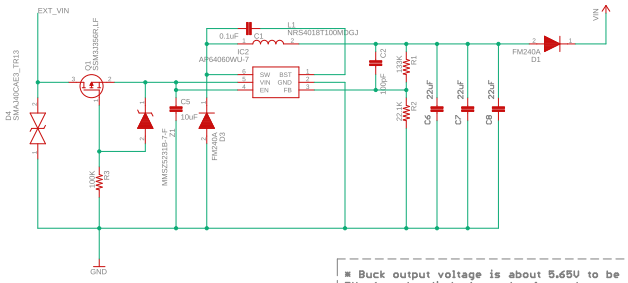
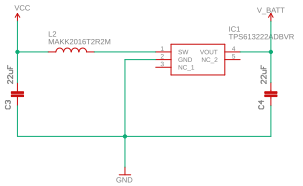
6V to 36V Buck



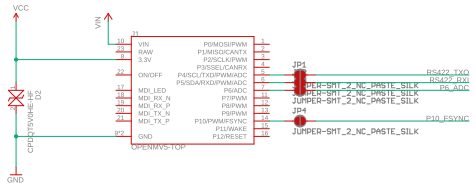
* Buck output voltage is about 5.65V to be 5V after the diode forward voltage drop.

3.3V to 5V Boost



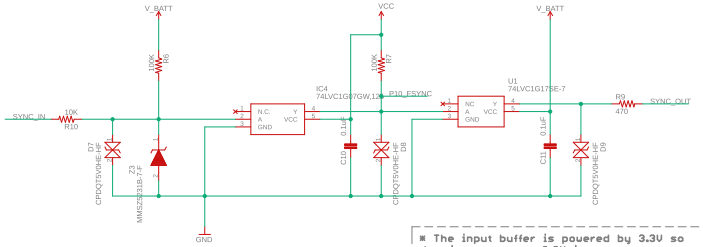
* 3.3V is used to create the 5V rail so it can be turned off in low power mode.

Shield Headers



FSYNC Input and Output

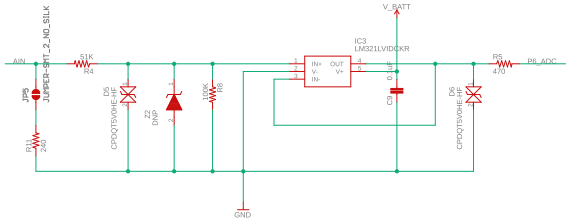
* The input buffer is open drain so that SYNCIN is OR'ed with multiple shields attached.



* The input buffer is powered by 3.3V so that it can accept 3.3V inputs.

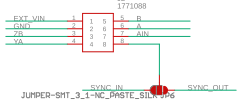
ADC Input

* The shunt resistor when connected allows the ADC circuit to read 4-20mA sensors.



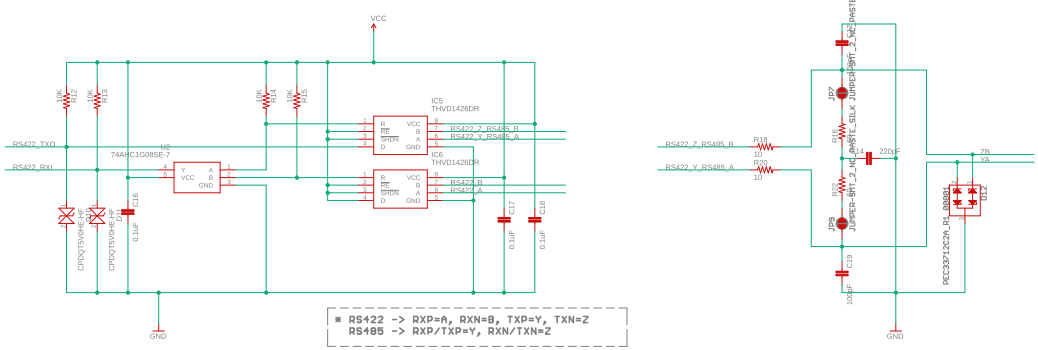
* The front end scales a 0-5V signal down to 0-3.3V. Reverse/Over-Voltage is clamped.
* The opamp is powered by 5V so that it can pass 0-3.3V signals (0-5V on input).

Terminal



Mechanical

RS422 and RS485 Interface



* RS422 -> RXP=A, RXN=B, TXP=Y, TXN=Z
  RS485 -> RXP/TXP=Y, RXN/TXN=Z

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