

Pufferfish – Power Management Board v0.1

LOGO

Input Connectors

Sheet: Input Connectors

File: Inputs.sch

LTC4221 Design

Sheet: LTC4221

File: LTC4221.sch

Interface

Sheet: Interface

File: Interface.sch

LEDs and Debug

Sheet: LEDs and Debug

File: LEDs.sch

5V Buck

Sheet: 5V Buck

File: 5V.sch

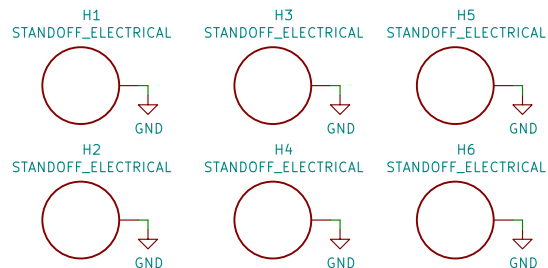
3.3V Buck

Sheet: 3.3V Buck

File: 3v3.sch

Fiducials

- FID1 Fiducial
- FID2 Fiducial
- FID3 Fiducial
- FID4 Fiducial
- FID5 Fiducial
- FID6 Fiducial

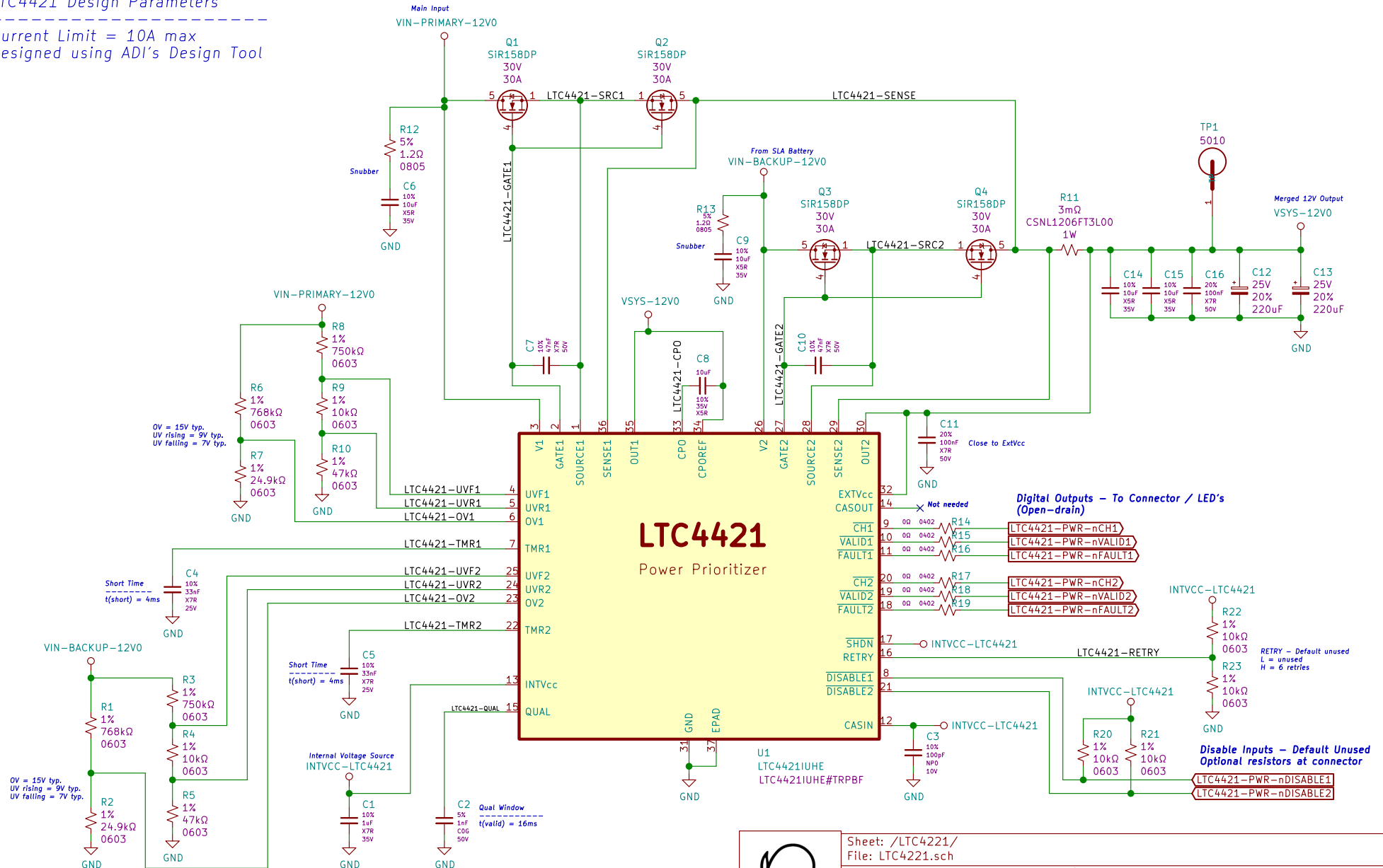


Sheet: /
File: Pufferfish-Power-1.sch
Title: Pufferfish Power – Top
Size: A4 Date: 2020-05-17
KiCad E.D.A. kicad (5.1.5)-3
Rev: v1.0
Id: 1/7

LTC4421 – Power Path Prioritizer IC

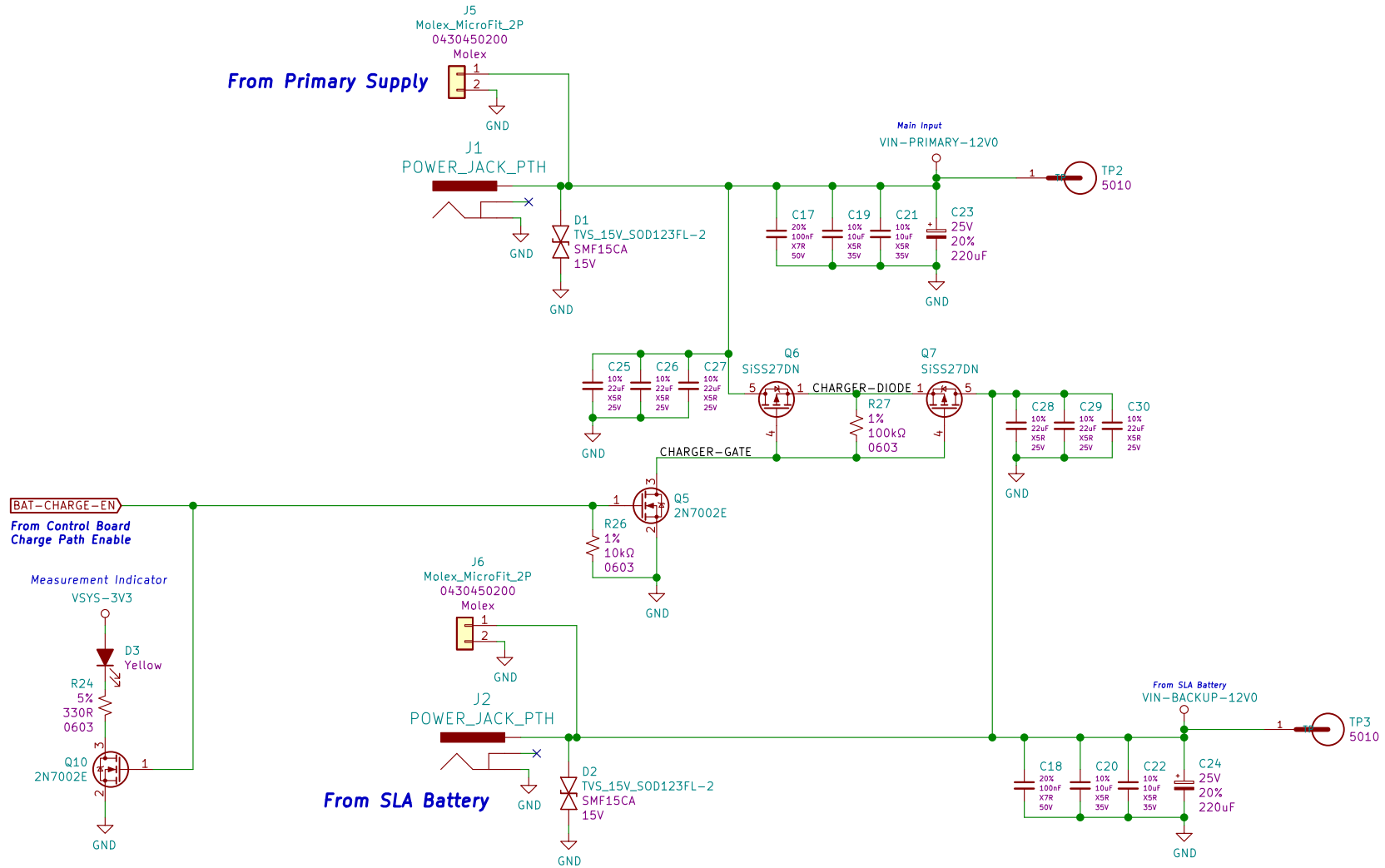
LTC4421 Design Parameters

Current Limit = 10A max
Designed using ADI's Design Tool



Sheet: /LTC4221/ File: LTC4221.sch	
Title: Pufferfish Power: LTC4221	
Size: A4	Date: 2020-05-17
KiCad E.D.A. kicad (5.1.5)-3	Rev: v1.0
	Id: 2/7

Input Power Connectors and Charging Circuit

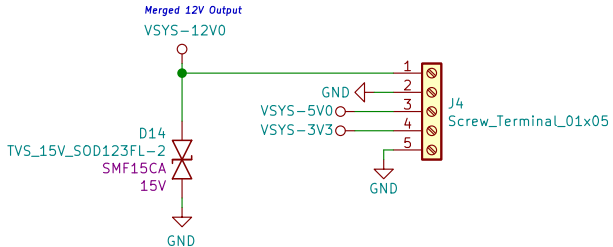


Sheet: /Input Connectors/ File: Inputs.sch		
Title: Pufferfish Power – Connector Inputs		
Size: A4	Date: 2020-05-19	Rev: v1.0
KiCad E.D.A. kicad (5.1.5)-3		Id: 3/7

Pin	Signal	Pin	Signal
1	LTC4421-PWR-nCH1	2	LTC4421-PWR-nFAULT2
3	LTC4421-PWR-nCH2	4	LTC4421-PWR-nFAULT1
5	VSYS-5V0-PGOOD	6	LTC4421-PWR-nDISABLE1
7	3V3-PGOOD	8	LTC4421-PWR-nDISABLE2
9	BAT-CHARGE-EN	10	LTC4421-PWR-nVALID1
11	BAT-MEAS-EN	12	LTC4421-PWR-nVALID2
13	BAT-MEAS-ANALOG	14	
15		16	

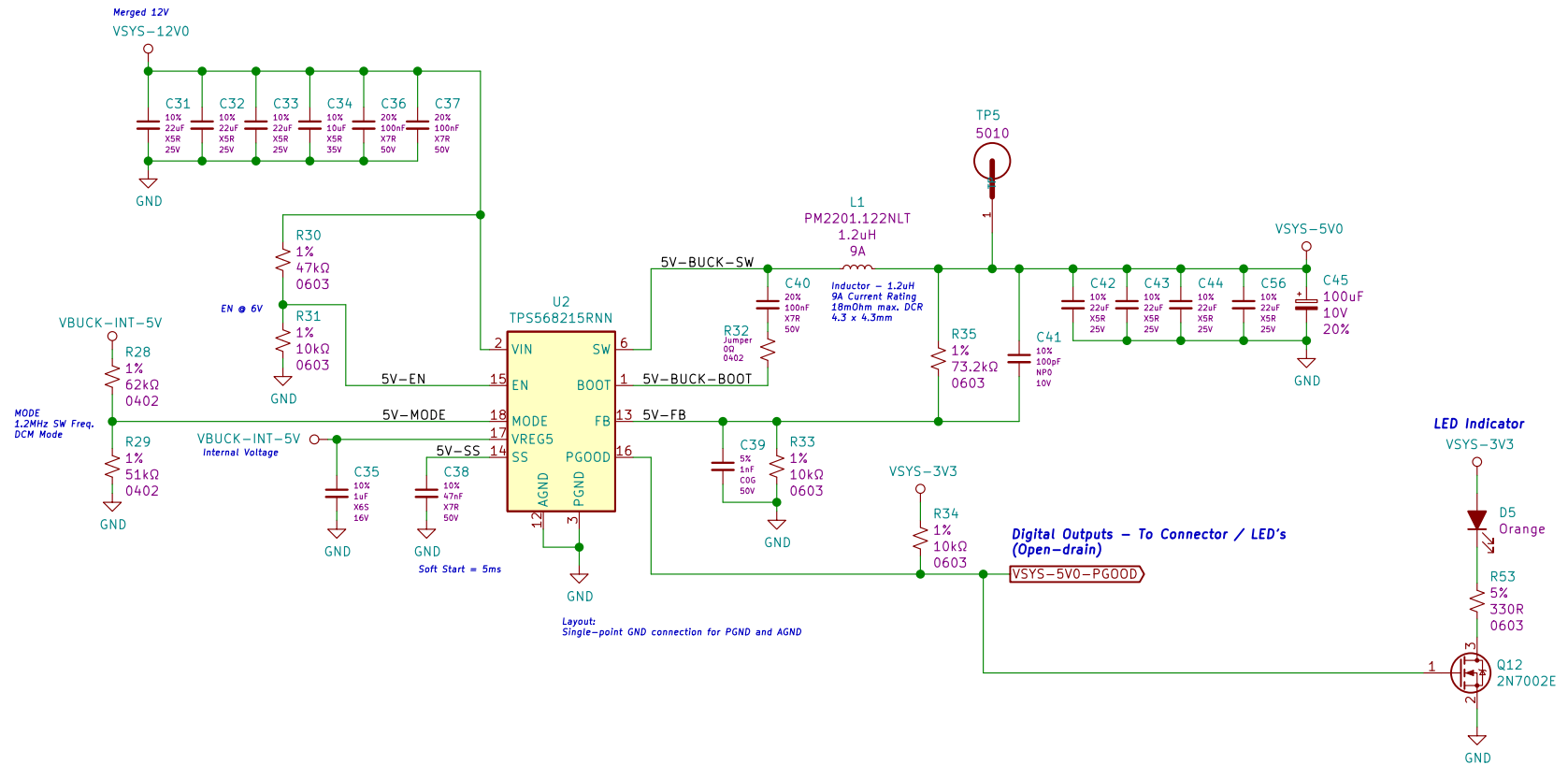
From Control Board Charge Path Enable own on Power Page

From LTC4421



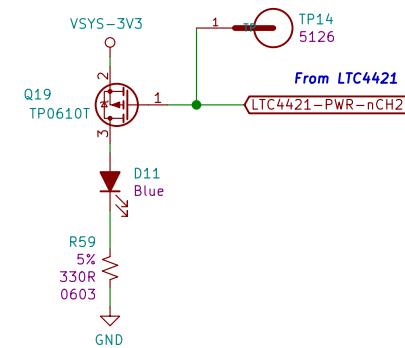
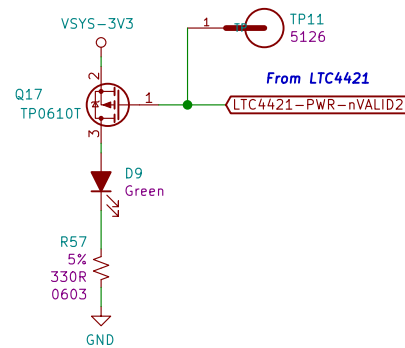
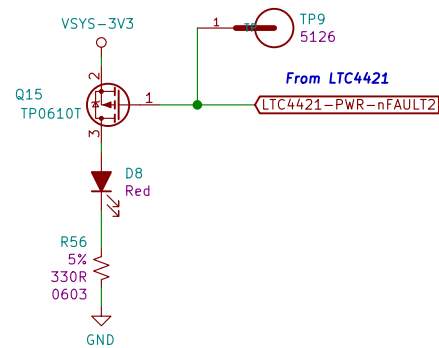
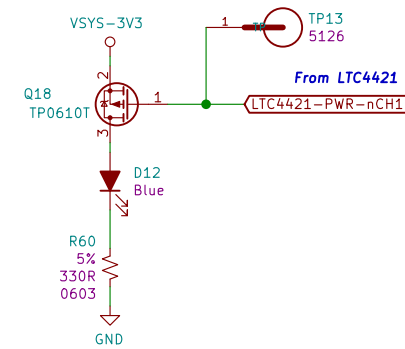
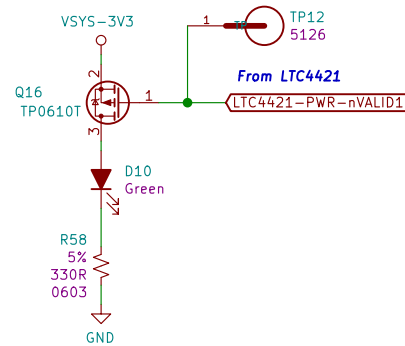
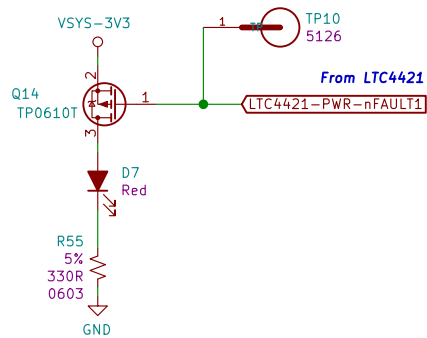
TPS56821 – 5V Buck Converter

8A Output
Sw. Frequency =1.2MHz

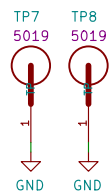


Sheet: /5V Buck/ File: 5V.sch	
Title: Pufferfish Power: TPS56821	
Size: A4	Date: 2020-06-05
KiCad E.D.A. kicad (5.1.5)-3	Rev: v1.0 Id: 5/7

LED's and Debug



Ground Test Points



Sheet: /LEDs and Debug/ File: LEDs.sch		
Title: Pufferfish Power: LED's and Debug		
Size: A4	Date: 2020-06-10	Rev: v1.0
KiCad E.D.A. kicad (5.1.5)-3		Id: 7/7