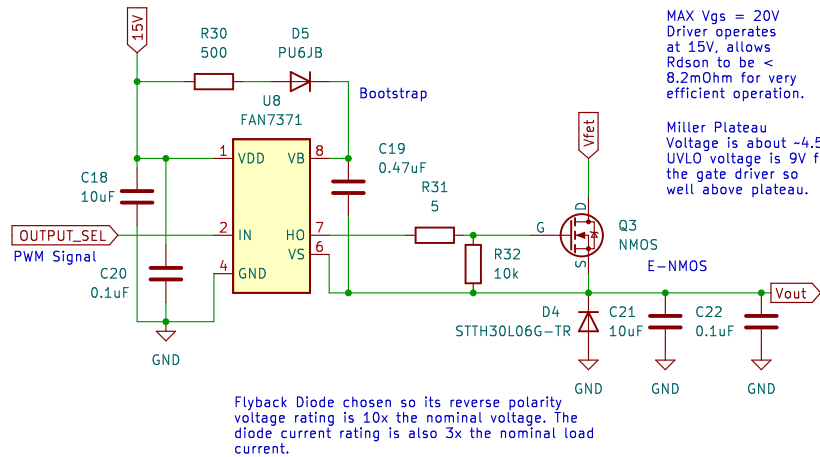
Rev:

Id: 3/5

Current Measurement



High Side Switch



Sheet: /High_Side_Switch_and_Current_Measurement_GateDriver/
File: High_Side_Switch_and_Current_Measurement_GateDriver.kicad_sch

Title: Local High Side Switch and Current Measurement Circuit

Size: A4
KiCad E.D.A. kicad 7.0.8

Date:

Rev:
Id: 4/5

POWER CONVERSION

