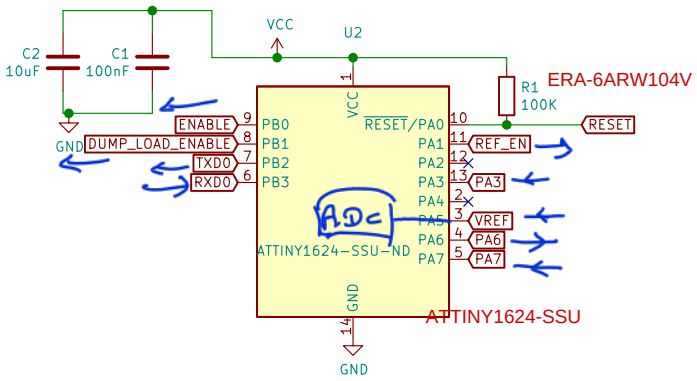
DIYBMS v4 CELL MONITORING MODULE

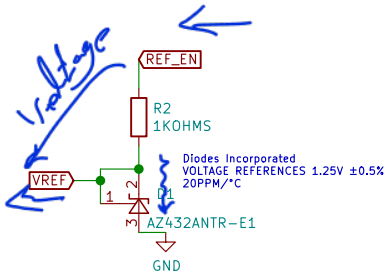
VERSION 4.50 – NOTE CHANGE TO ATTINY1624 MICRO CONTROLLER

FOR LITHIUM VOLTAGE RANGES (18650 etc.) 2.0V – 4.2V

V_{cc} → 1.8V - 5.5V



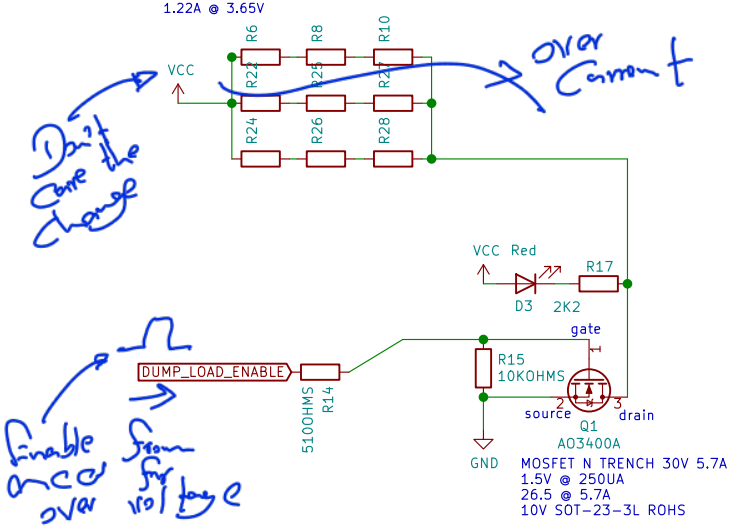
Change pin for Reference EN – its 2nd TX serial port so useful for DEBUG?

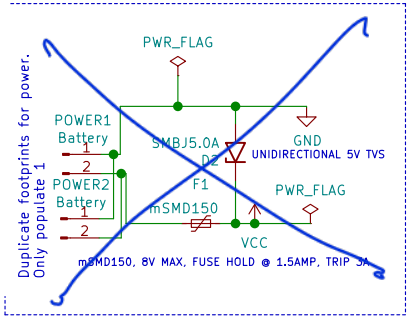


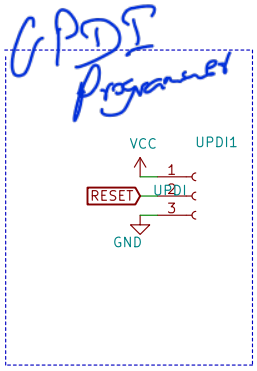
CHIP RESISTOR – SURFACE MOUNT 3OHMS ±5% 3/4W 2010
3 in series with 3 in parallel gives 3Ohm equivalent resistance

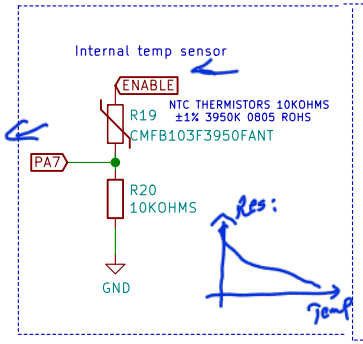
9 resistors provide 9*0.75W=6.75W of power disipation.

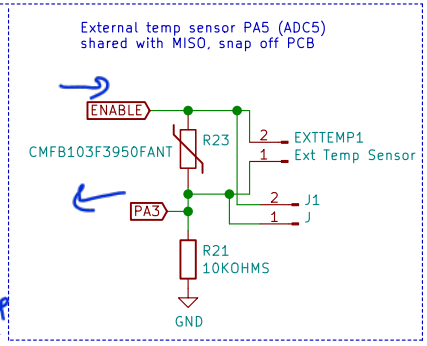
Balance current (at 3ohm):
1.4A @ 4.2V
1.22A @ 3.65V

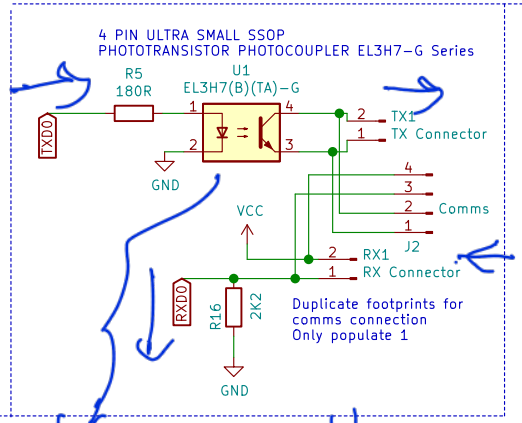


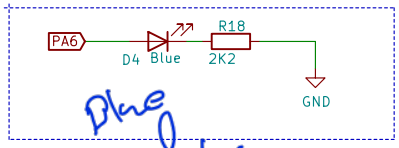












Blue signal indicator with time delay

Isolation - O/P voltage changes. Also O/P needs 5V. (only in last one)

Stuart Pittaway		
Sheet: /		
File: ModuleV450.sch		
Title: DIYBMS cell monitoring module		
Size: A4	Date: 2021-01-31	**Rev: 4.5**
KiCad E.D.A. eeschema 5.1.9+dfsg1-1+deb11u1		Id: 1/1