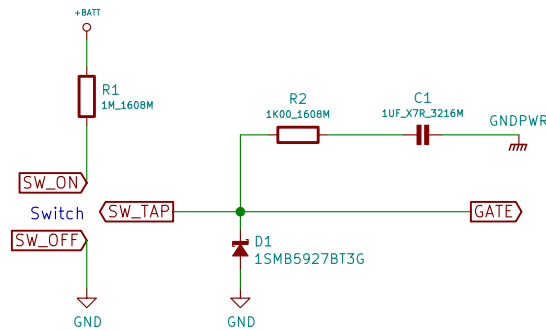
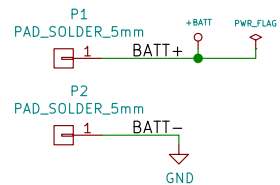


Switching Circuit

provides soft starting and fast cut with user supplied switch

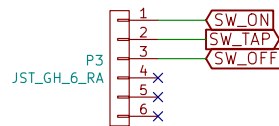


Battery Pack Connection



Switch Connector

Switch is provided on connector for easier access.
Allows external LED for state indication.



Status LED

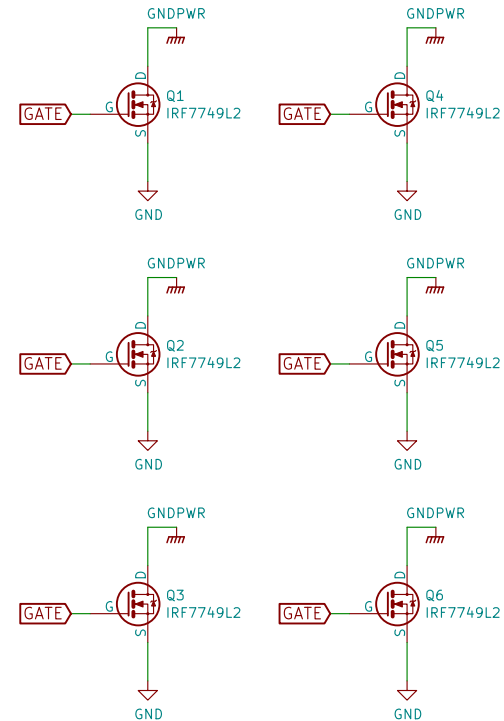
Notes

Use copper heatsink for free-air convection during continuous high loads.
Ensure pads have vias for thermal/structural relief on PCB

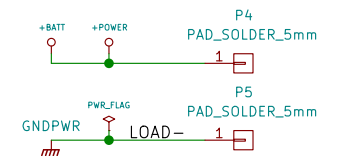
Follows discussion in <https://endless-sphere.com/forums/viewtopic.php?f=3&t=40142>

Power Fets

We use overly powerful fets to provide lower heat output in normal operation.
This also allows for high transient currents without damaging the switch.
DirectFET packages are used due to metal casing for improved heatsinking performance.



Load Connection



Requires heatsinks installed for free-air convection
Rated to 60V DC, approx 200A continuous

Scott Rapson

Sheet: /
File: antispark-pcb.sch

Title: Anti-Spark Fet Switch Board

Size: A4 Date: 2017-09-28

KiCad E.D.A. kicad no-vcs-found

Rev: 1.0

Id: 1/1