

Net Label	Description	Notes
+BATT	Unprotected Battery Power Net	
P+	+BATT After Current Shunt	
+BMS	Protected Battery Power Net	
VC1..3	Cell Voltages 1..3	VC3 = +BATT
Phi	Control Pulse for odd MOSFETs	
Phi	Control Pulse for even MOSFETs	
CHGF_Pump_CLK	Charge Pumps Clock	
RECHG	Enable Recharge MOSFET	
DECHG	Enable Discharge MOSFET	

Designer: Morad Tamer

Info Hive

Sheet: /

File: Graduation Project PCB.kicad\_sch

Title: 3S BMS & Power Delivery Carrier Board

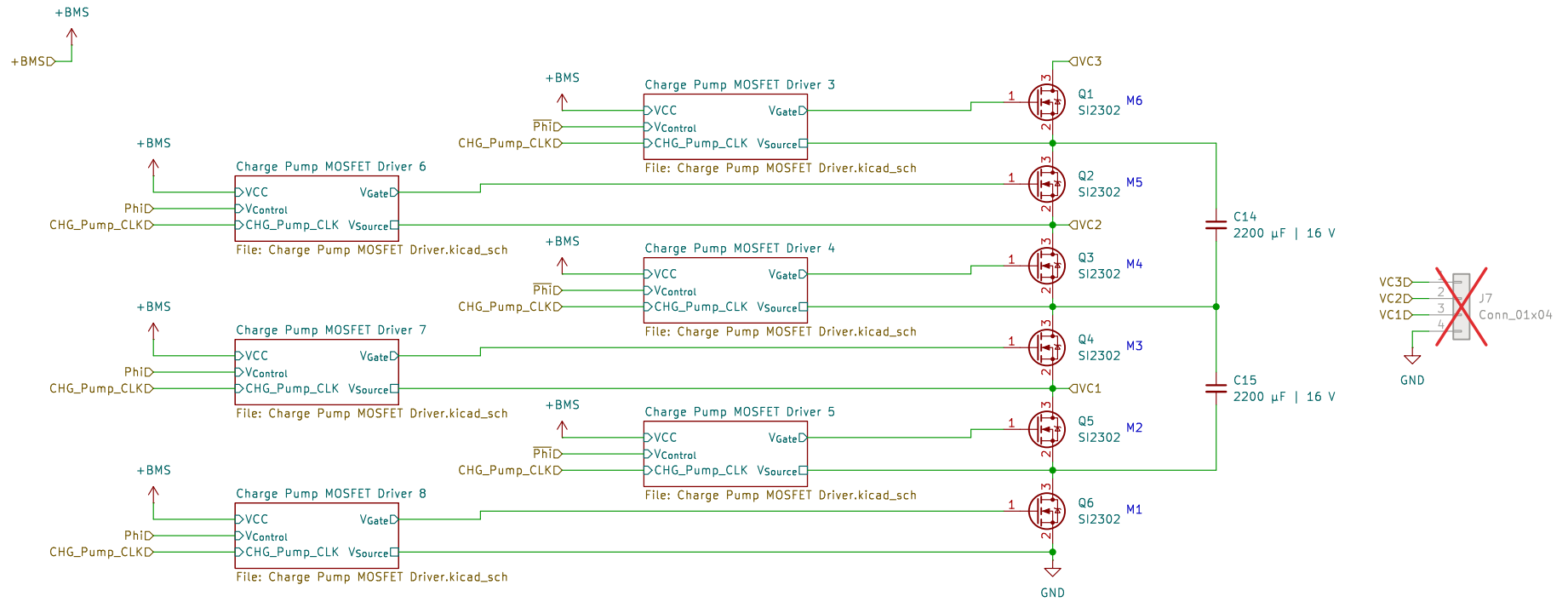
Size: A4

Date: 2025-05-01

Rev: C1

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Id: 1/16



Designer: Morad Tamer

**Info Hive**

Sheet: /Active Balancer/

File: Active\_Balancer.kicad\_sch

**Title: Active Balancer**

Size: A4

Date: 2025-05-01

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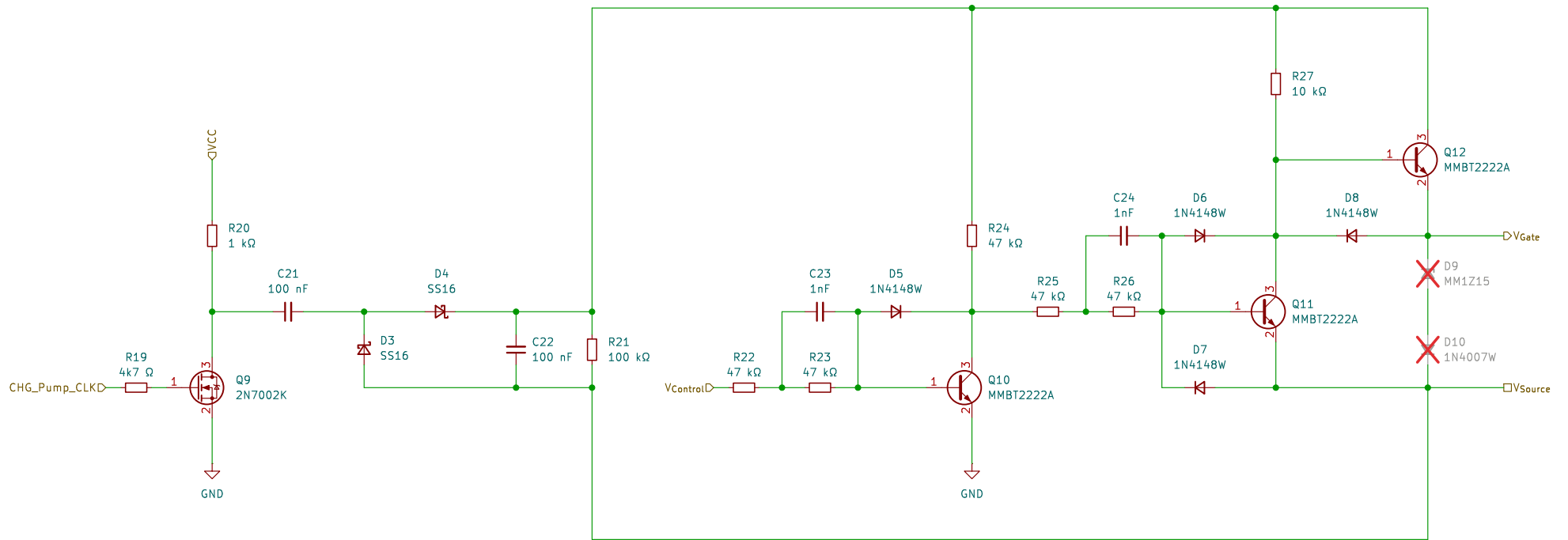
**Rev: C1**

Id: 6/16

Id: 12/16

Id: 13/16

Id: 14/16



Designer: Morad Tamer

**Info Hive**

Sheet: /Active Balancer/Charge Pump MOSFET Driver 3/

File: Charge Pump MOSFET Driver.kicad\_sch

**Title: Charge Pump MOSFET Driver 3**

Size: A4

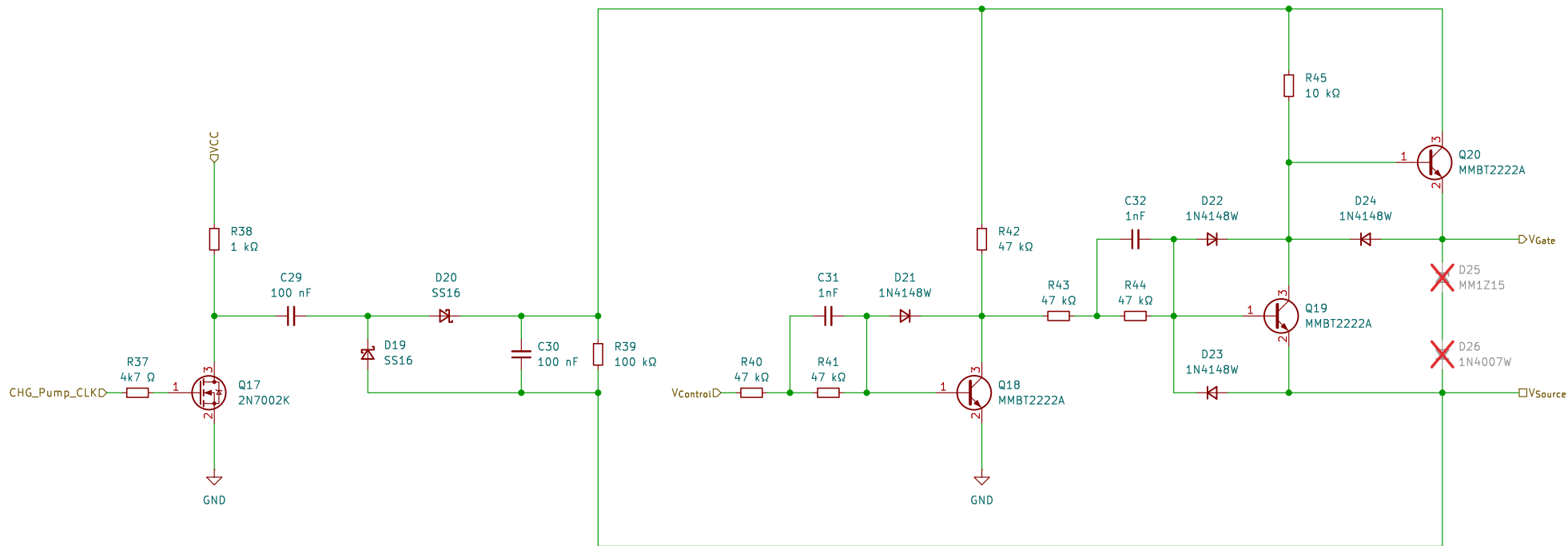
Date: 2025-05-01

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Id: 9/16

Id: 10/16



Designer: Morad Tamer

Info Hive

Sheet: /Active Balancer/Charge Pump MOSFET Driver 5/

File: Charge Pump MOSFET Driver.kicad\_sch

**Title: Charge Pump MOSFET Driver 5**

Size: A4

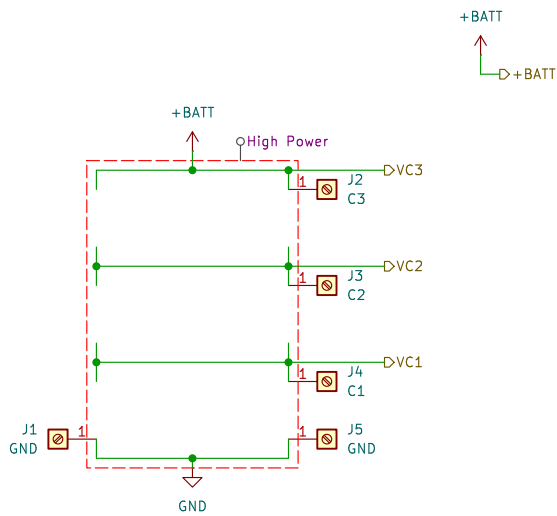
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Id: 11/16





FID1  
Fiducial

FID2  
Fiducial

FID3  
Fiducial

FID4  
Fiducial

Designer: Morad Tamer

**Info Hive**

Sheet: /Battery Pack/

File: Battery Pack.kicad\_sch

**Title: Battery Pack**

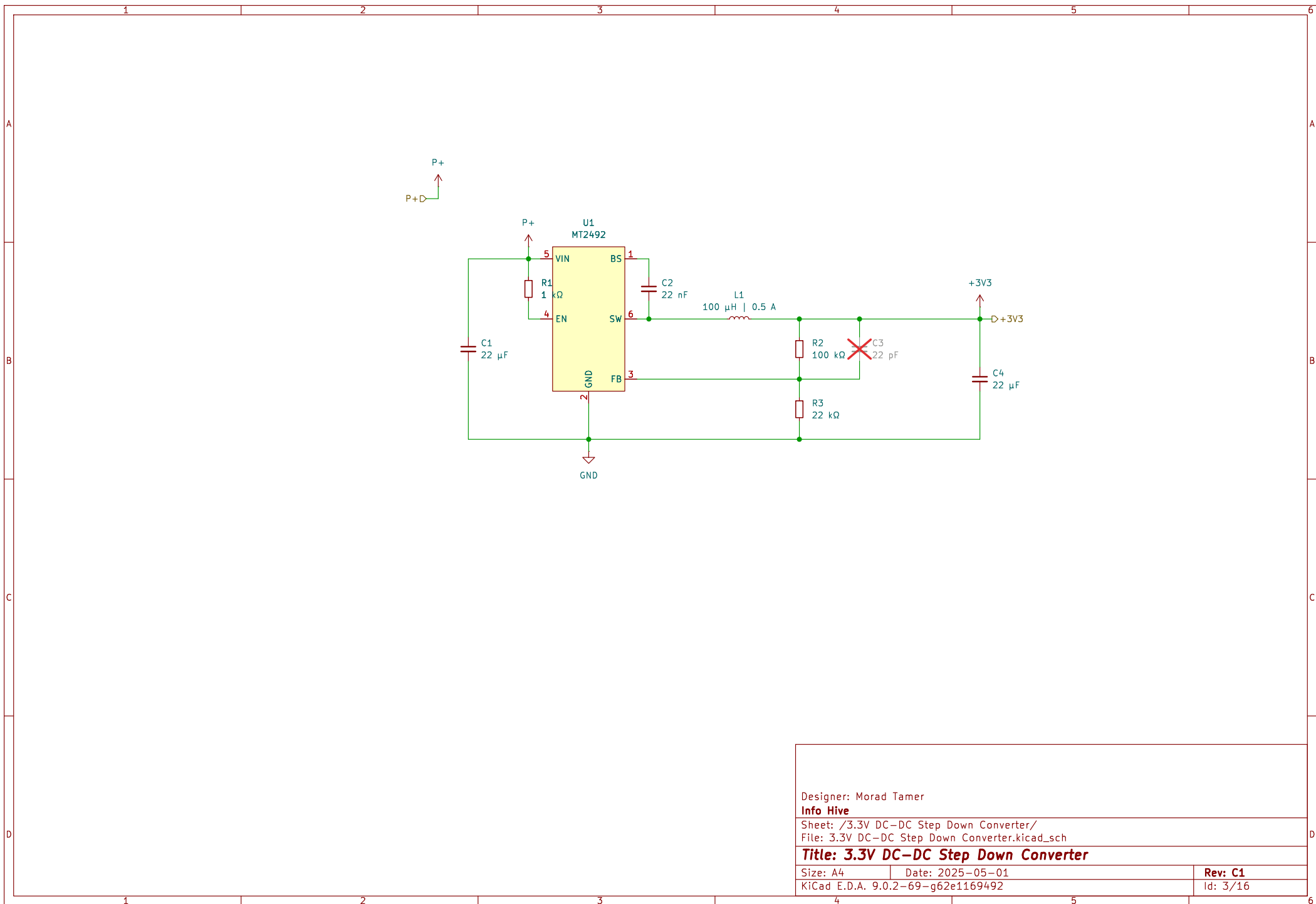
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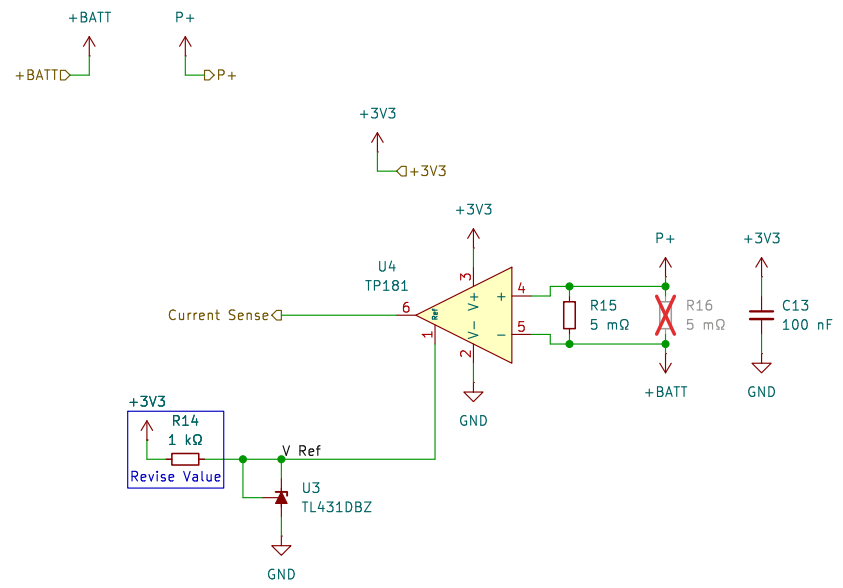
Date: 2025-05-01

**Rev: C1**

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Id: 2/16

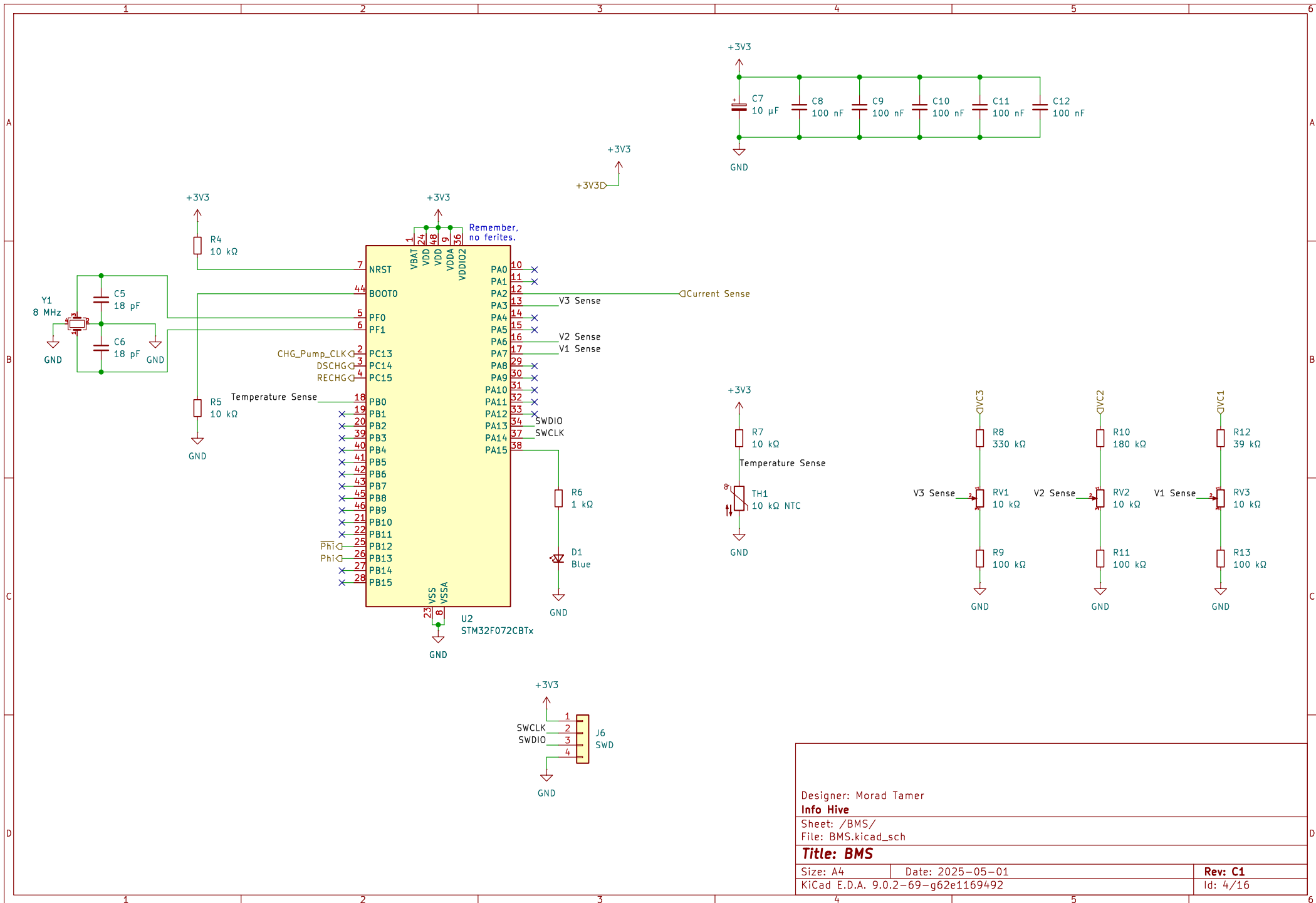


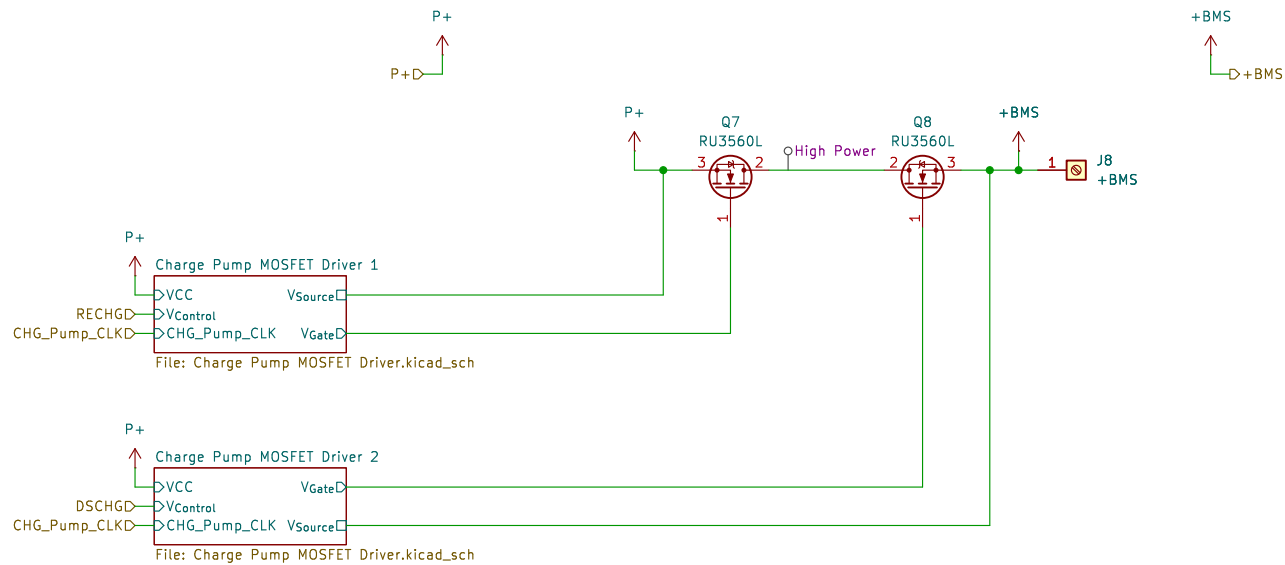


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KiCad E.D.A. 9.0.2-69-g62e1169492		Id: 5/16





Sheet: /BMS Cutoff MOSFETs/  
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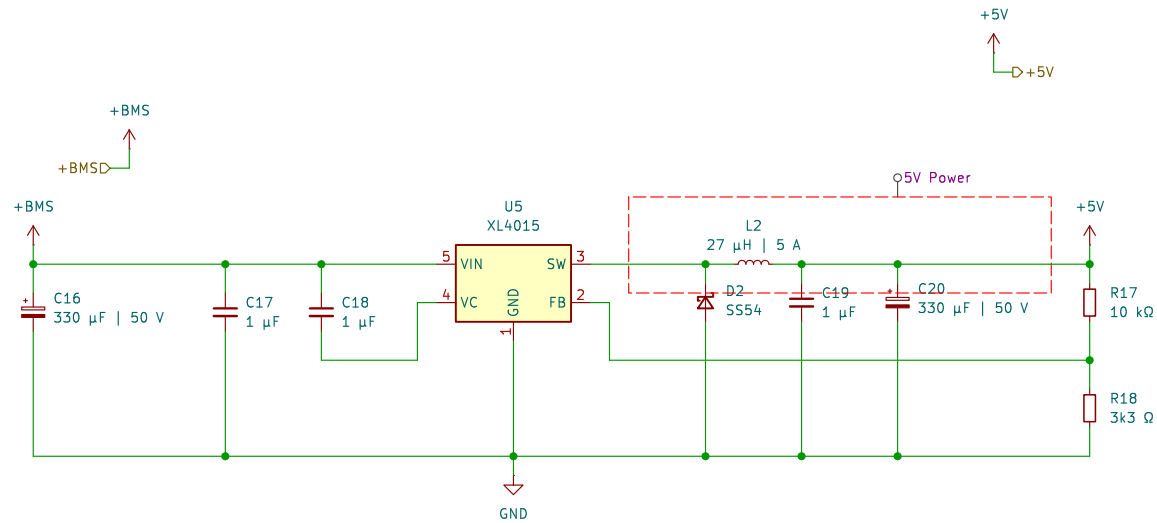
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KiCad E.D.A. 9.0.2-69-g62e1169492

**Rev:**  
Id: 8/16

Id: 15/16

Id: 16/16



Designer: Morad Tamer

**Info Hive**

Sheet: /5V DC-DC Step Down Converter/

File: 5V DC-DC Step Down Converter.kicad\_sch

**Title: 5V DC-DC Step Down Converter**

Size: A4

Date: 2025-05-01

**Rev: C1**

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Id: 7/16