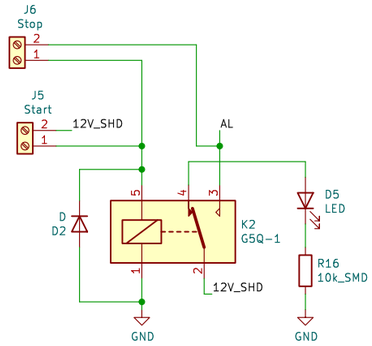
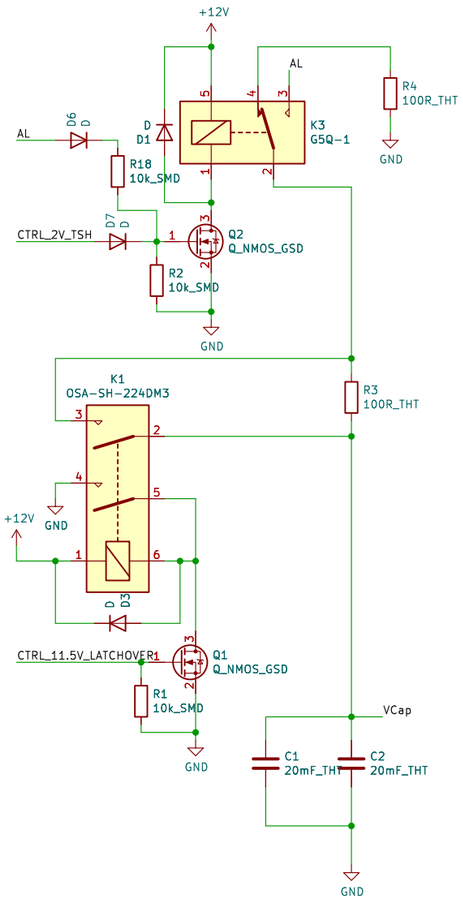
Activation Logic

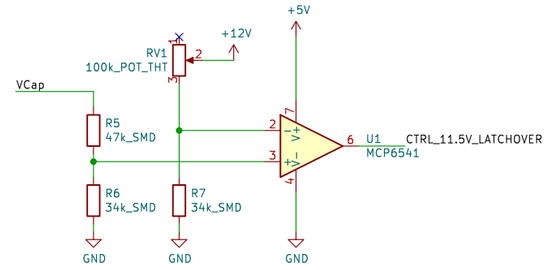
Isolated to minimise current drawn



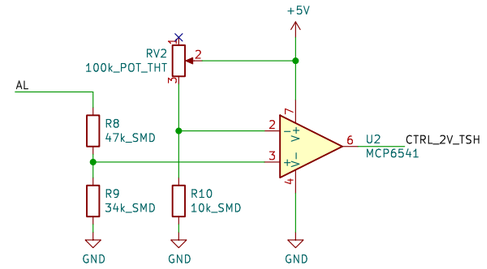
Capacitor Load and Latch



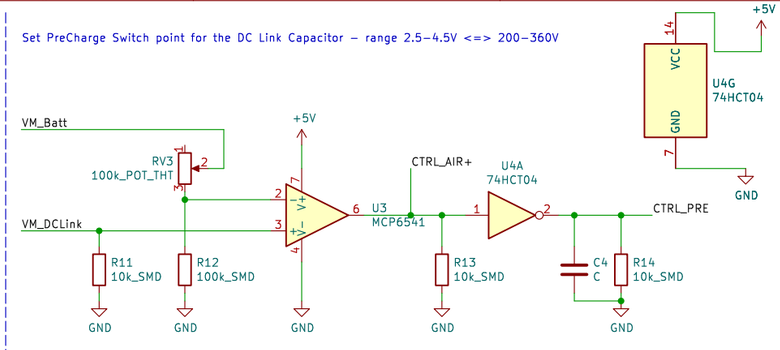
Set Latch-Over-Resistor point for the capacitor bank - range 3.8-4.86V <=> 9.15V-11.5V
This signal is also used to signal MC to stop
Proportional point; can be set to percentage of the AL(Shutdown) voltage



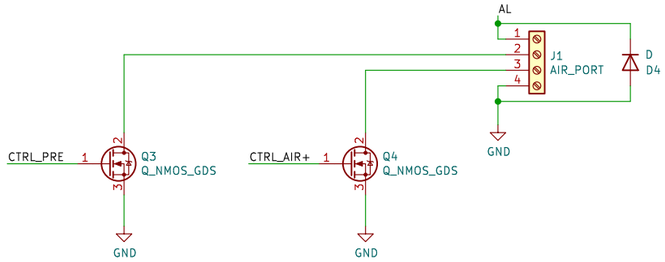
Set AIR cutoff point for the capacitor bank - range 0.45-2.5V <=> 1.1V-6V
Fixed set point;set according to a fixed voltage as the dropout voltage is fixed



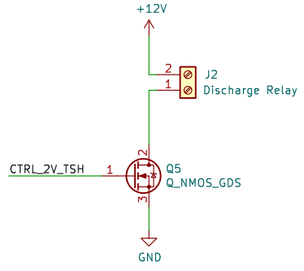
Set PreCharge Switch point for the DC Link Capacitor - range 2.5-4.5V <=> 200-360V



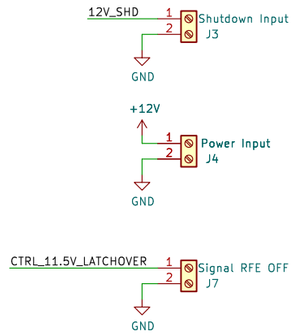
Pre-charge toggle circuit
AIR- will be connected always when AL is on, AIR+ and PRE will be connected only when the correct NMOS is on



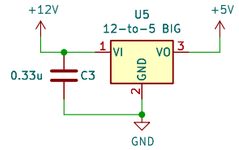
Discharge Circuit
Having more than 2V means that the AIRs are open
The relay used is NC, turning it on will stop the discharge

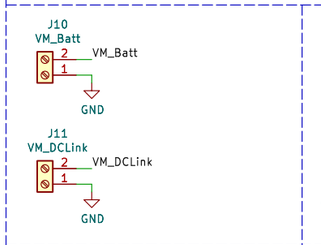


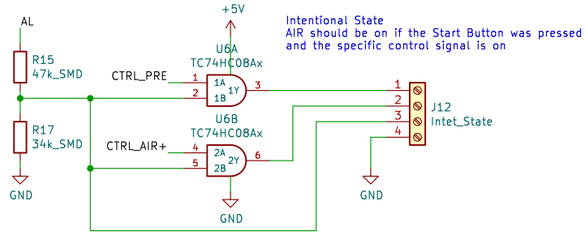
Connectors

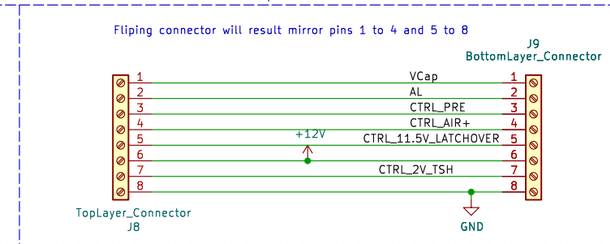


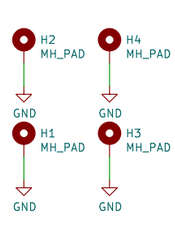
12V-to-5V











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Title: Precharge Discharge Activation Logic

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KiCad E.D.A. 8.0.2		Id: 1/1