

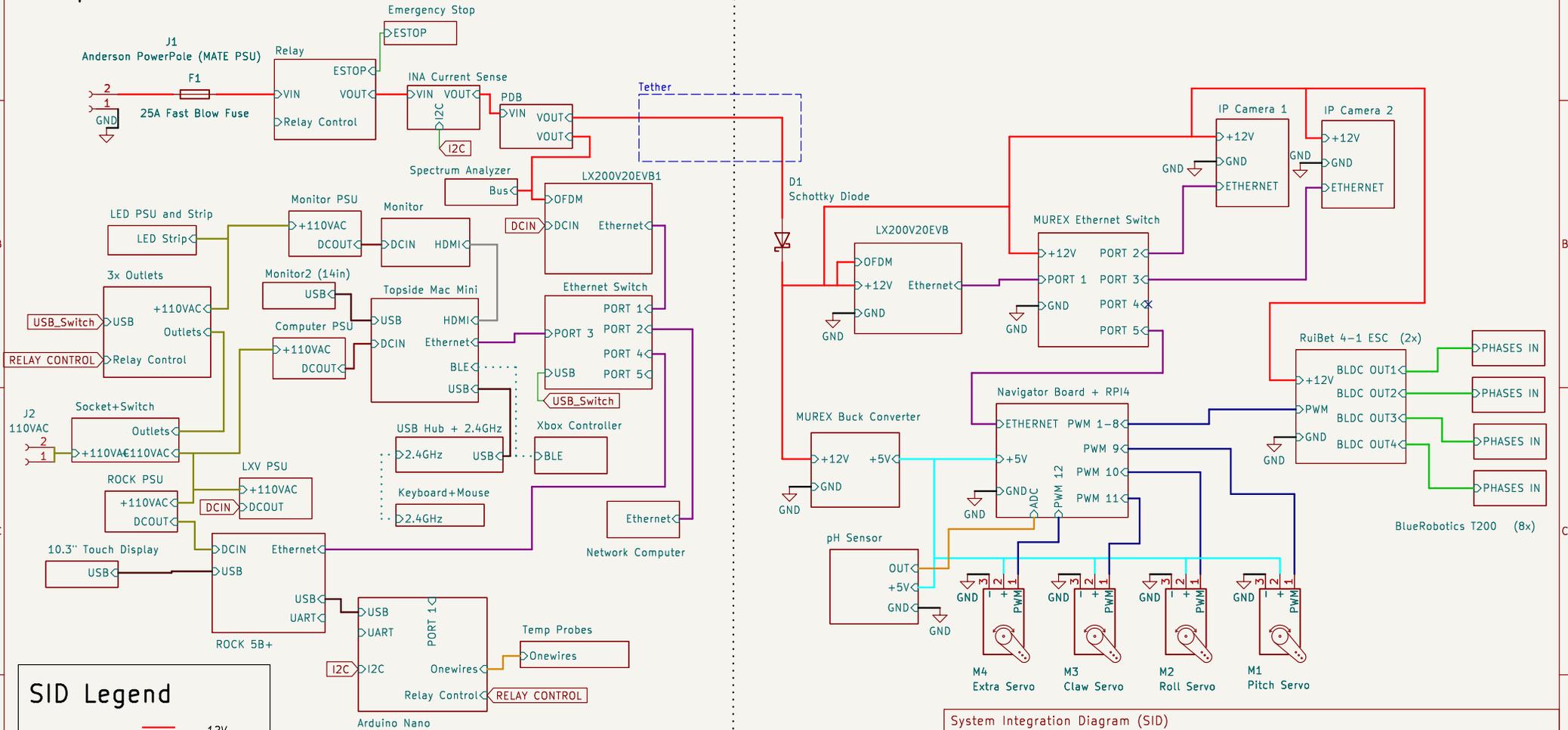
SYSTEM INTEGRATION DIAGRAM (SID)

*Fluid power is not used

0

Topside

Aquatic



SID Legend	
—	110VAC
—	GND
—	PSU DC
—	HDMI
—	7V
·····	Wireless
—	12V
—	5V
—	PWM
—	Ethernet
—	BLDC Phases
—	USB
—	Analog

ROV Full Load Amps (FLA) in Water: 24.8A
Fuse selected based upon FLA: 25A ATO

System Integration Diagram (SID)
MUREX ROV V4.0

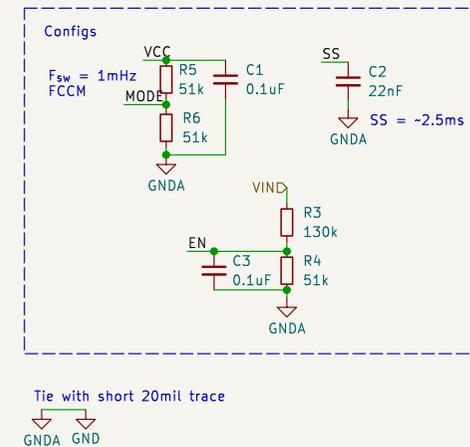
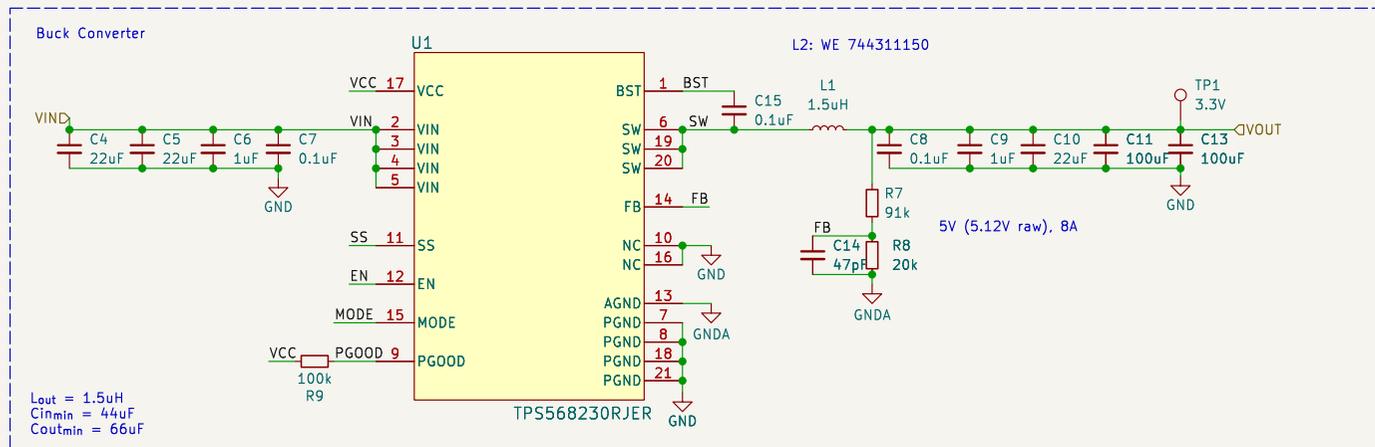
MUREX Robotics

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File: 2025_SID.kicad_sch

Title: System Integration Diagram

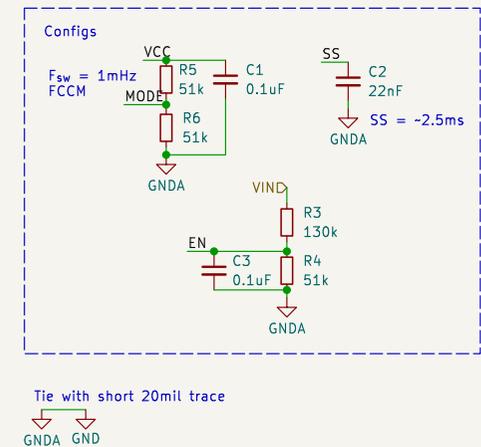
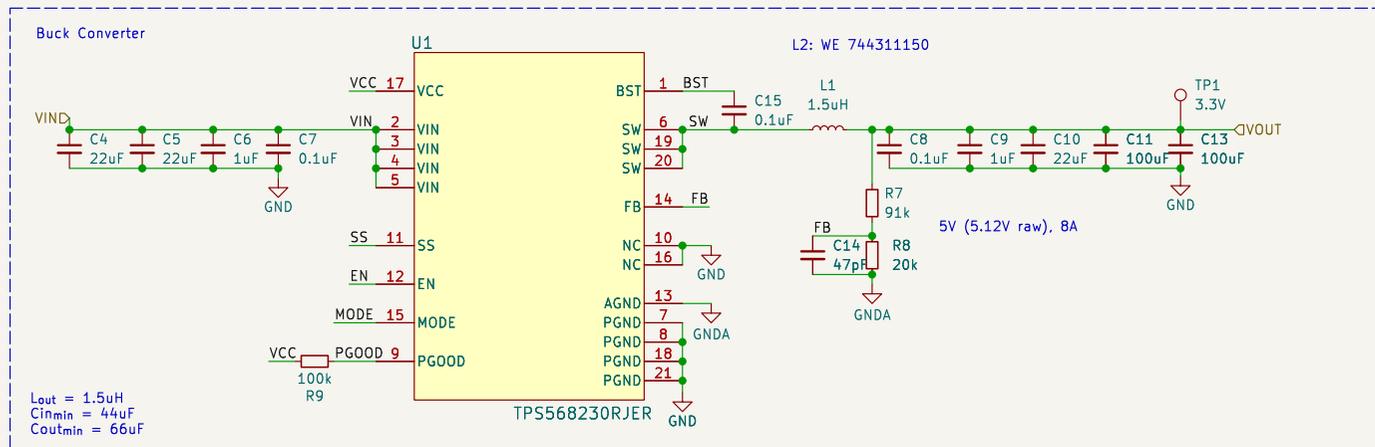
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Rev: V1.0
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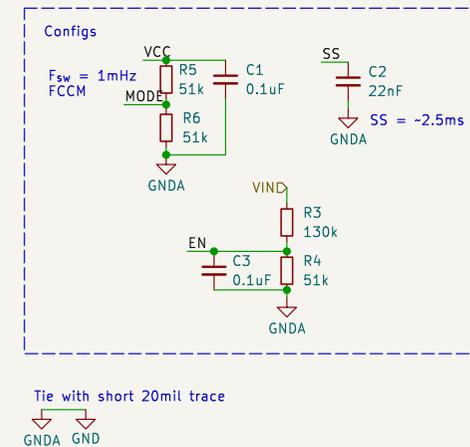
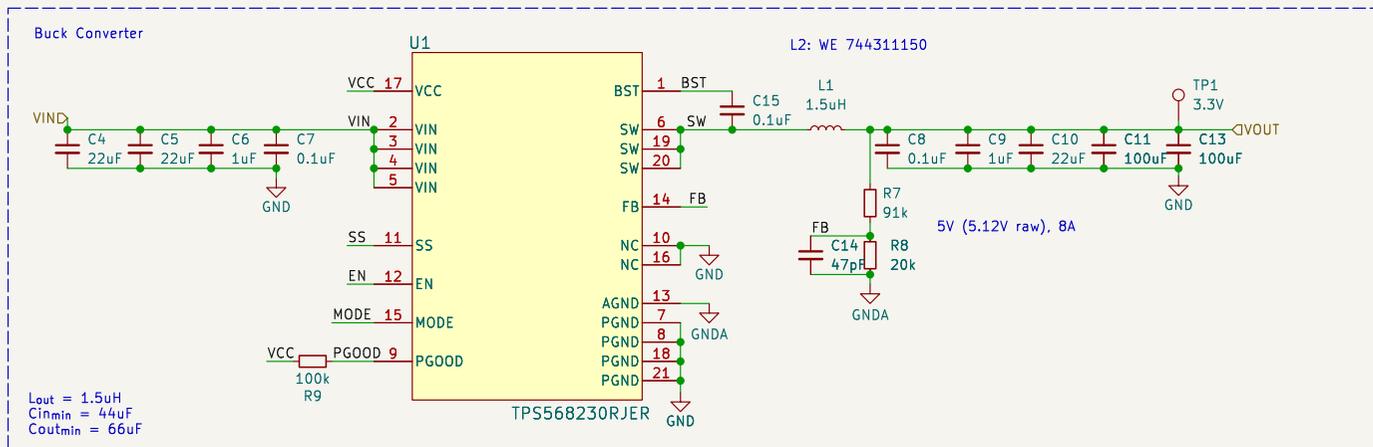
The MUREX Power Board is the world's smallest open-source dual output, high power module designed for ROV applications and other 12V/5V/3.3V DC systems.
 // THINK DIFFERENT, THINK MUREX.
 // INNOVATION IS OUR OBSESSION.
MUREX Robotics [Max Liu]

Sheet: /MUREX Buck Converter/ File: untitled.kicad_sch	
Title: Power Board	
Size: A4	Date: 2023-11-27
KiCad E.D.A. 9.0.0	Rev: V2.0 Id: 2/38



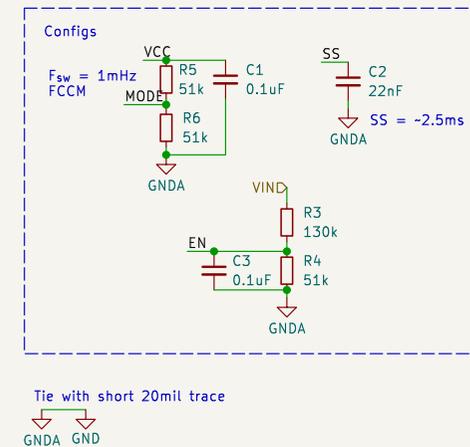
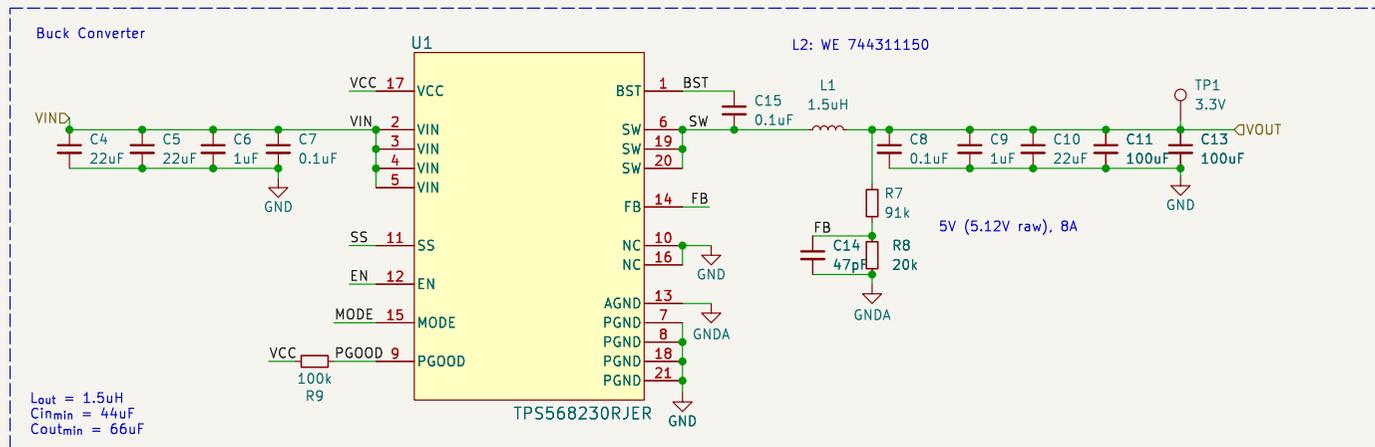
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MUREX Robotics [Max Liu]
 Sheet: /IP Camera 1/
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Size: A4	Date: 2023-11-27
KiCad E.D.A. 9.0.0	Rev: V2.0
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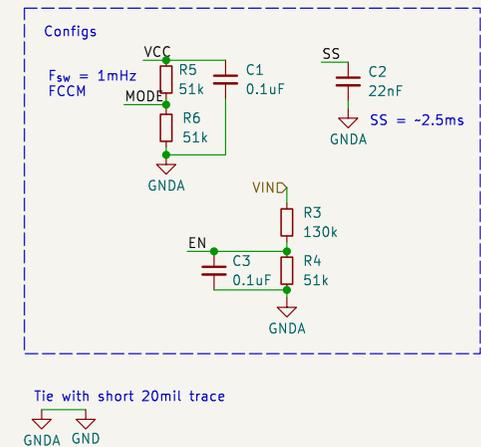
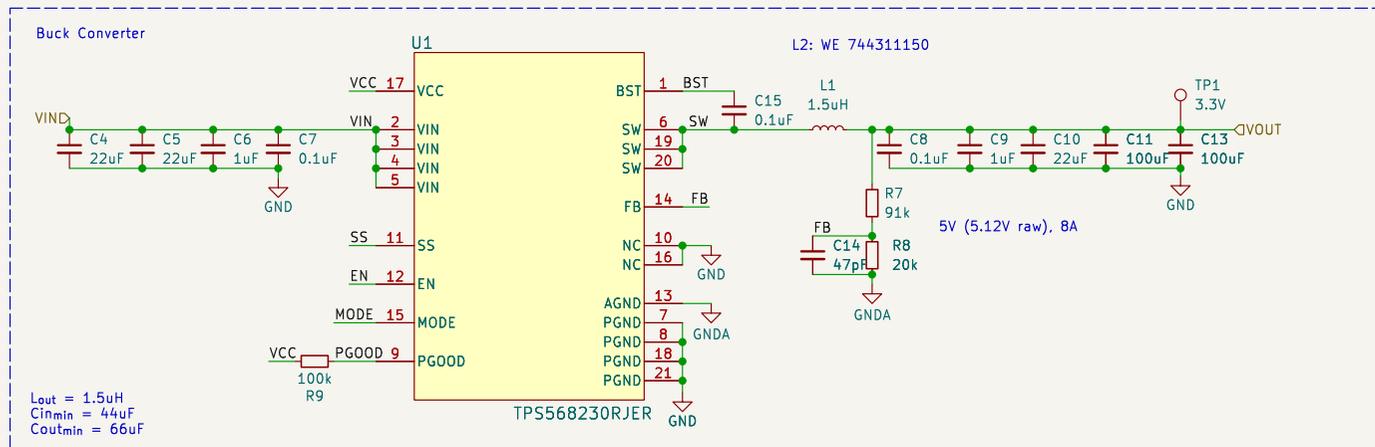
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 // THINK DIFFERENT, THINK MUREX.
 // INNOVATION IS OUR OBSESSION.
MUREX Robotics [Max Liu]
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KiCad E.D.A. 9.0.0	Rev: V2.0 Id: 5/38



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MUREX Robotics [Max Liu]
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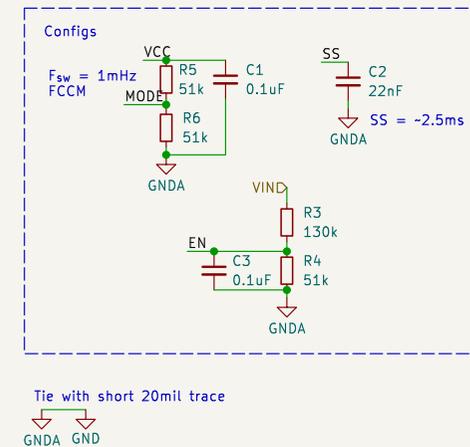
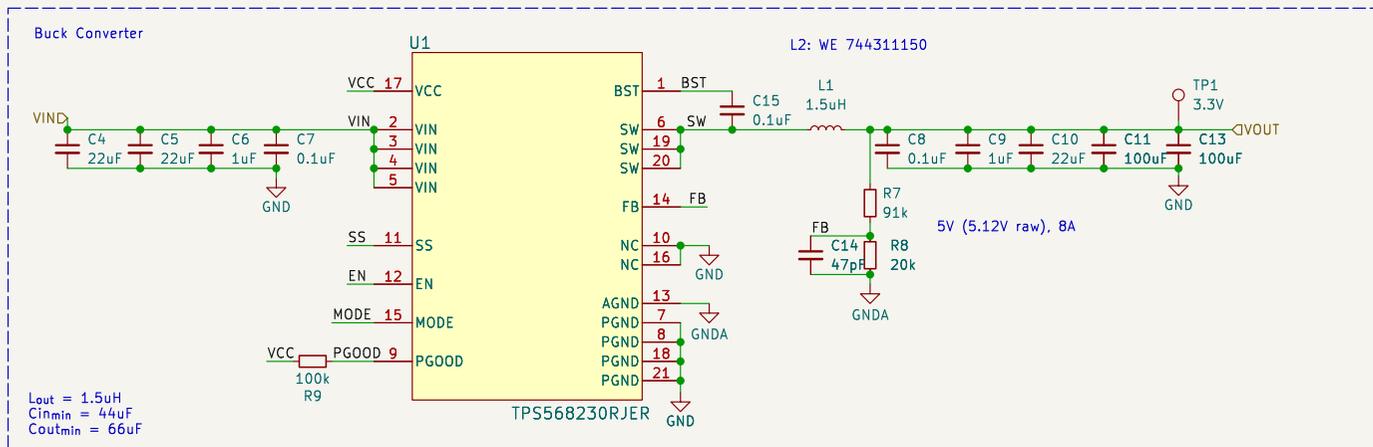
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MUREX Robotics [Max Liu]
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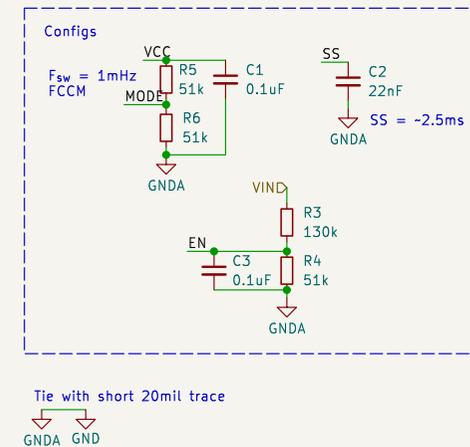
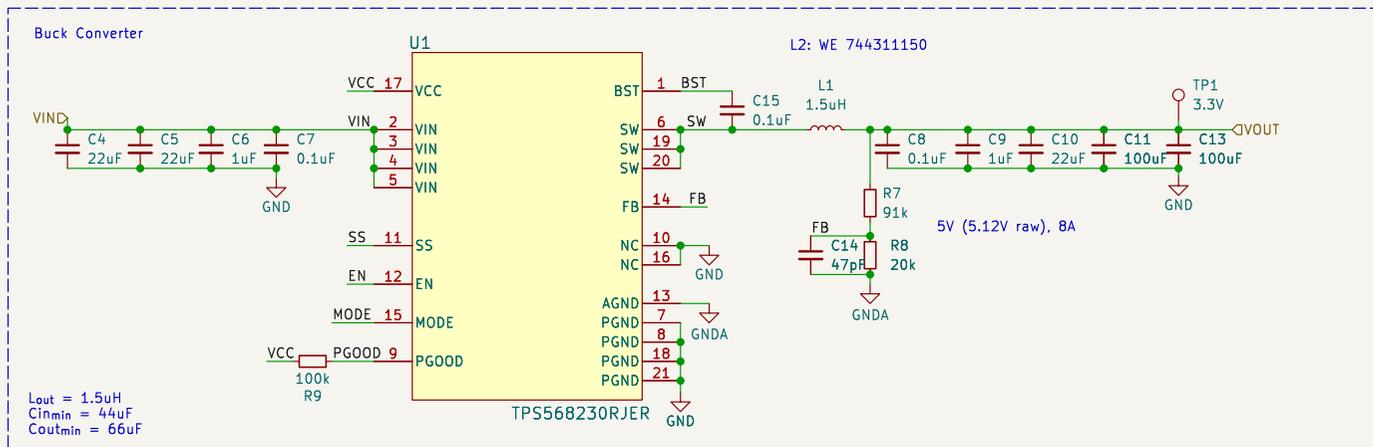
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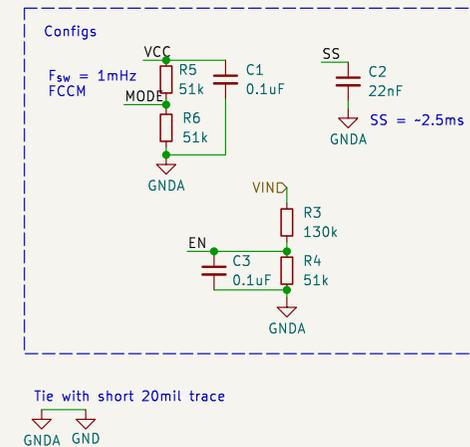
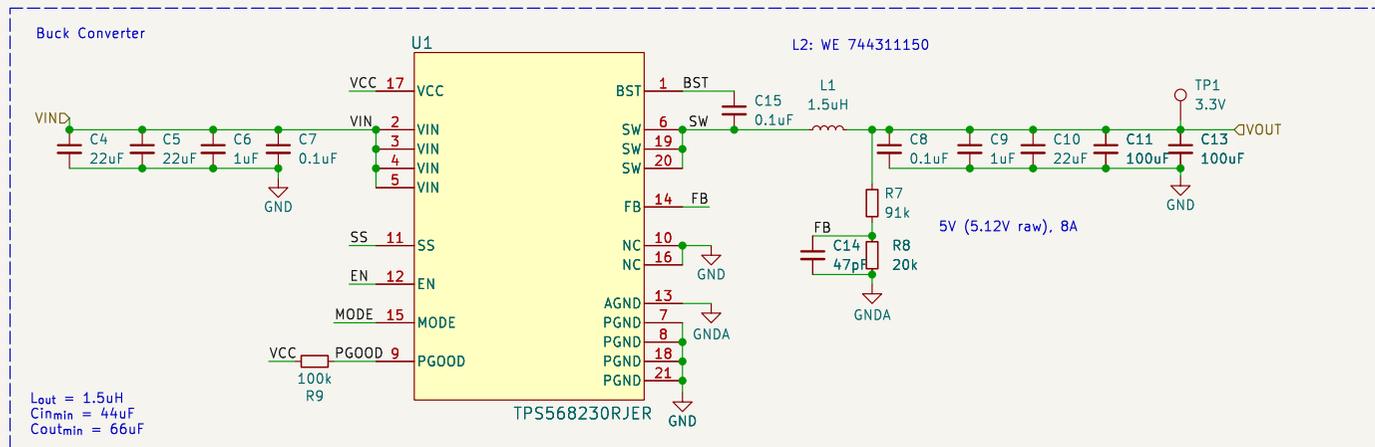
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MUREX Robotics [Max Liu]
 Sheet: /BlueRobotics T200 8x3/
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Size: A4	Date: 2023-11-27
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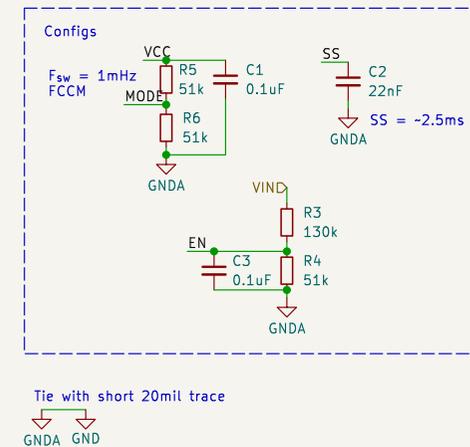
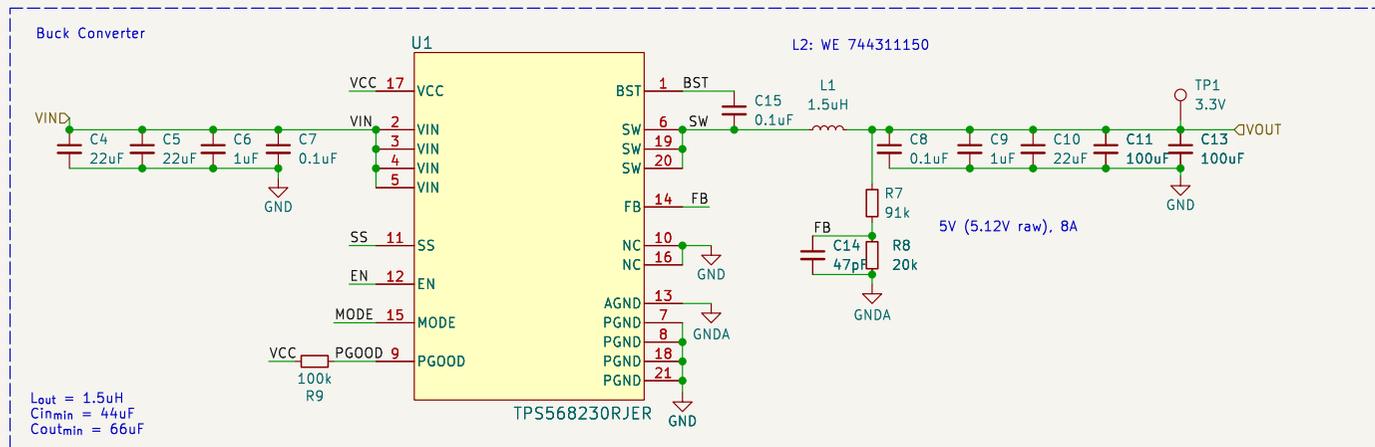
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MUREX Robotics [Max Liu]
 Sheet: /Navigator Board + RPI4/
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Title: Power Board	
Size: A4	Date: 2023-11-27
KiCad E.D.A. 9.0.0	Rev: V2.0 Id: 12/38



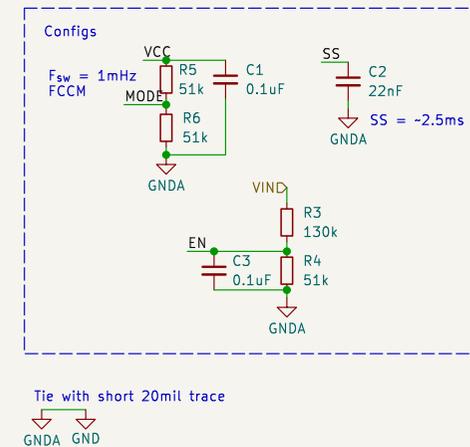
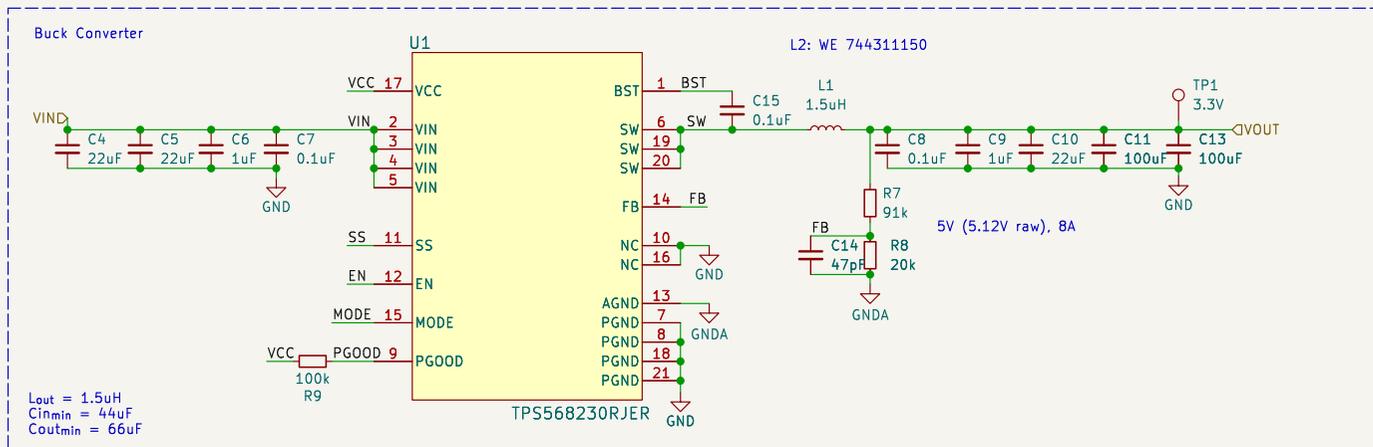
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MUREX Robotics [Max Liu]
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Size: A4	Date: 2023-11-27
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MUREX Robotics [Max Liu]
 Sheet: /Monitor2 (14in)/
 File: untitled.kicad_sch

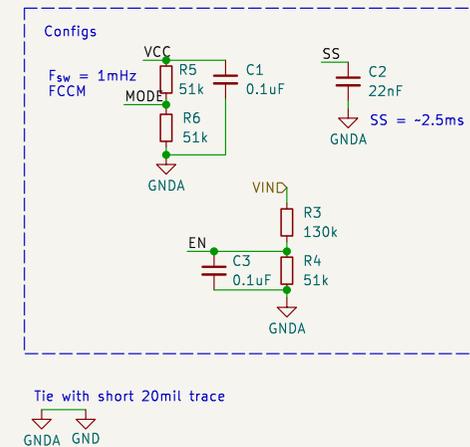
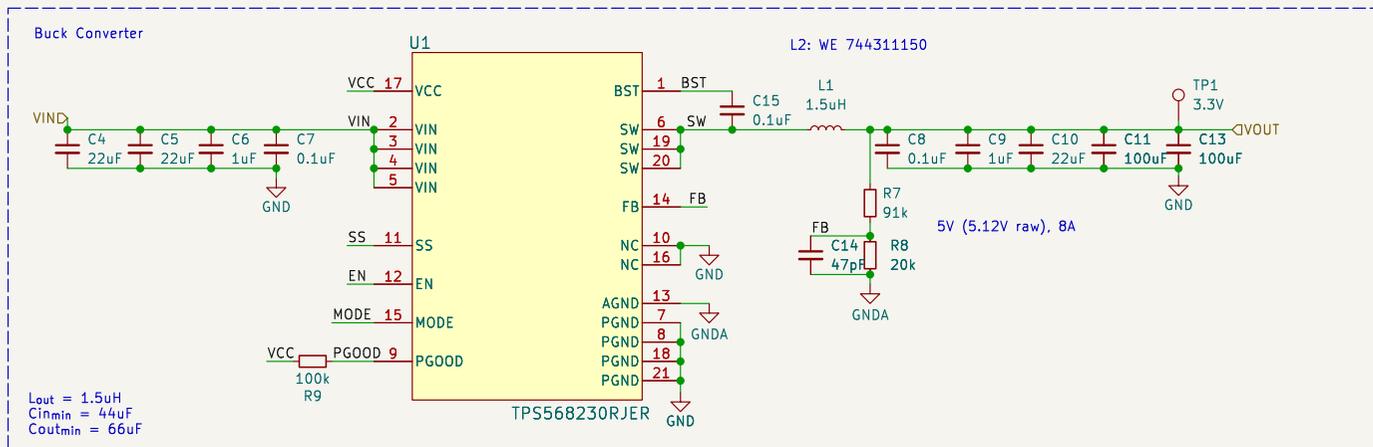
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MUREX Robotics [Max Liu]
 Sheet: /Socket+Switch/
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Title: Power Board

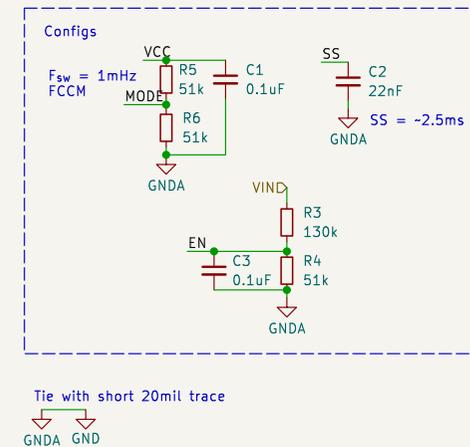
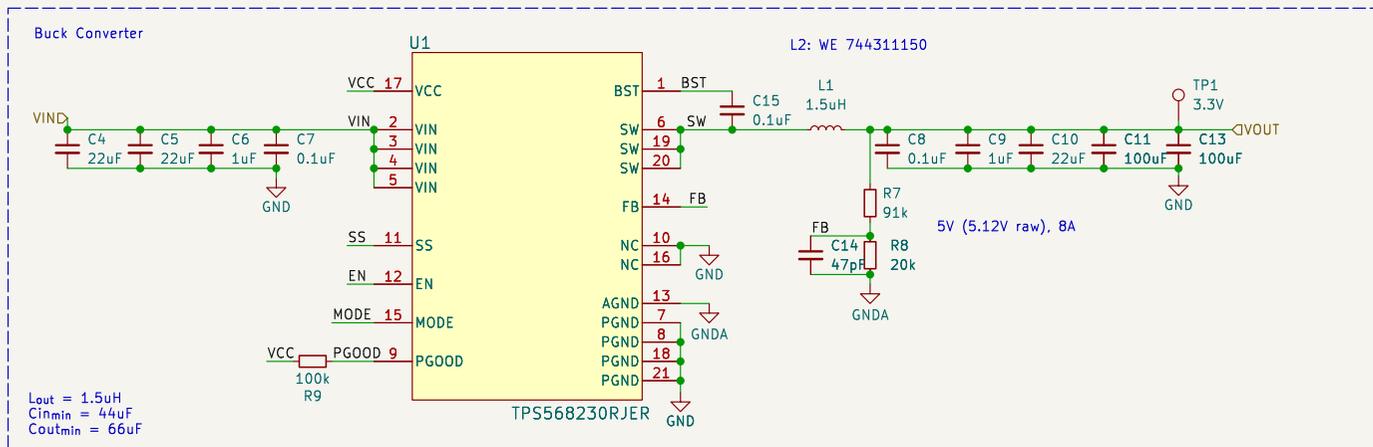
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MUREX Robotics [Max Liu]
 Sheet: /Xbox Controller/
 File: untitled.kicad_sch

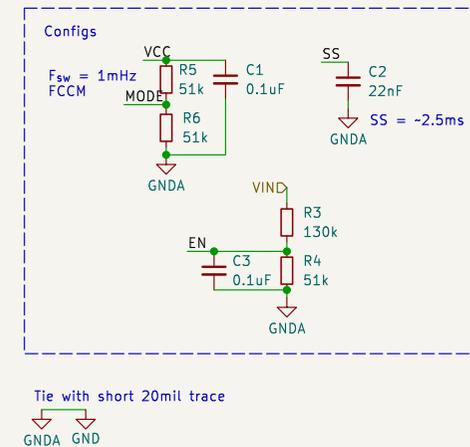
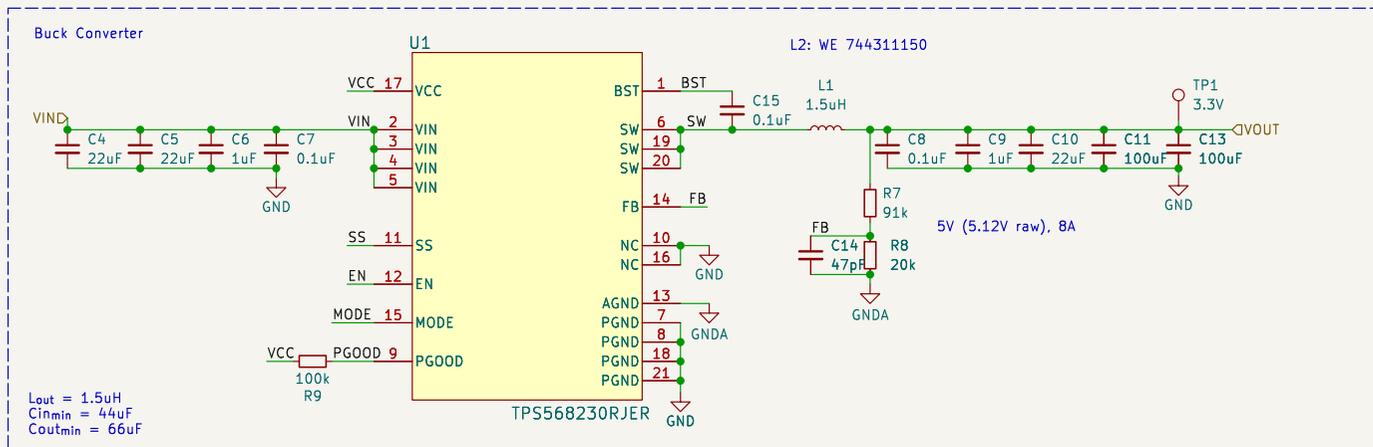
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Size: A4	Date: 2023-11-27	Rev: V2.0
KiCad E.D.A. 9.0.0		Id: 17/38



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MUREX Robotics [Max Liu]
 Sheet: /Computer PSU/
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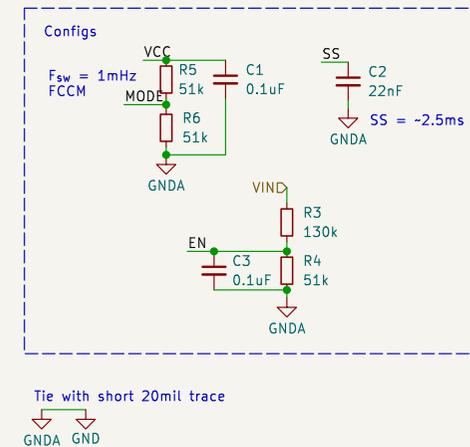
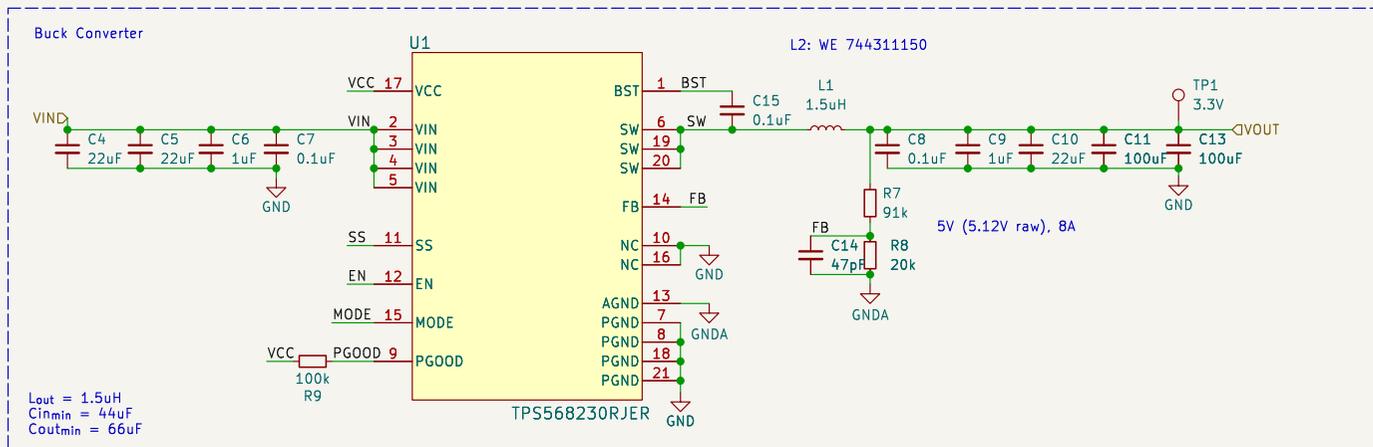
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KiCad E.D.A. 9.0.0	Rev: V2.0 Id: 19/38



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MUREX Robotics [Max Liu]
 Sheet: /Topside Mac Mini/
 File: untitled.kicad_sch

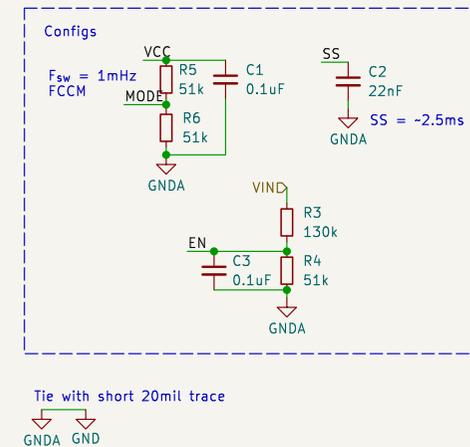
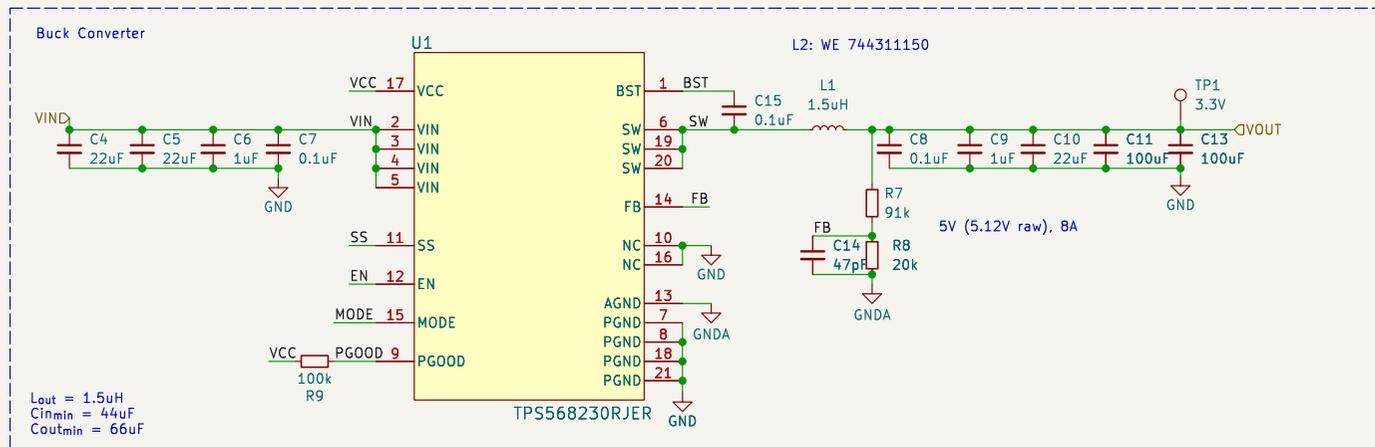
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MUREX Robotics [Max Liu]
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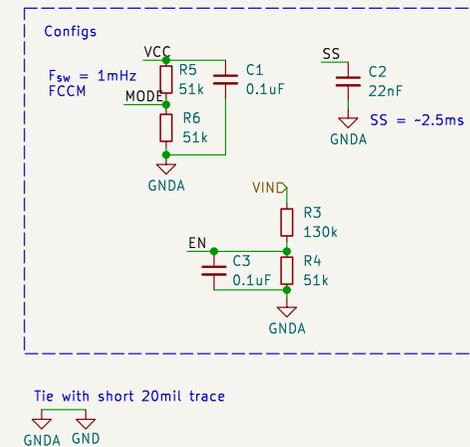
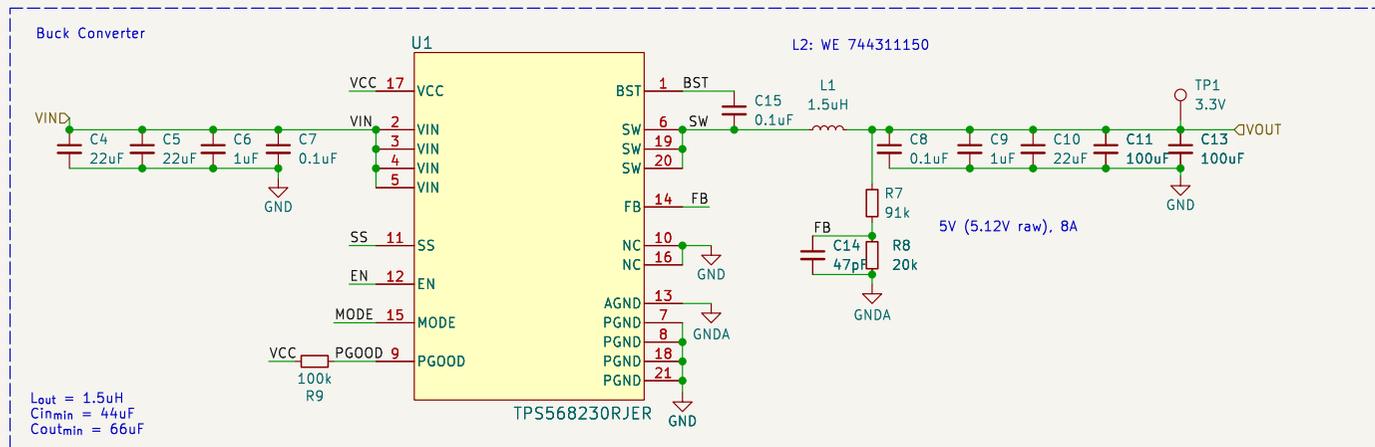
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MUREX Robotics [Max Liu]
 Sheet: /Network Computer/
 File: untitled.kicad_sch

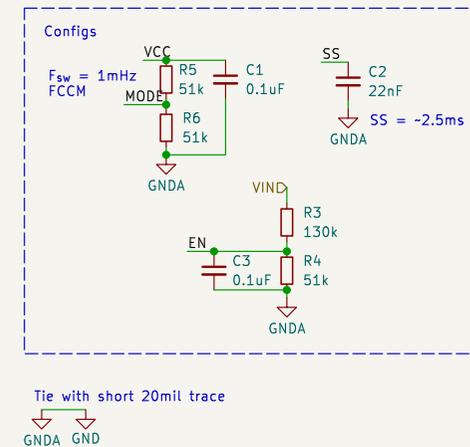
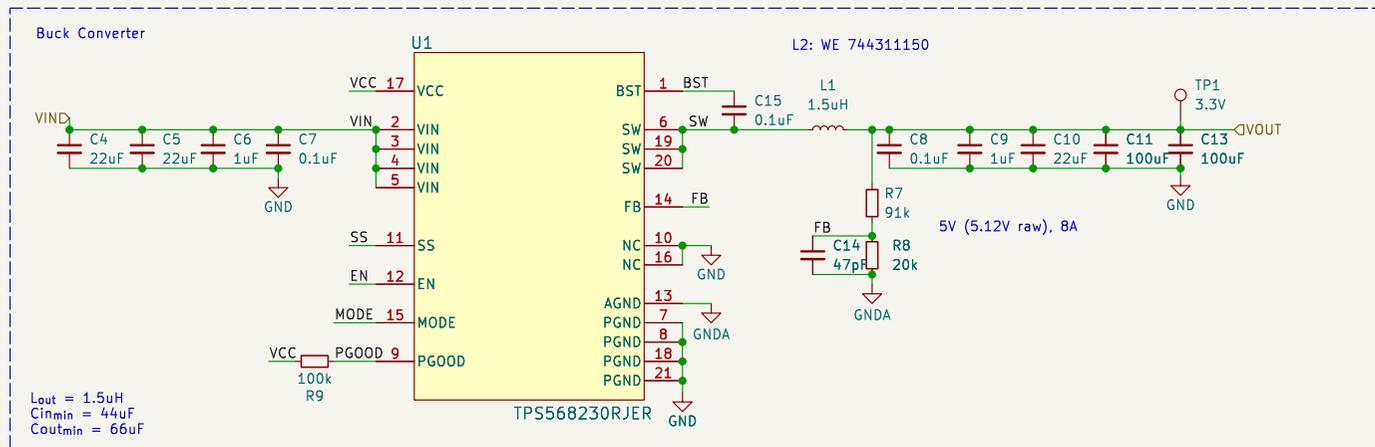
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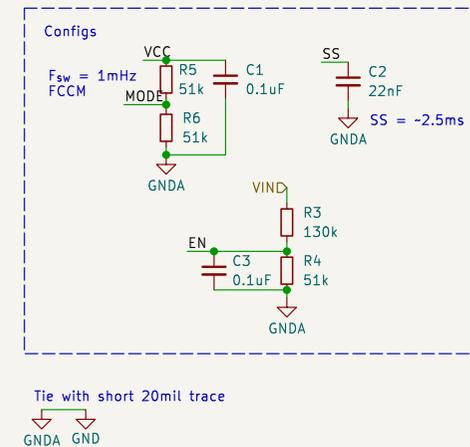
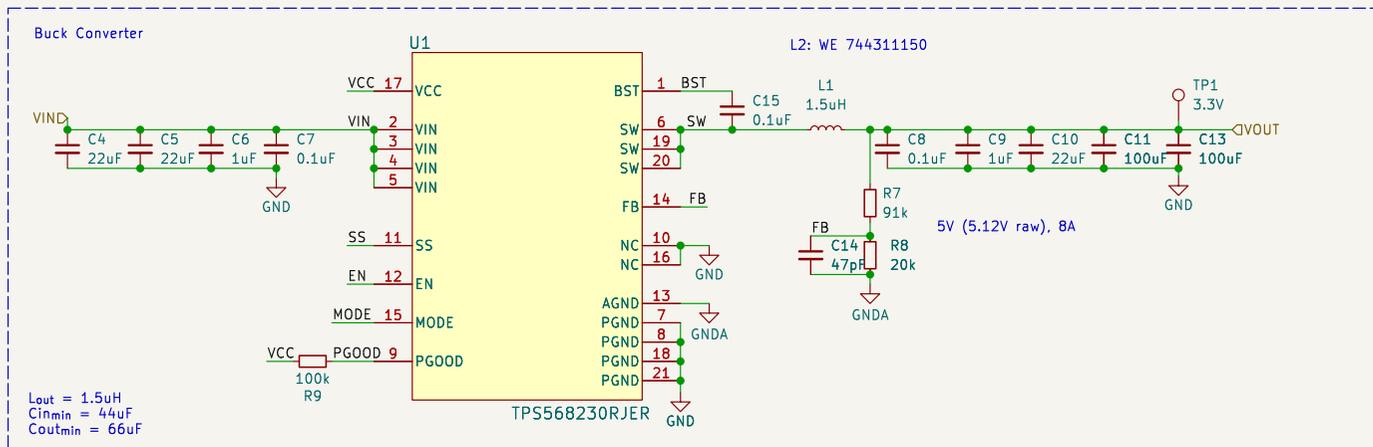
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MUREX Robotics [Max Liu]
 Sheet: /ROCK 5B+/
 File: untitled.kicad_sch

Title: Power Board	
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	Id: 27/38



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MUREX Robotics [Max Liu]
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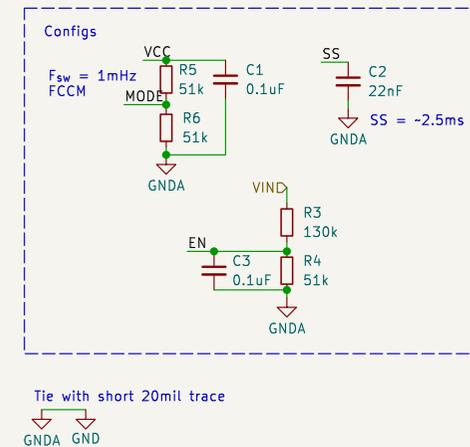
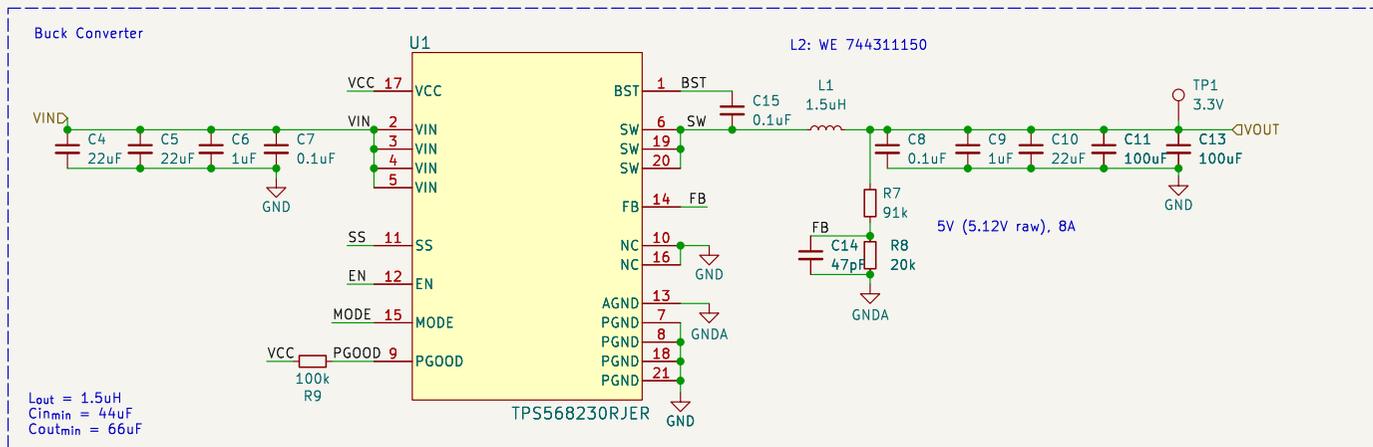
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MUREX Robotics [Max Liu]
 Sheet: /INA Current Sense/
 File: untitled.kicad_sch

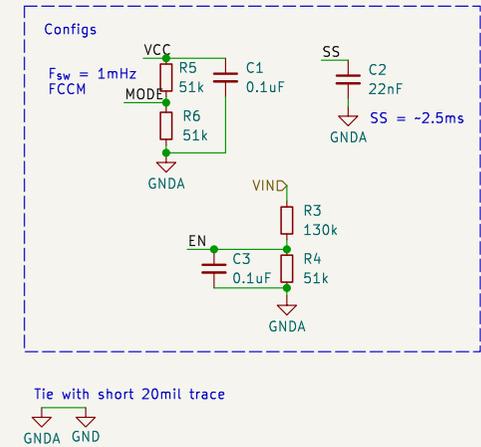
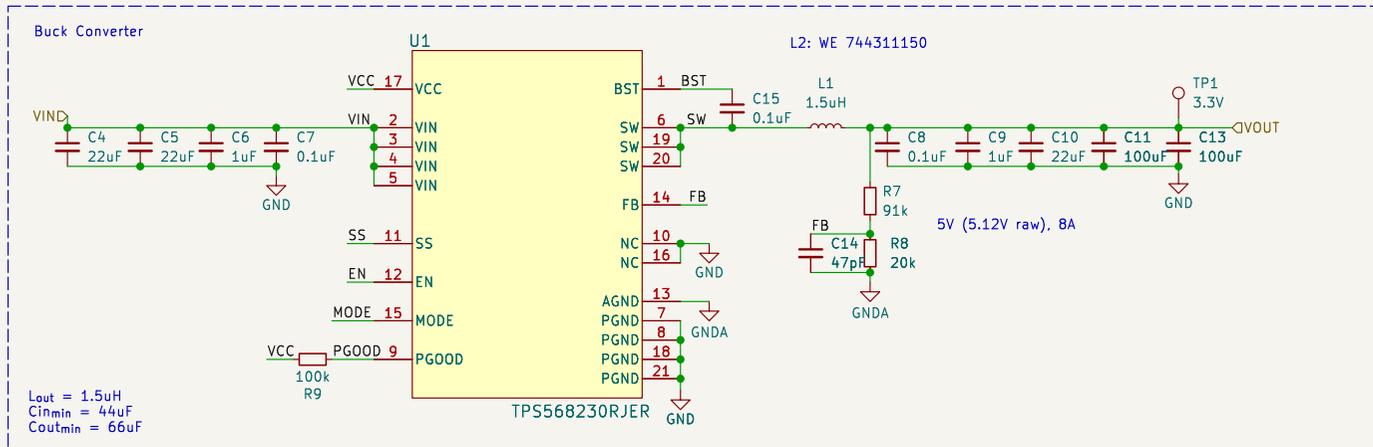
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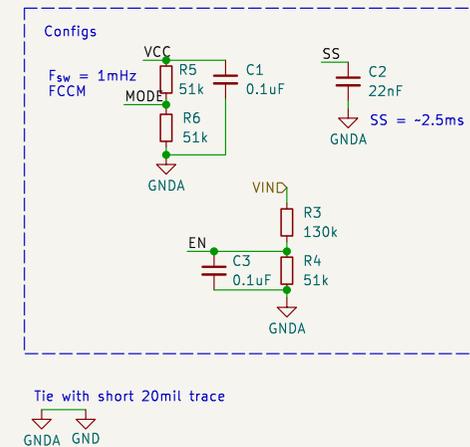
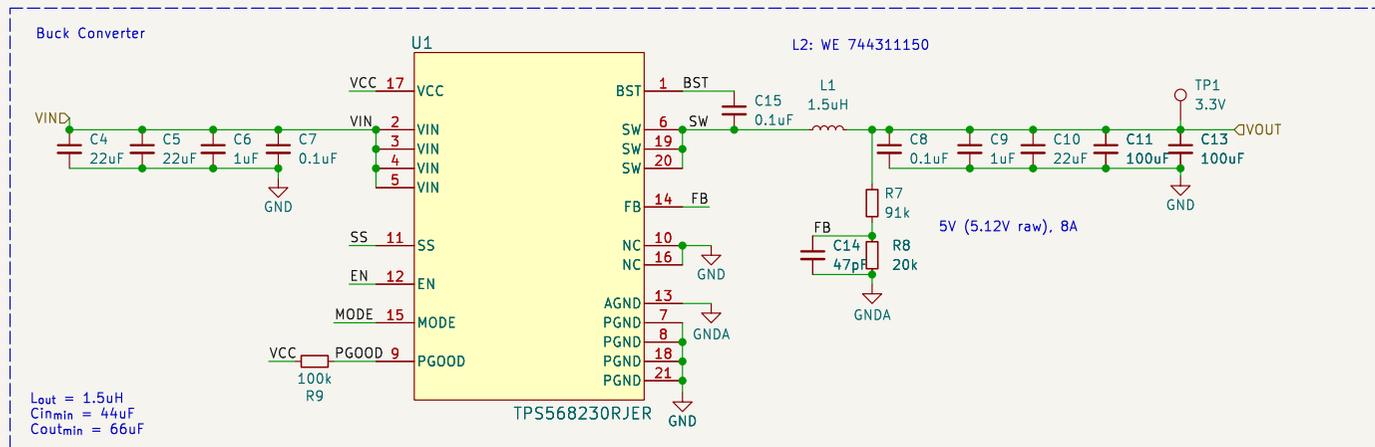
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MUREX Robotics [Max Liu]
 Sheet: /Relay/
 File: untitled.kicad_sch

Title: Power Board	
Size: A4	Date: 2023-11-27
KiCad E.D.A. 9.0.0	Rev: V2.0 Id: 31/38



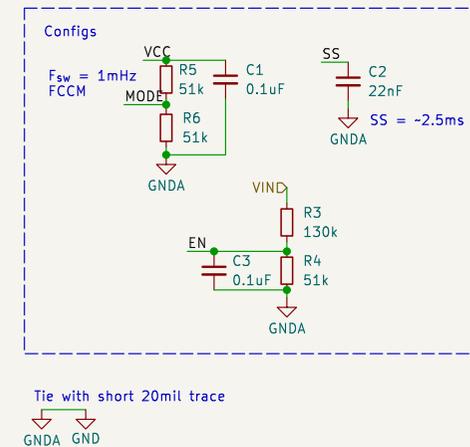
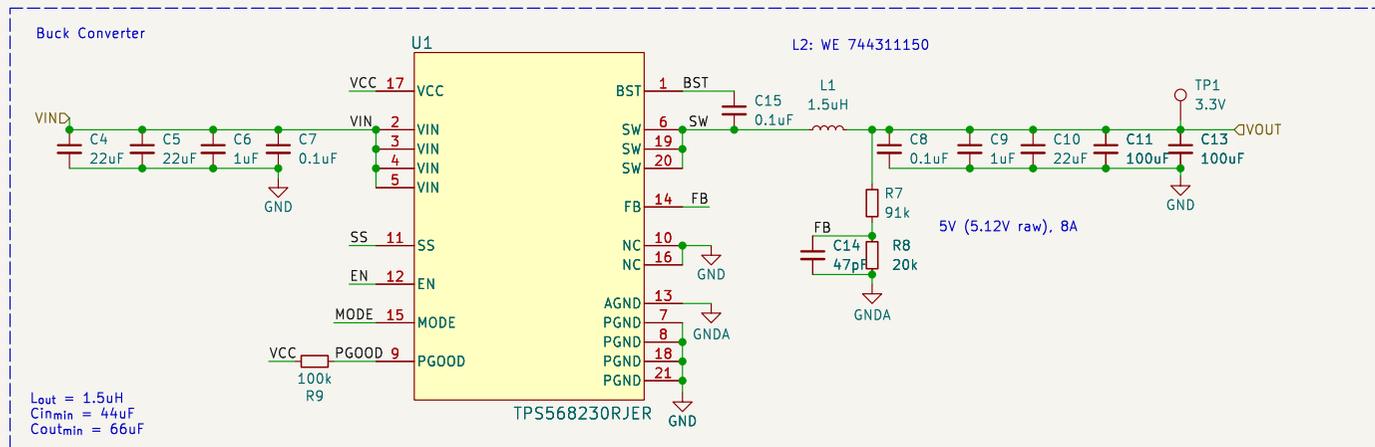
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MUREX Robotics [Max Liu]

Sheet: /PDB/		Date: 2023-11-27	
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Size: A4	KiCad E.D.A. 9.0.0		Id: 33/38



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MUREX Robotics [Max Liu]
 Sheet: /USB Hub + 2.4GHz/
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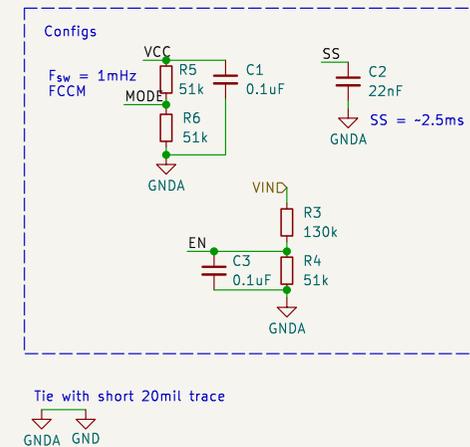
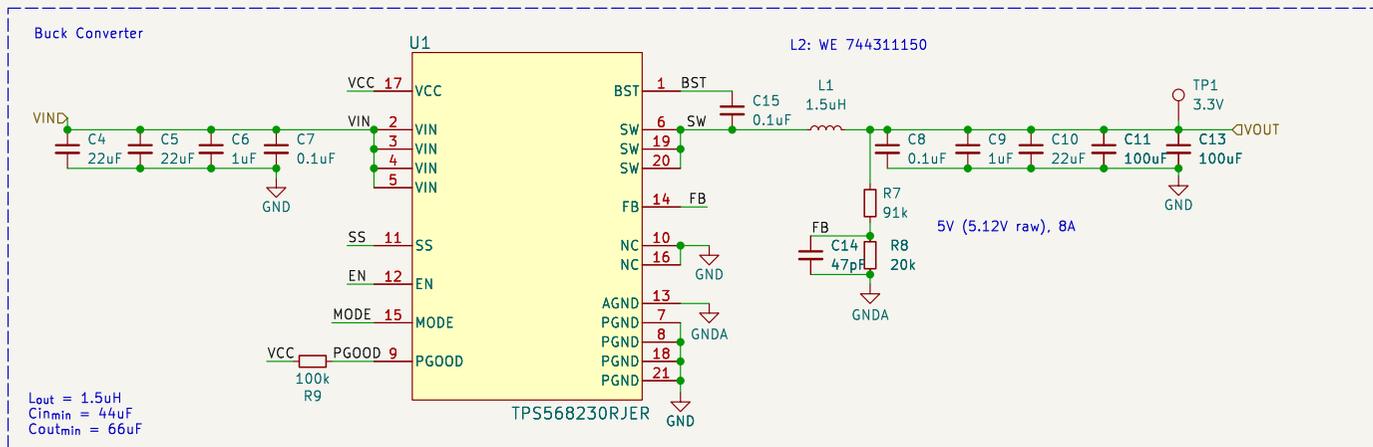
Title: Power Board	
Size: A4	Date: 2023-11-27
KiCad E.D.A. 9.0.0	Rev: V2.0 Id: 34/38



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MUREX Robotics [Max Liu]
 Sheet: /Keyboard+Mouse/
 File: untitled.kicad_sch

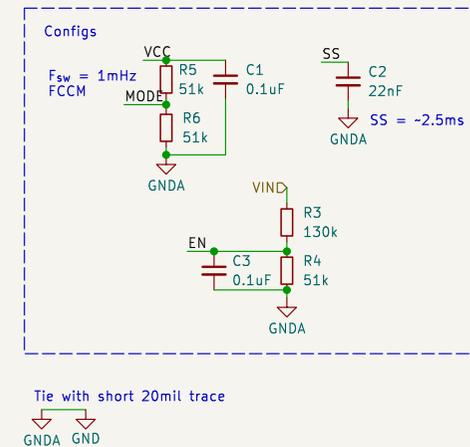
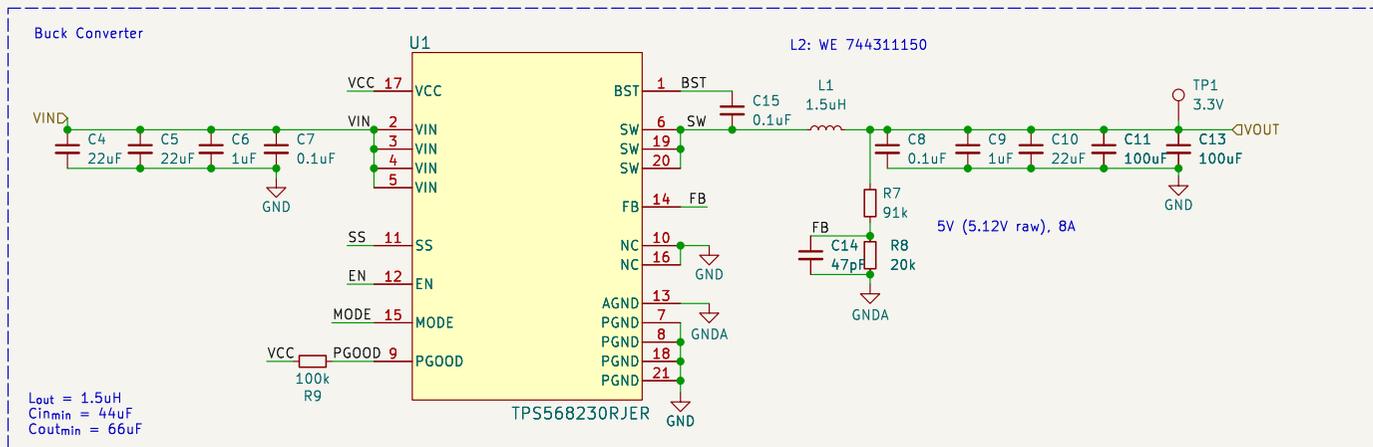
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Size: A4	Date: 2023-11-27	Rev: V2.0
KiCad E.D.A. 9.0.0		Id: 35/38



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MUREX Robotics [Max Liu]
 Sheet: /ROCK PSU/
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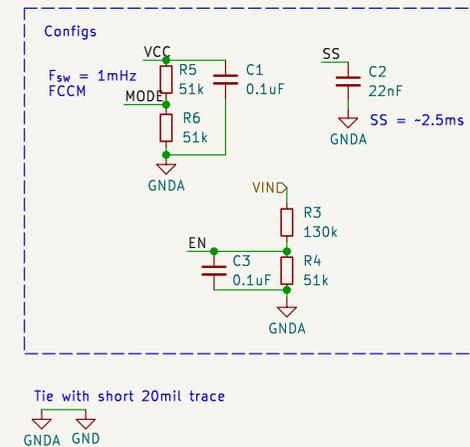
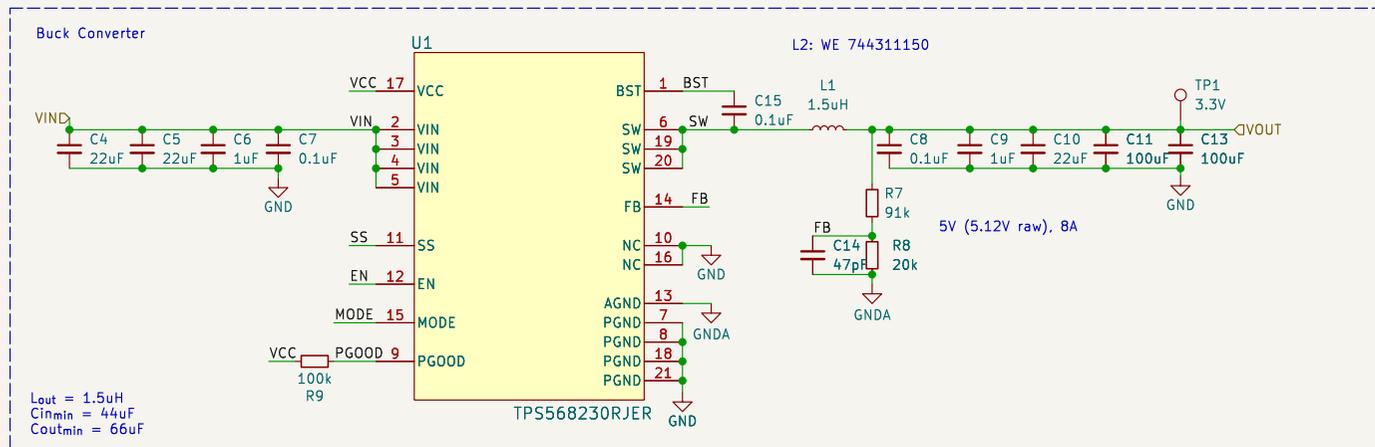
Title: Power Board	
Size: A4	Date: 2023-11-27
KiCad E.D.A. 9.0.0	Rev: V2.0 Id: 36/38



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Title: Power Board	
Size: A4	Date: 2023-11-27
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