Pufferfish – Power Management Board v0.1

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

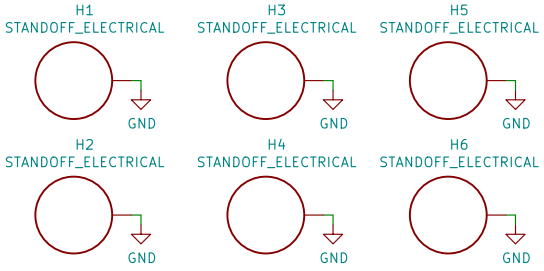
3.3V Buck

Sheet: 3.3V Buck

File: 3v3.sch

Fiducials

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



Pufferfish

Sheet: /
File: Pufferfish-Power-1.sch

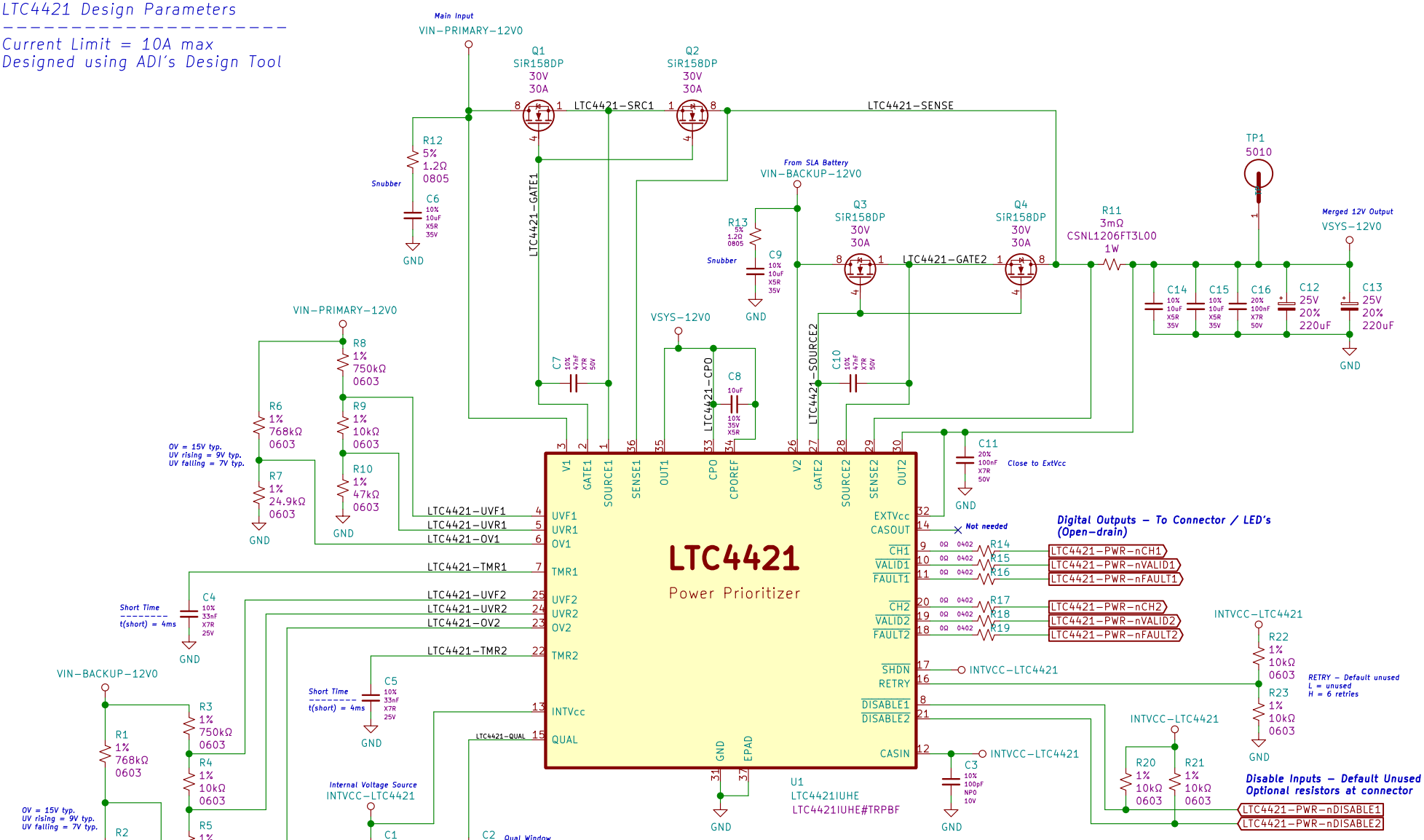
Title: Pufferfish Power – Top

Size: A4 | Date: 2020-05-17 | **Rev: v1.0**
KiCad E.D.A. kicad (5.1.5)-3 | Id: 1/7

LTC4421 – Power Path Prioritizer IC

LTC4421 Design Parameters

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



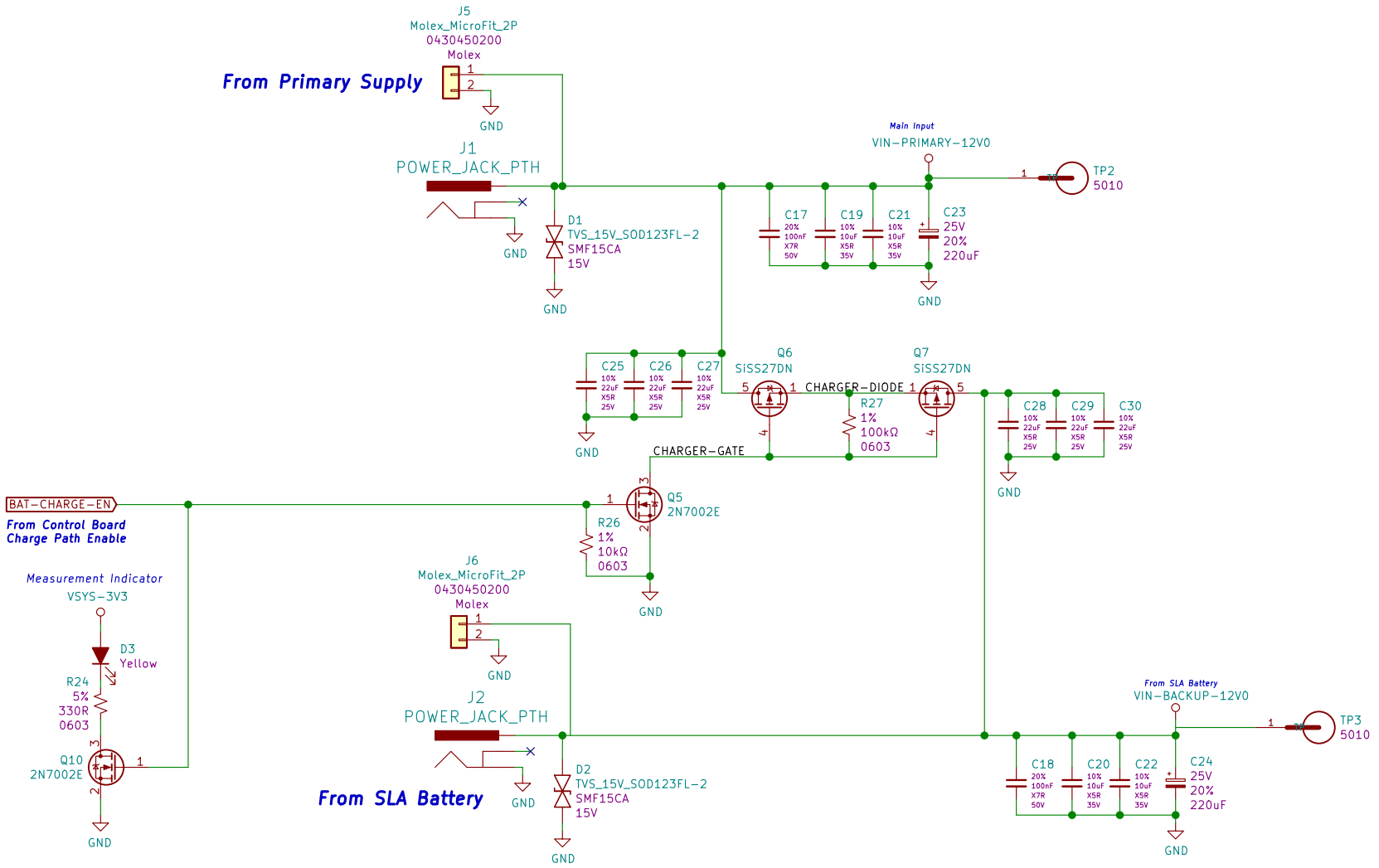
Pufferfish

Sheet: /LTC4221/
File: LTC4221.sch

Title: Pufferfish Power: LTC4221

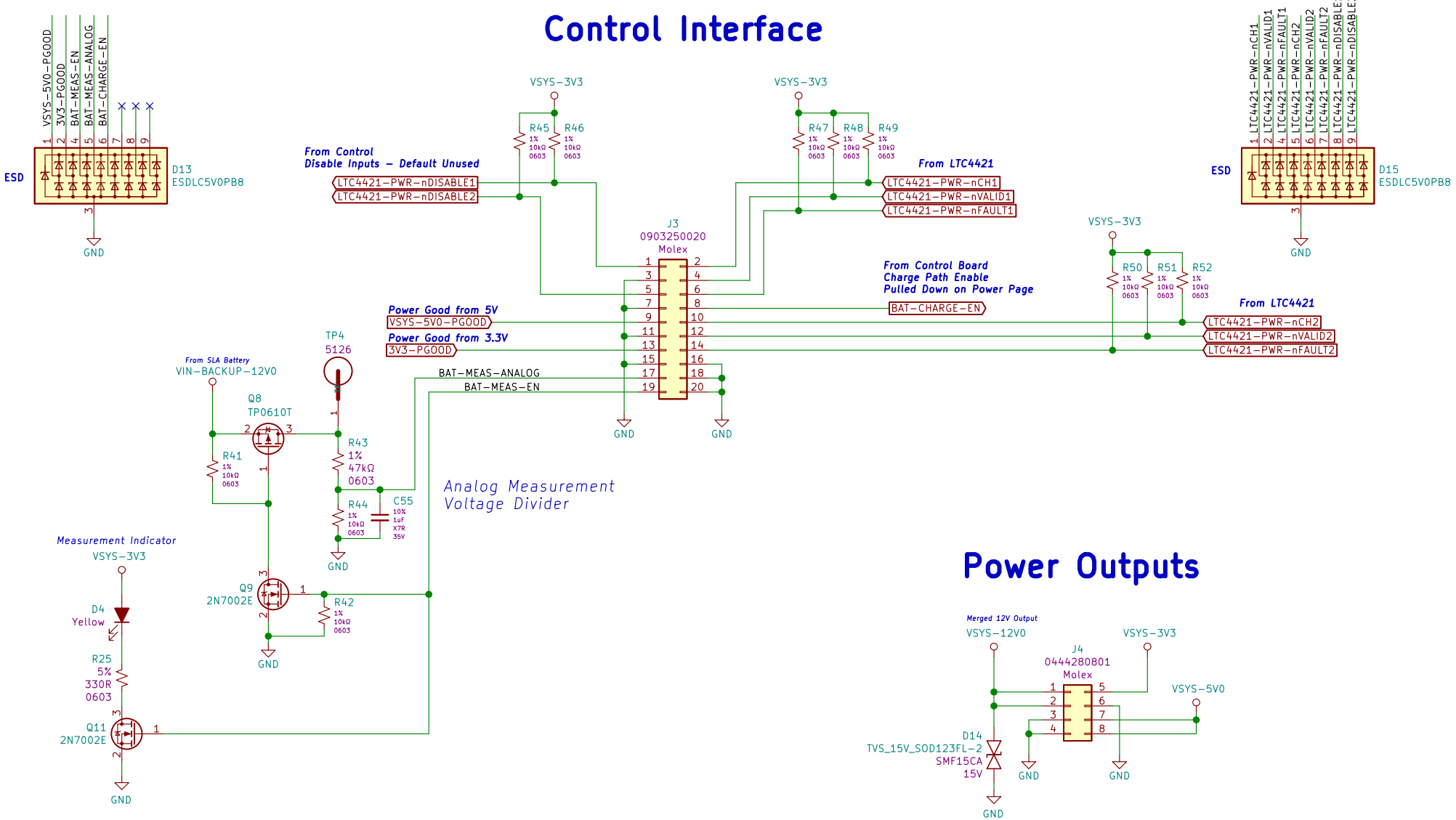
Size: A4	Date: 2020–05–17	**Rev: v1.0**
KiCad E.D.A. kicad (5.1.5)–3		Id: 2/7

Input Power Connectors and Charging Circuit



Pufferfish	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

Control Interface

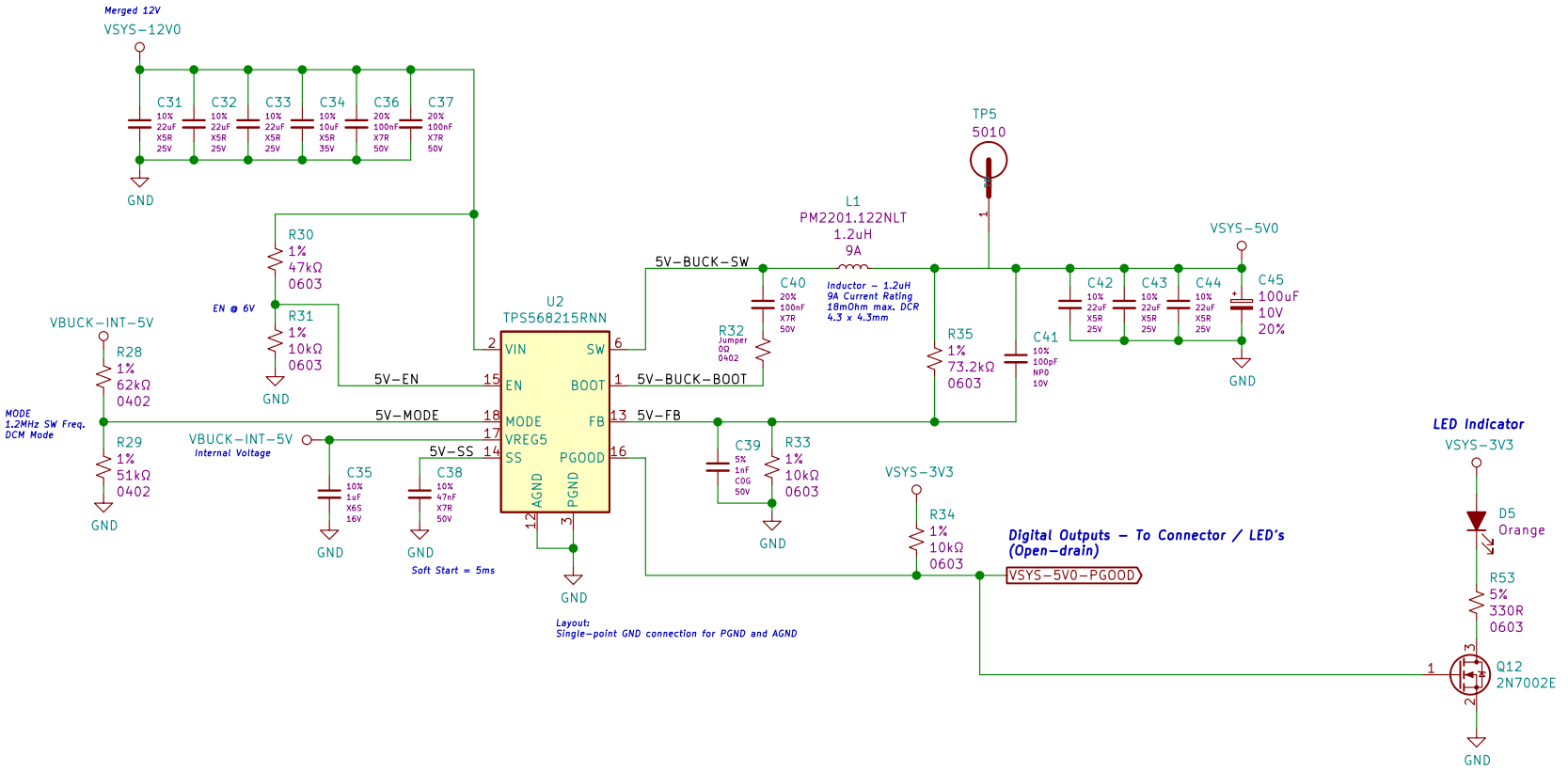


Power Outputs

Pufferfish	Sheet: /Interface/ File: Interface.sch	
	Title: Pufferfish Power: Interface Connectors	
	Size: A4 | Date: 2020-06-10	**Rev: v1.0**
	KiCad E.D.A. kicad (5.1.5)-3	Id: 4/7

TPS56821 – 5V Buck Converter

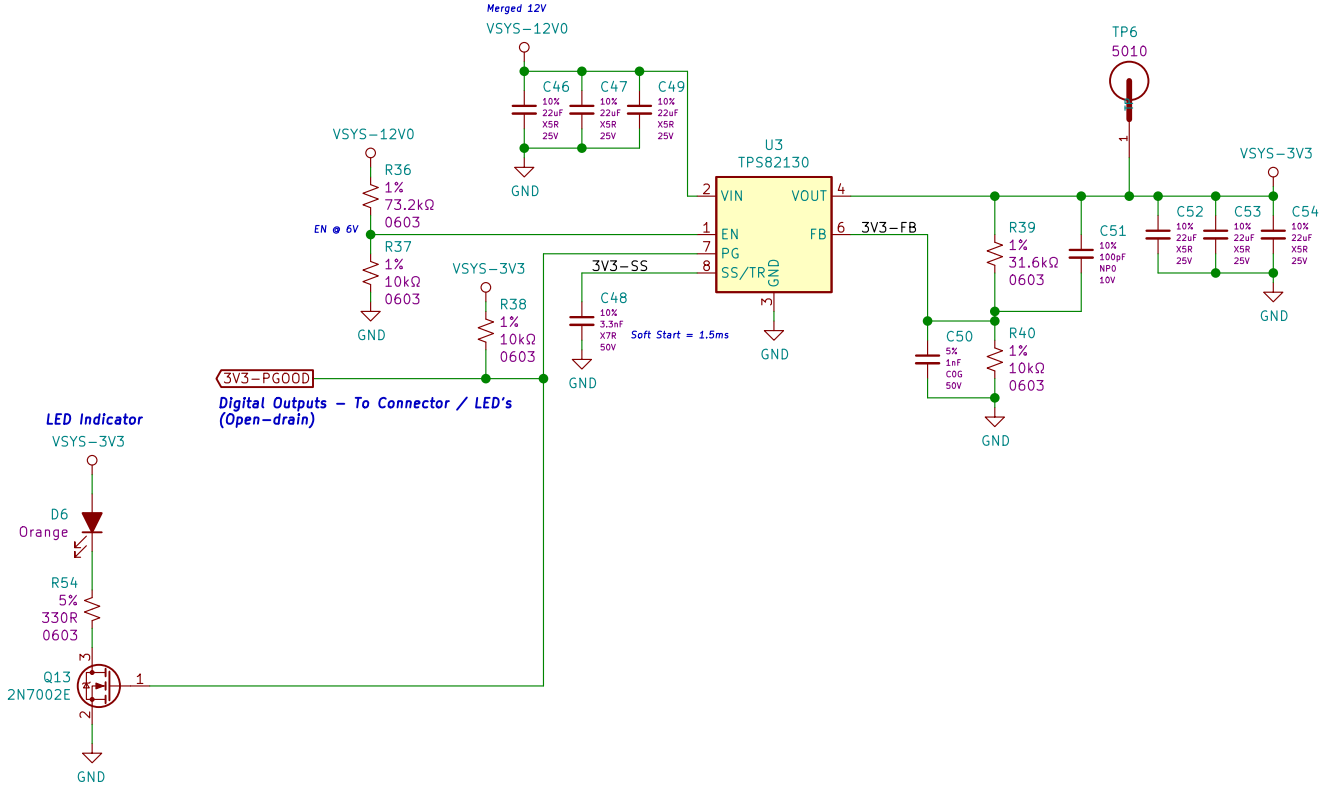
8A Output
Sw. Frequency =1.2MHz



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

TPS82130 – 3.3V Buck Converter

3A Output
Sw. Frequency = 2MHz



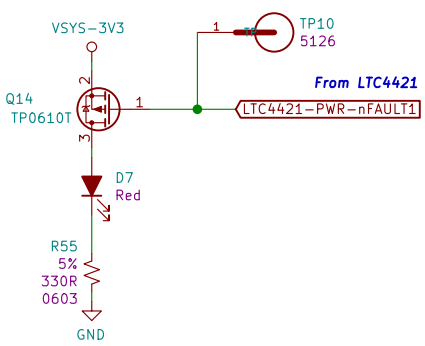
Pufferfish

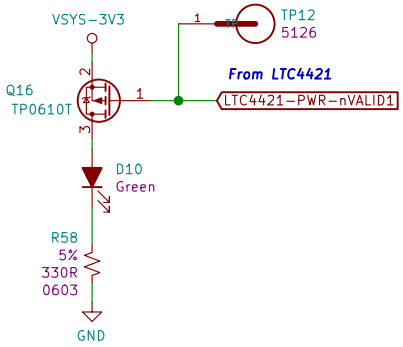
Sheet: /3.3V Buck/
File: 3v3.sch

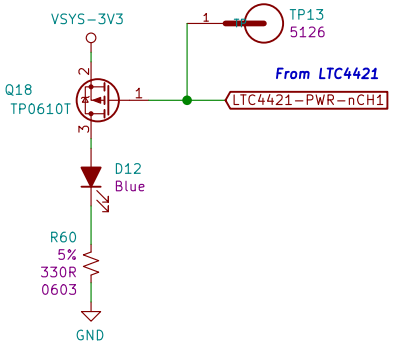
Title: Pufferfish Power: TPS82130

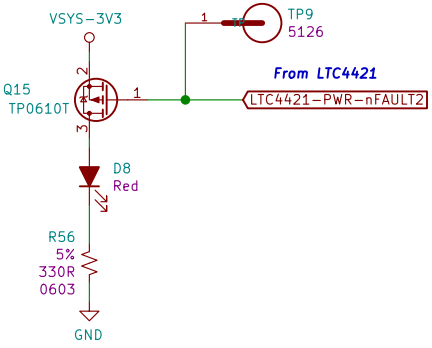
Size: A4 | Date: 2020-06-05 | **Rev: v1.0**
KiCad E.D.A. kicad (5.1.5)-3 | Id: 6/7

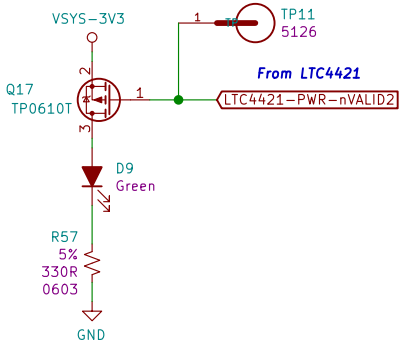
LED's and Debug

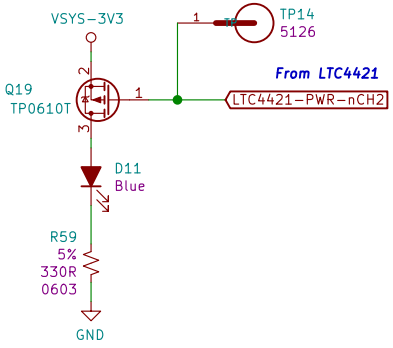


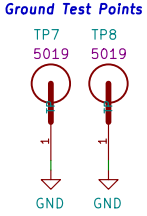












Pufferfish

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