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File: DIB_EEP

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File: DAC_Vre

11/11/2019

File: Power_p

File: Bias_po

Page 10

File: Post-r

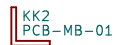
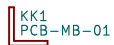
Page 10 of 10

File: Rsense_

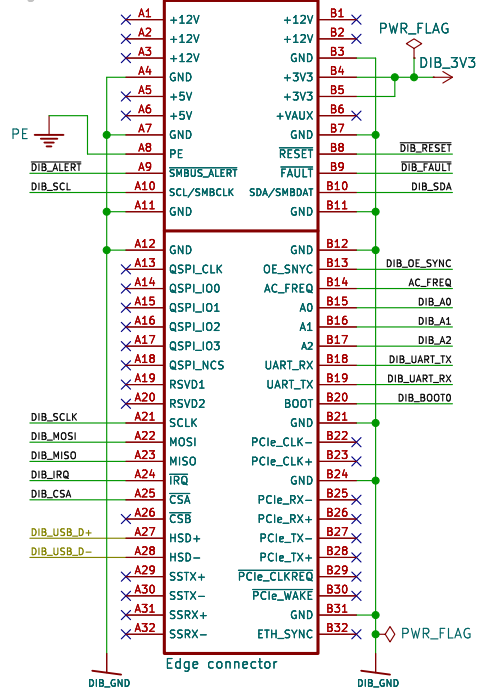
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File: CC_CV_0

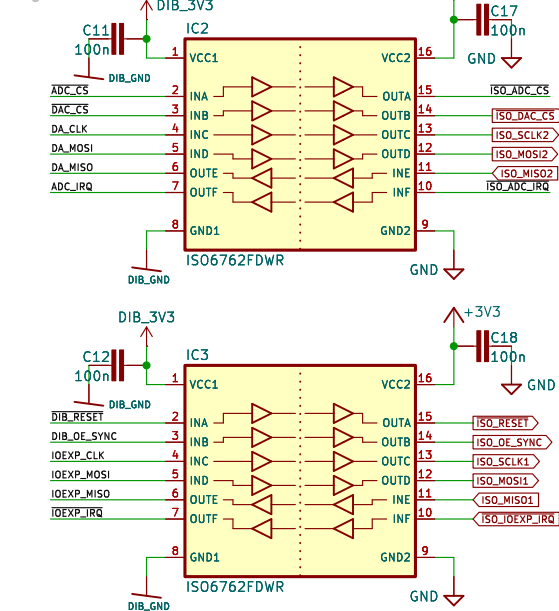
Id: 1/8



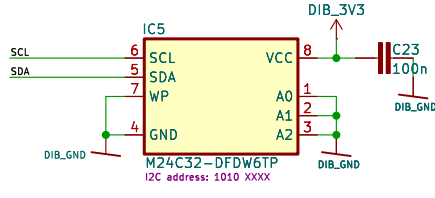
DIB signal connector X1



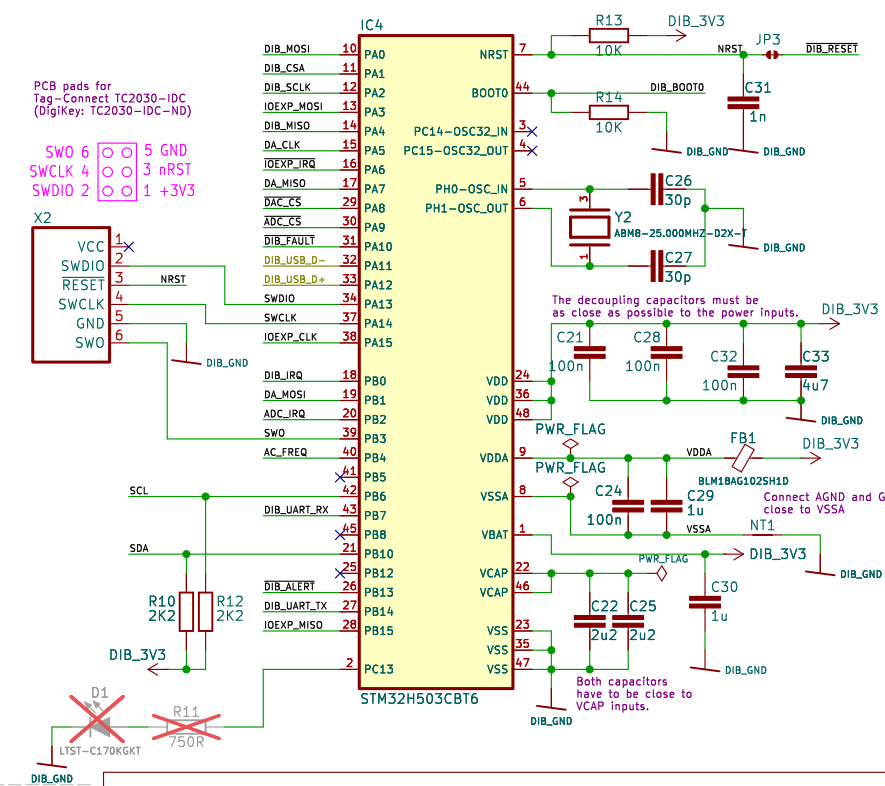
Digital isolators



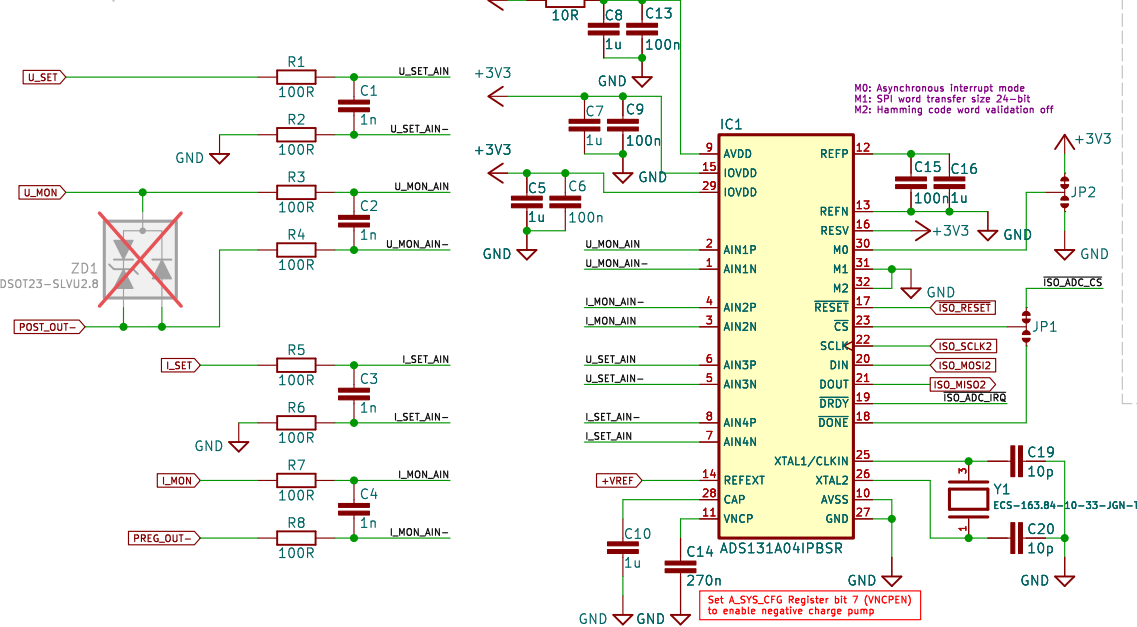
I2C Module ID EEPROM



32-bit MCU



ADC with input RC filters

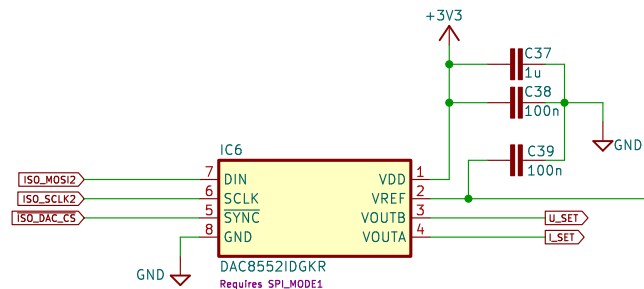


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Sheet: /DIB isolators, EEPROM, ADC, MCU/
File: DIB_EEPROM_ADC_MCU.kicad_sch

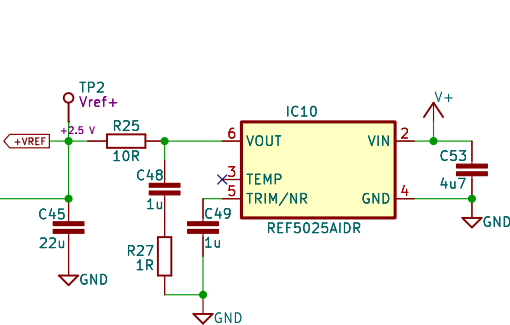
Title: EEZ DIB DCP405+ power module

Size: A4	Date: 2025-12-07
KiCad E.D.A. 9.0.6	Rev: r4B4
	Id: 2/8

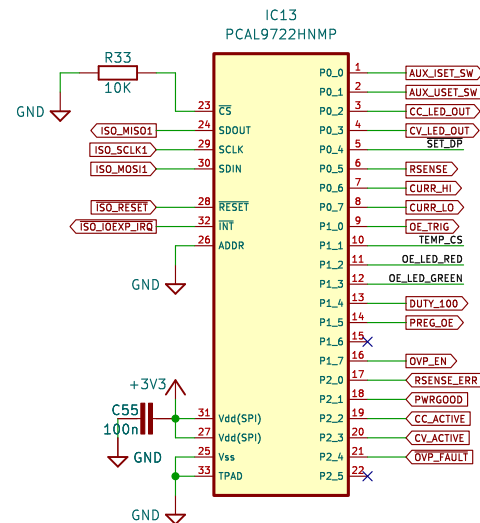
16-bit DAC (set voltage and current)



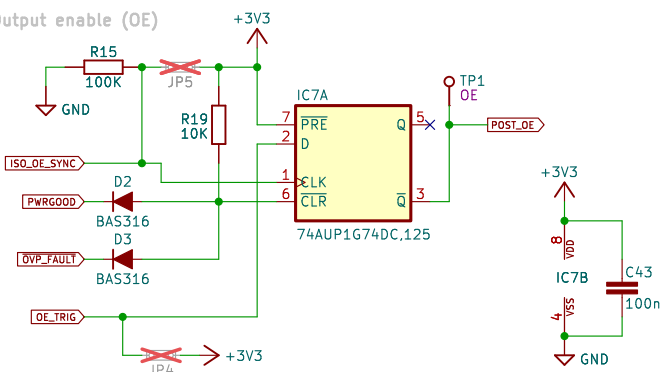
Voltage reference



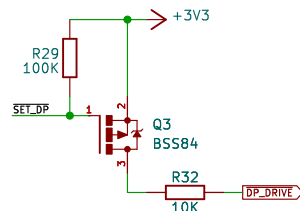
SPI 22-bit I/O Expander



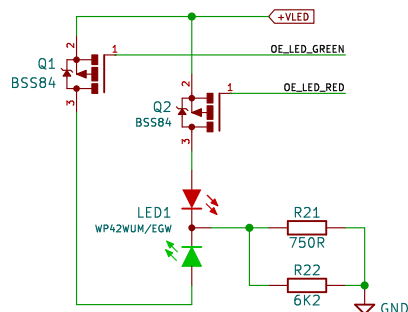
Output enable (OE)



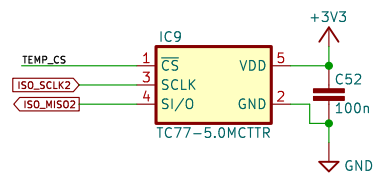
Down-programmer



OE indicator



SPI Temperature sensor



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Sheet: /DAC, OE, Vref, IOEXP, Temp/

File: DAC_Vref_IOEXP_Temp.kicad_sch

Title: EEZ DIB DCP405+ power module

Size: A4

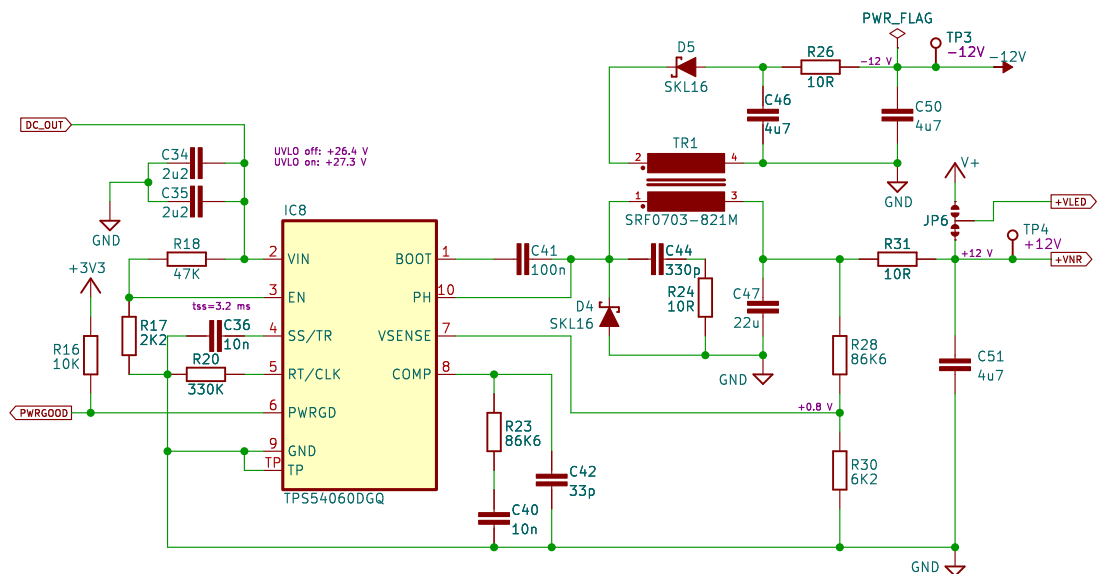
Date: 2025-12-07

Rev: r4B4

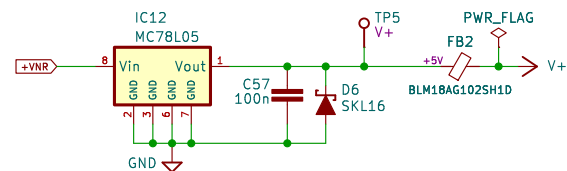
KiCad E.D.A. 9.0.6

Id: 3/8

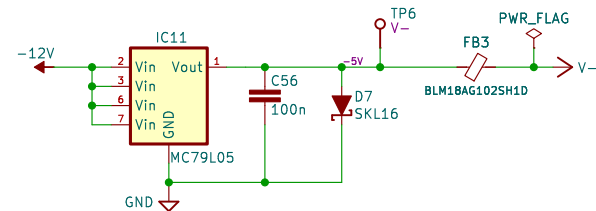
Bias power supply



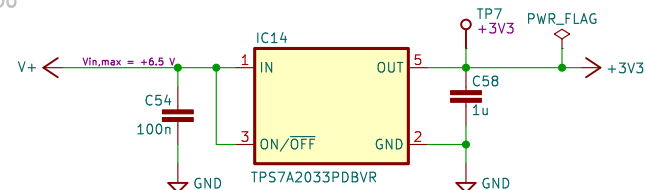
+5V LDO



-5V LDO



+3V3 LDO



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Sheet: /Bias power/

File: Bias_power.kicad_sch

Title: EEZ DIB DCP405+ power module

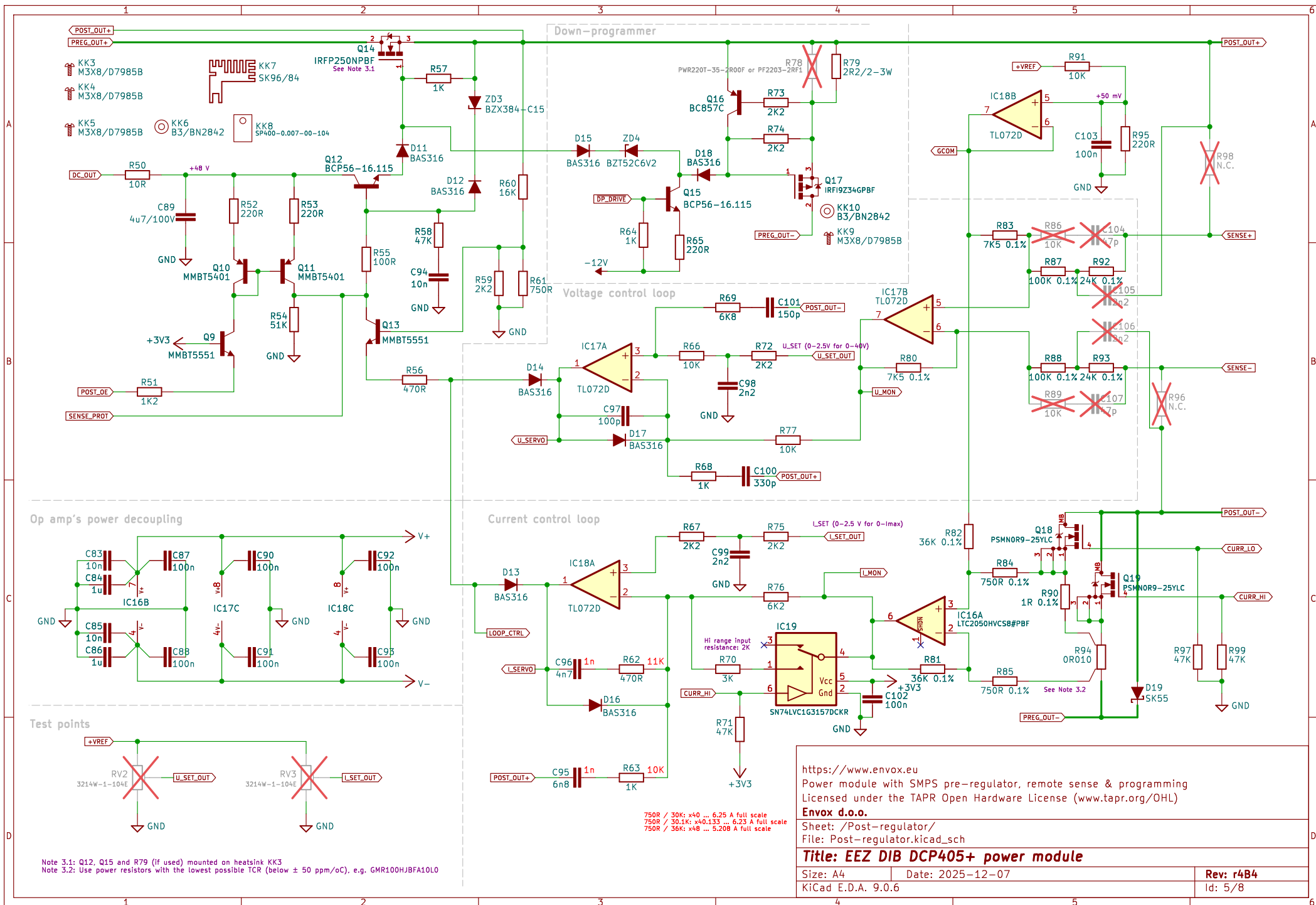
Size: A4

Date: 2025-12-07

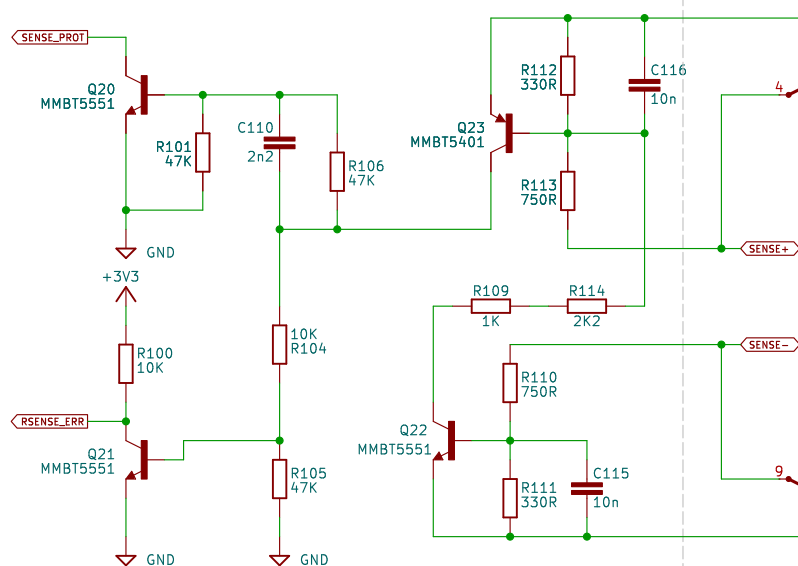
Rev: r4B4

KiCad E.D.A. 9.0.6

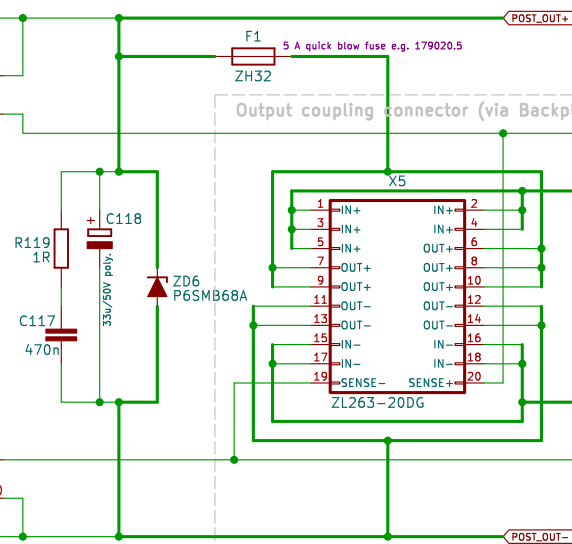
Id: 3/8



Remote sense reverse polarity detection



Power output section

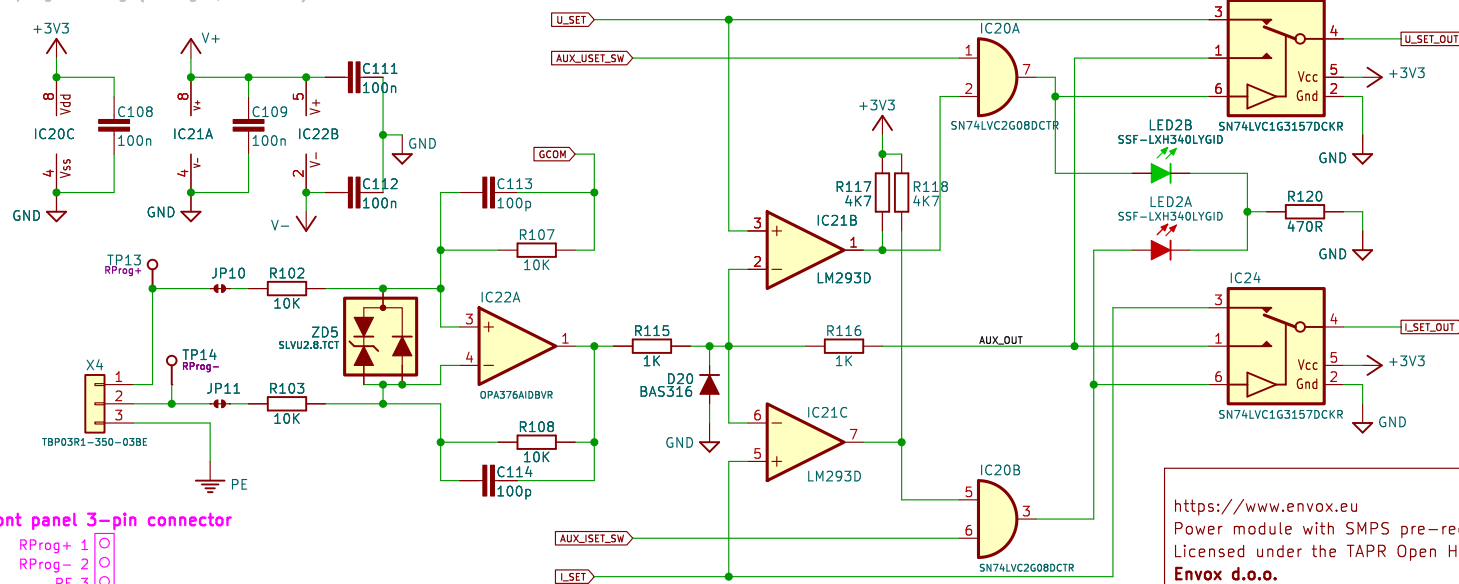


Output coupling connector (via Backplane PCB)

20-pin DIB 2.0 power socket

OUTC+ 1	2 OUTC+
OUTC+ 3	4 OUTC+
OUTC+ 5	6 POST_OUT+
POST_OUT+ 7	8 POST_OUT+
POST_OUT+ 9	10 POST_OUT+
POST_OUT+ 11	12 POST_OUT-
POST_OUT+ 13	14 POST_OUT-
POST_OUT+ 15	16 OUTC-
OUTC- 17	18 OUTC-
SENSE- 19	20 SENSE+

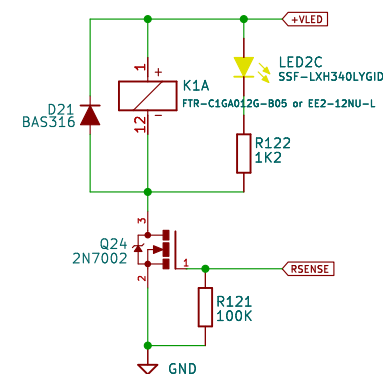
Remote programming (Voltage / Current)



Front panel 3-pin connector

RProg+ 1	2
RProg- 2	3
PE 3	4

Remote sense selection



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Sheet: /Rsense protection, power output, Rprog/

File: Rsense_protection_power_output.kicad_sch

Title: EEZ DIB DCP405+ power module

Size: A4

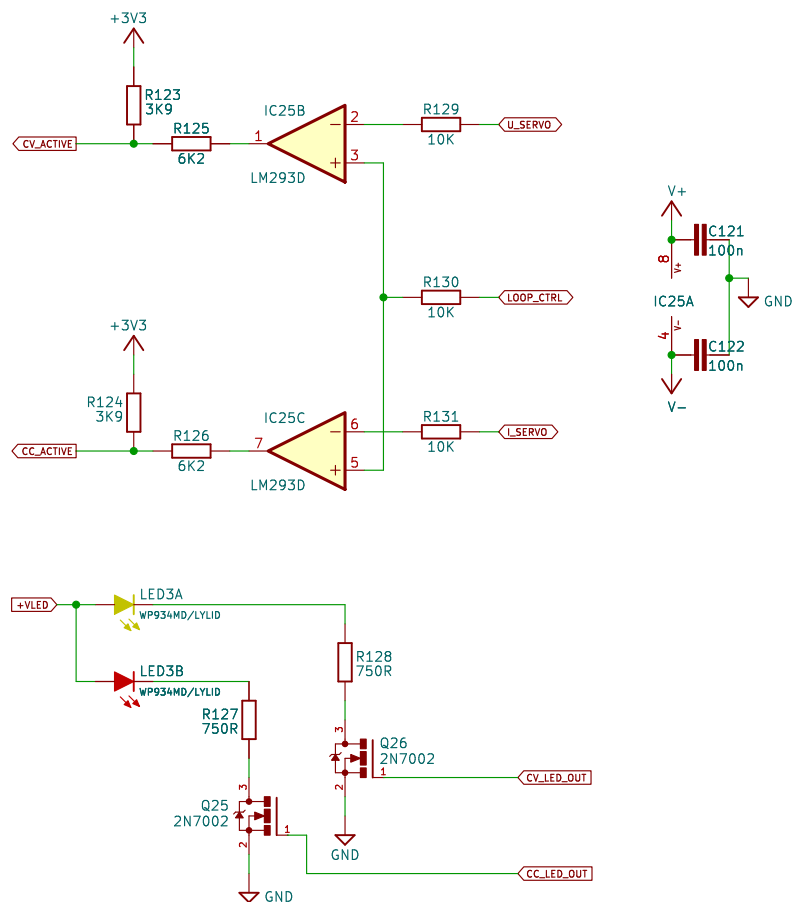
Date: 2025-12-07

KiCad E.D.A. 9.0.6

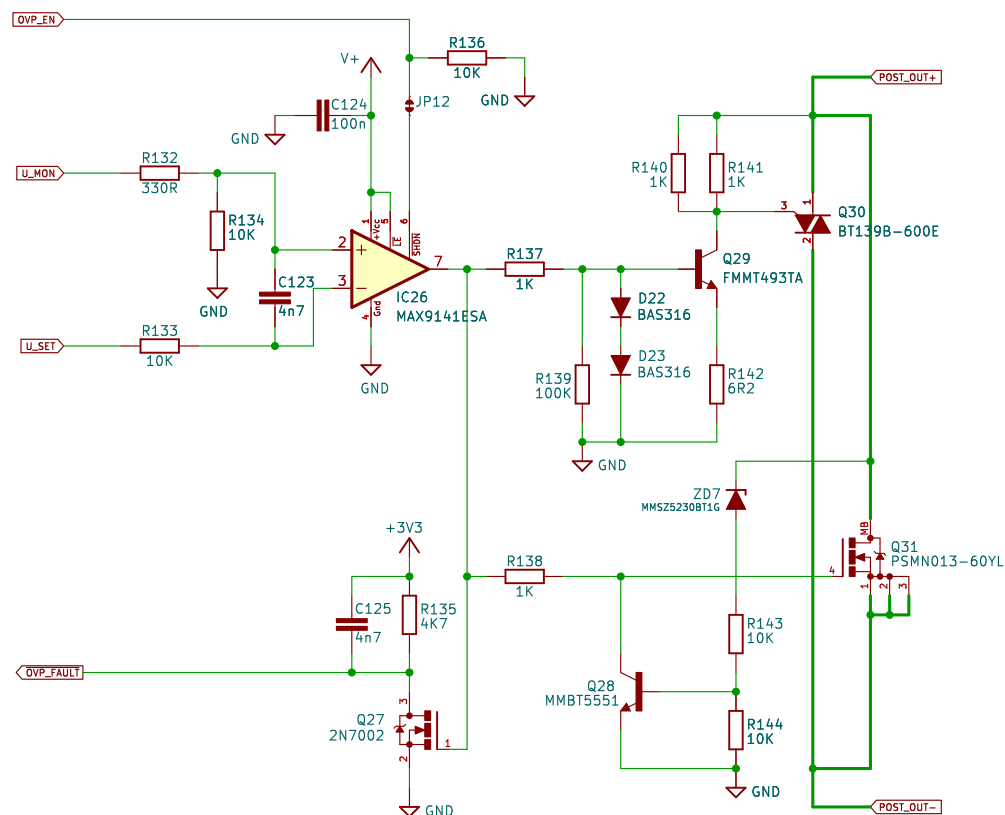
Rev: r4B4

Id: 6/8

Constant Voltage (CV) and Constant Current (CC) mode detection and indication



Over-voltage protection (OVP)



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Sheet: /Mode detection, OVP/

File: CC_CV_OVP.kicad_sch

Title: EEZ DIB DCP405+ power module

Size: A4

Date: 2025-12-07

Rev: r4B4

KiCad E.D.A. 9.0.6

Id: 7/8