

Footprints supplied by Shrike

Connects to protection board, 3.3V is supplied to protection board.

PCB Conn: 505448-1091  
 Mating: 505432-1001  
 Precrimp: 79758-2144 (300mm)  
 OR 79758-2144 (150mm)  
 Terminals: 505431-1200

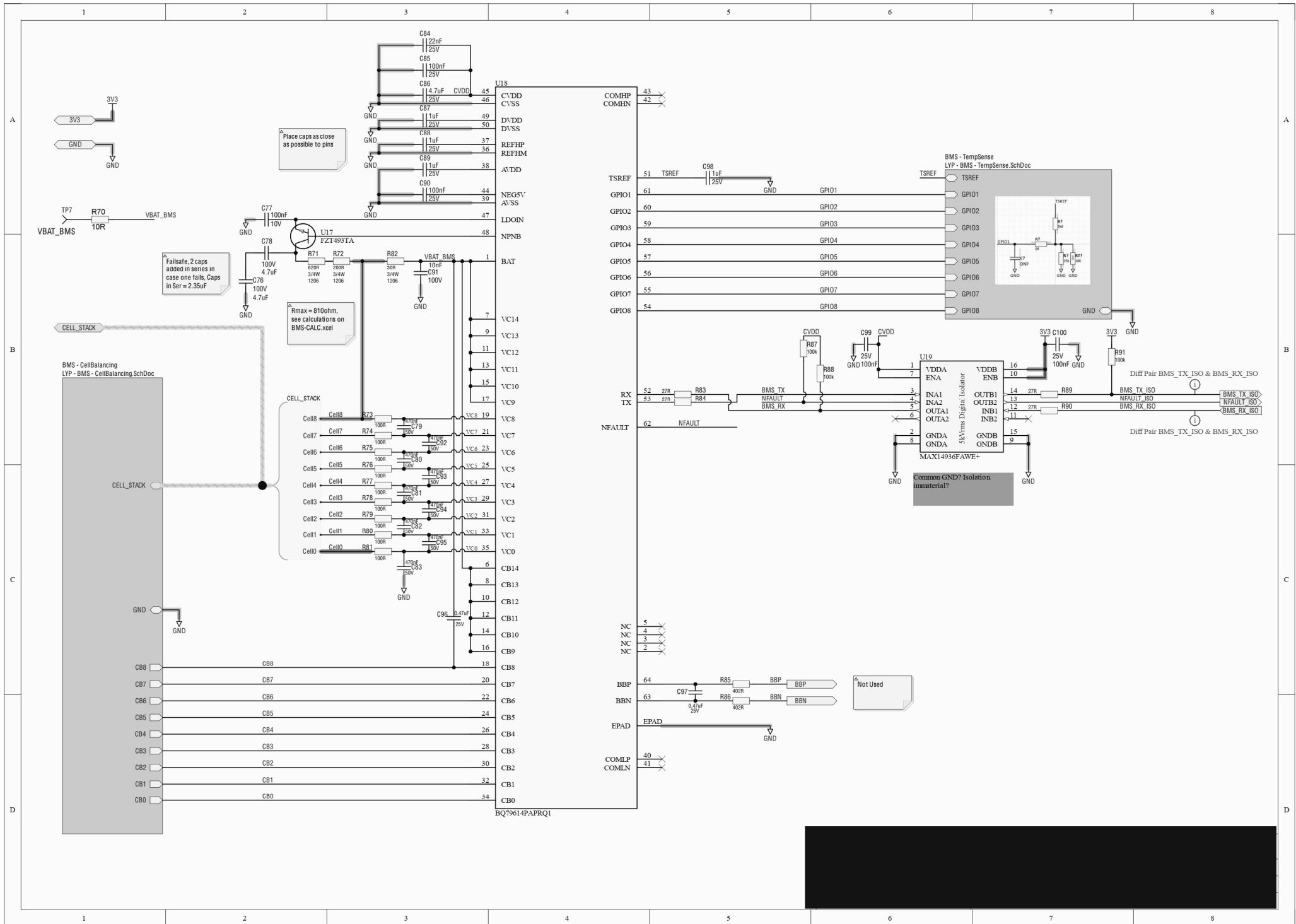
Push Button & E-Ink Interface  
 PCB Conn: 505448-1291  
 Mating: 505432-1201  
 Precrimp: 79758-2144 (300mm) OR 79758-2144 (150mm)  
 Terminals: 505431-1200

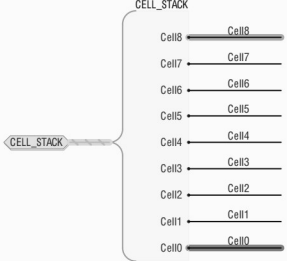
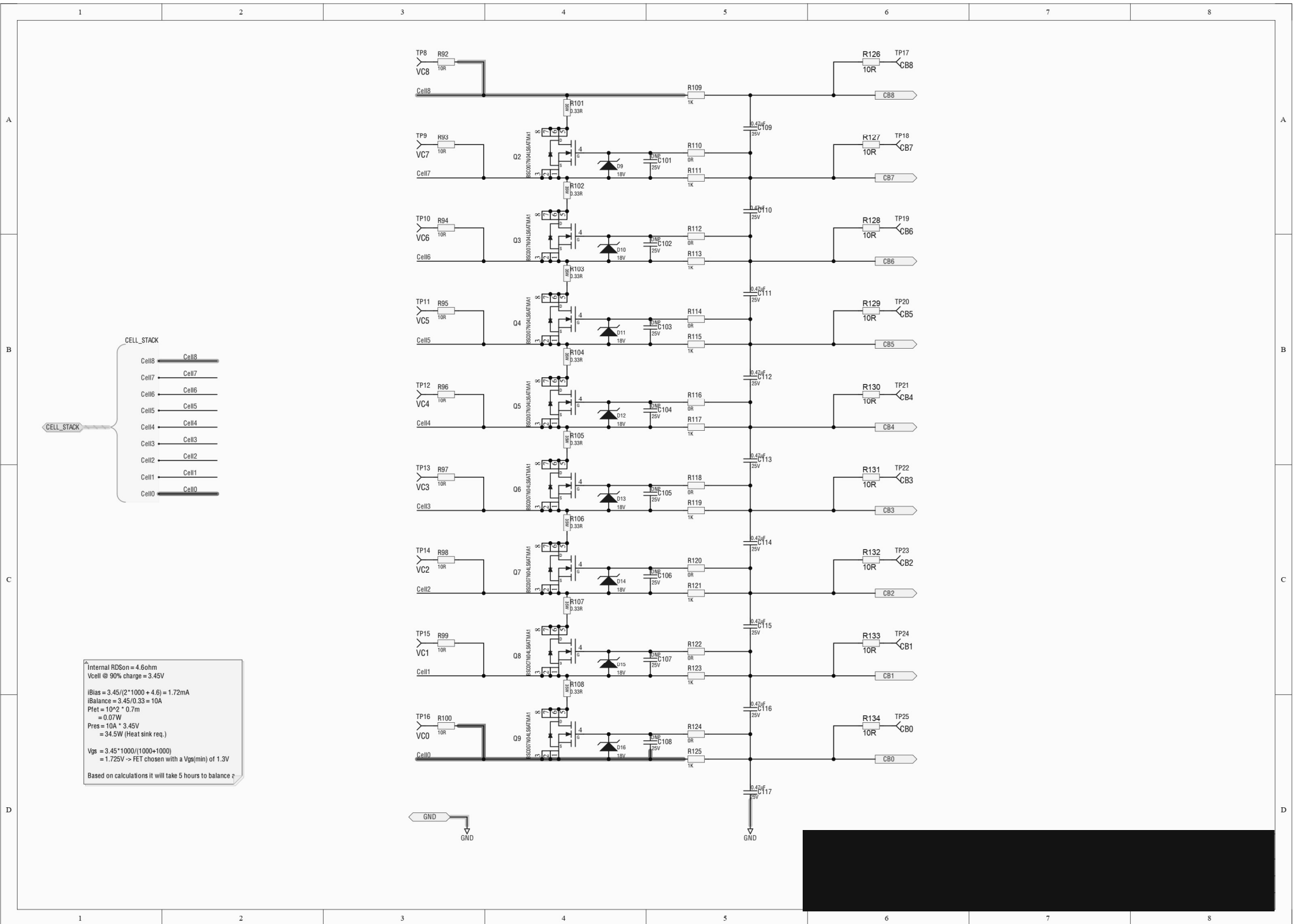
To Protection Board

E-Ink Display  
 E-Ink PCB  
 8888



**Battery Controller**





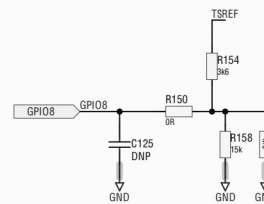
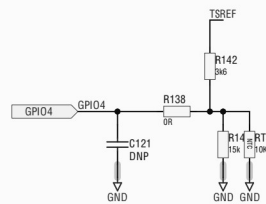
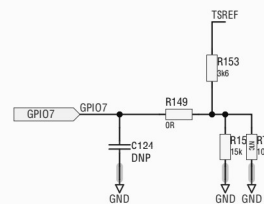
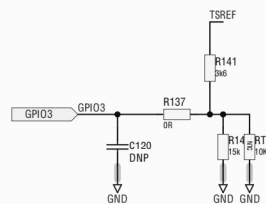
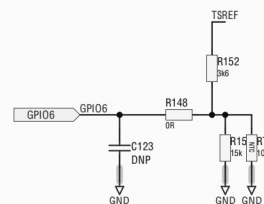
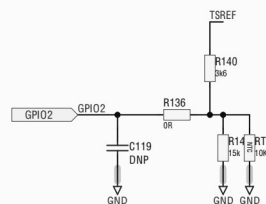
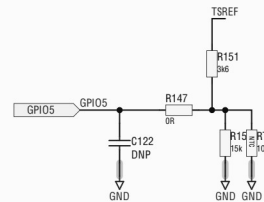
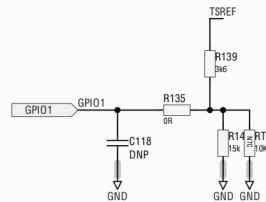
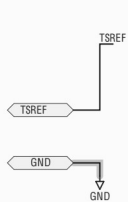
Internal RDSon = 4.6ohm  
 Vcell @ 90% charge = 3.45V

$I_{Bias} = 3.45 / (2 * 1000 + 4.6) = 1.72mA$   
 $I_{Balance} = 3.45 / 0.33 = 10A$   
 $P_{fet} = 10 * 2 * 0.7m = 0.07W$   
 $P_{res} = 10A * 3.45V = 34.5W$  (Heat sink req.)

$V_{gs} = 3.45 * 1000 / (1000 + 1000) = 1.725V$  -> FET chosen with a Vgs(min) of 1.3V

Based on calculations it will take 5 hours to balance





To be placed near respective busbar.

