

[illegible][illegible]

OpAmp as IORef Comparator

5V

100n C11

R9 100k

4V5

R11 470k

IOREF

100n C12

LMV321

4

ioref_is_3V3_not_5V

Status LEDs

VIN

R10 47k

D1 0603_LED

GND

5V

SolderJumper_4

JP18

IOREF

3V3

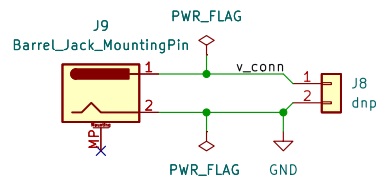
ioref

Power Sheet

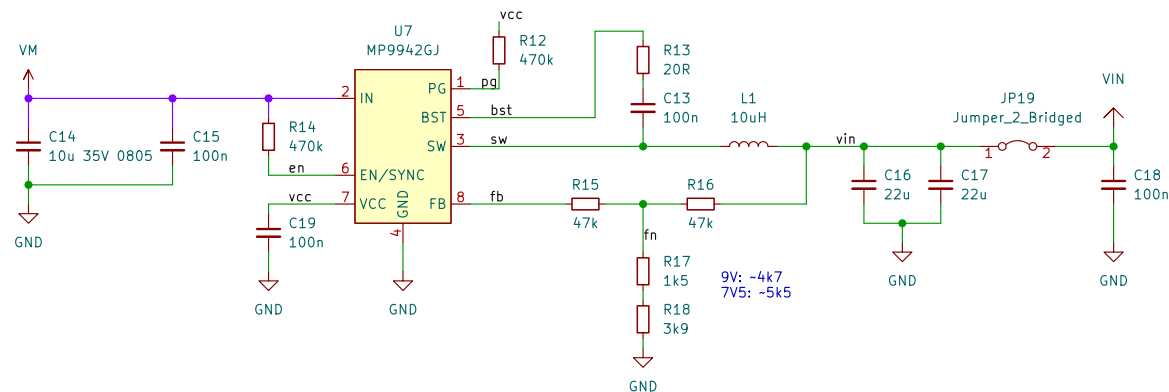
Engineer: Erwin Peterlin semify-edu.com		
Sheet: /		
File: motor-shield.kicad_sch		
Title: Motor Shield (DCC-EX compatible)		
Size: A3	Date: 2023-02-06	Rev: Prototype A
KiCad E.D.A. kicad (6.0.11)		Id: 1/2

Sheet: /	
File: motor-shield.kicad_sch	
Title: Motor Shield (DCC-EX compatible)	
Size: A3	Rev: Prototype A
Date: 2023-02-06	
KiCad E.D.A. kicad (6.0.11)	Id: 1/2

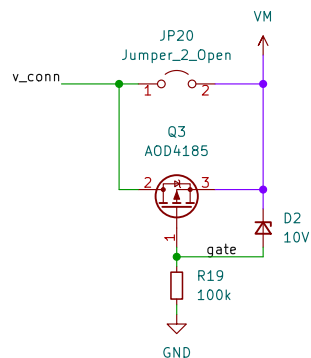
Barrel Jack



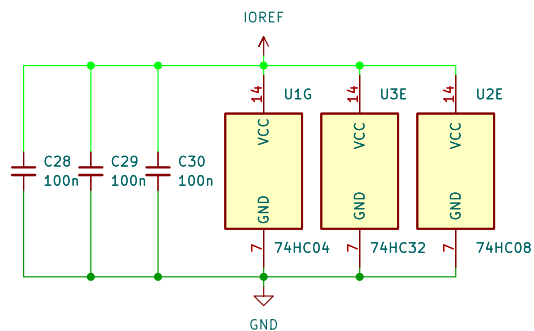
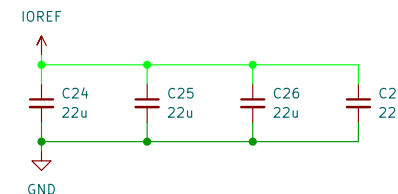
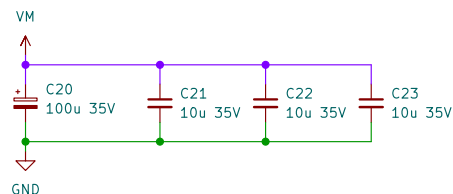
VIN DCDC Buck Converter



Reverse Polarity Protection



Bulk Caps



Engineer: Erwin Peterlin

semify-edu.com

Sheet: /Power/

File: power.kicad_sch

Title: Motor Shield (DCC-EX compatible)

Size: A4

Date: 2023-02-06

Rev: Prototype A

KiCad E.D.A. kicad (6.0.11)

Id: 2/2