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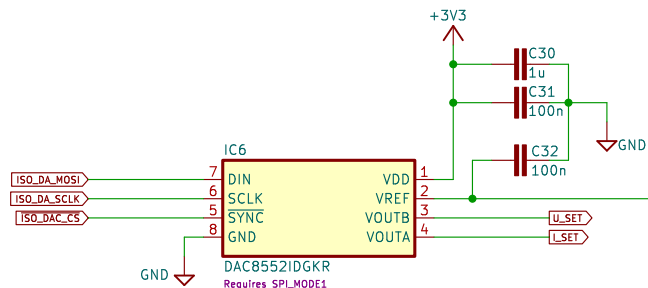
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Id: 1/8

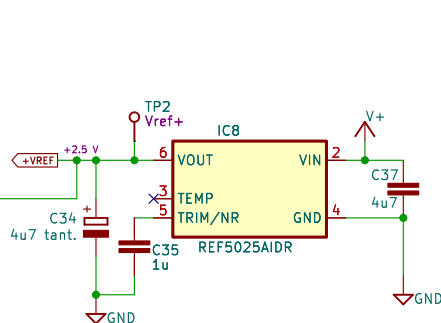




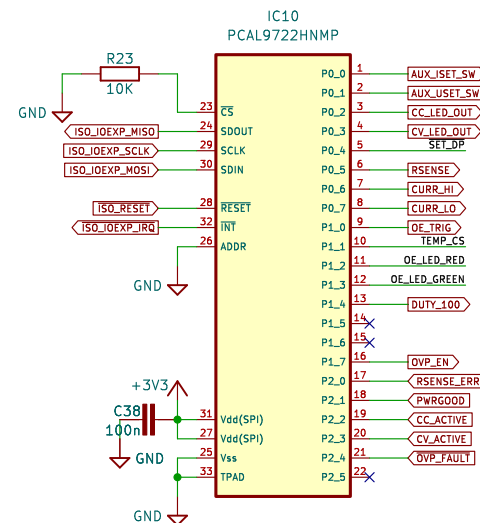
# 16-bit DAC (set voltage and current)



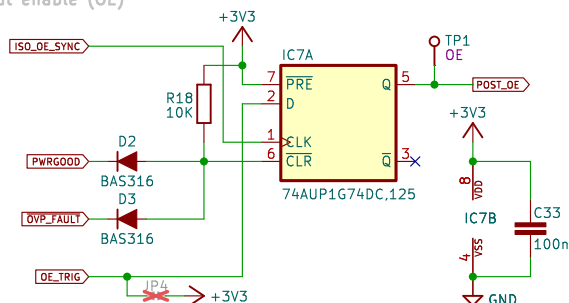
# Voltage reference



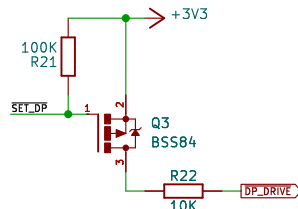
# SPI 22-bit I/O Expander



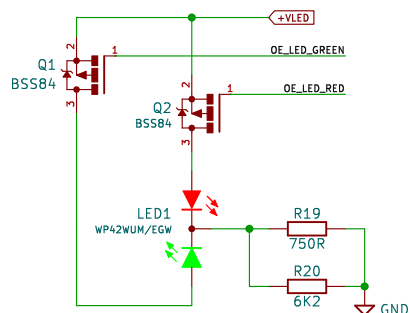
# Output enable (OE)



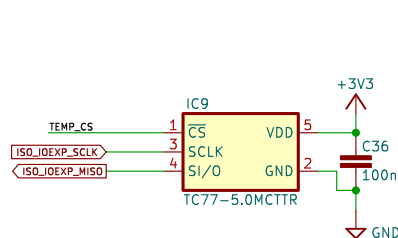
# Down-programmer



# OE indicator



# SPI Temperature sensor



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**Envox d.o.o.**

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

File: DAC\_Vref\_IOEXP\_Temp.kicad\_sch

**Title: EEZ DIB DCP405+ power module**

Size: A4

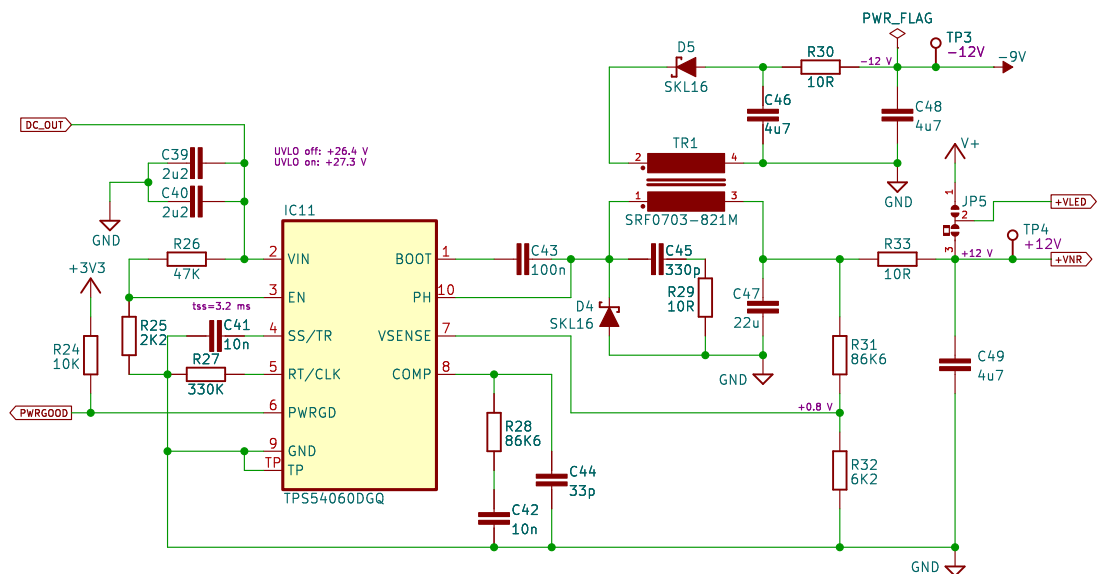
Date: 2025-10-22

Rev: r4B2

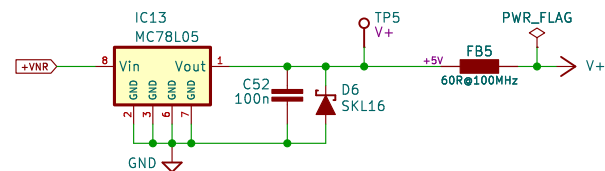
KiCad E.D.A. 9.0.5

Id: 3/8

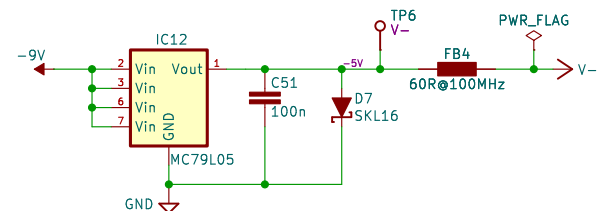
# Bias power supply



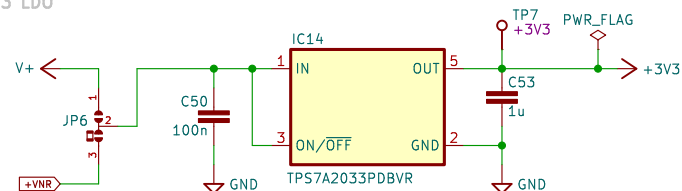
## +5V LDO



## -5V LDO



## +3V3 LDO



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**Envox d.o.o.**

Sheet: /Bias power/

File: Bias\_power.kicad\_sch

**Title: EEZ DIB DCP405+ power module**

Size: A4

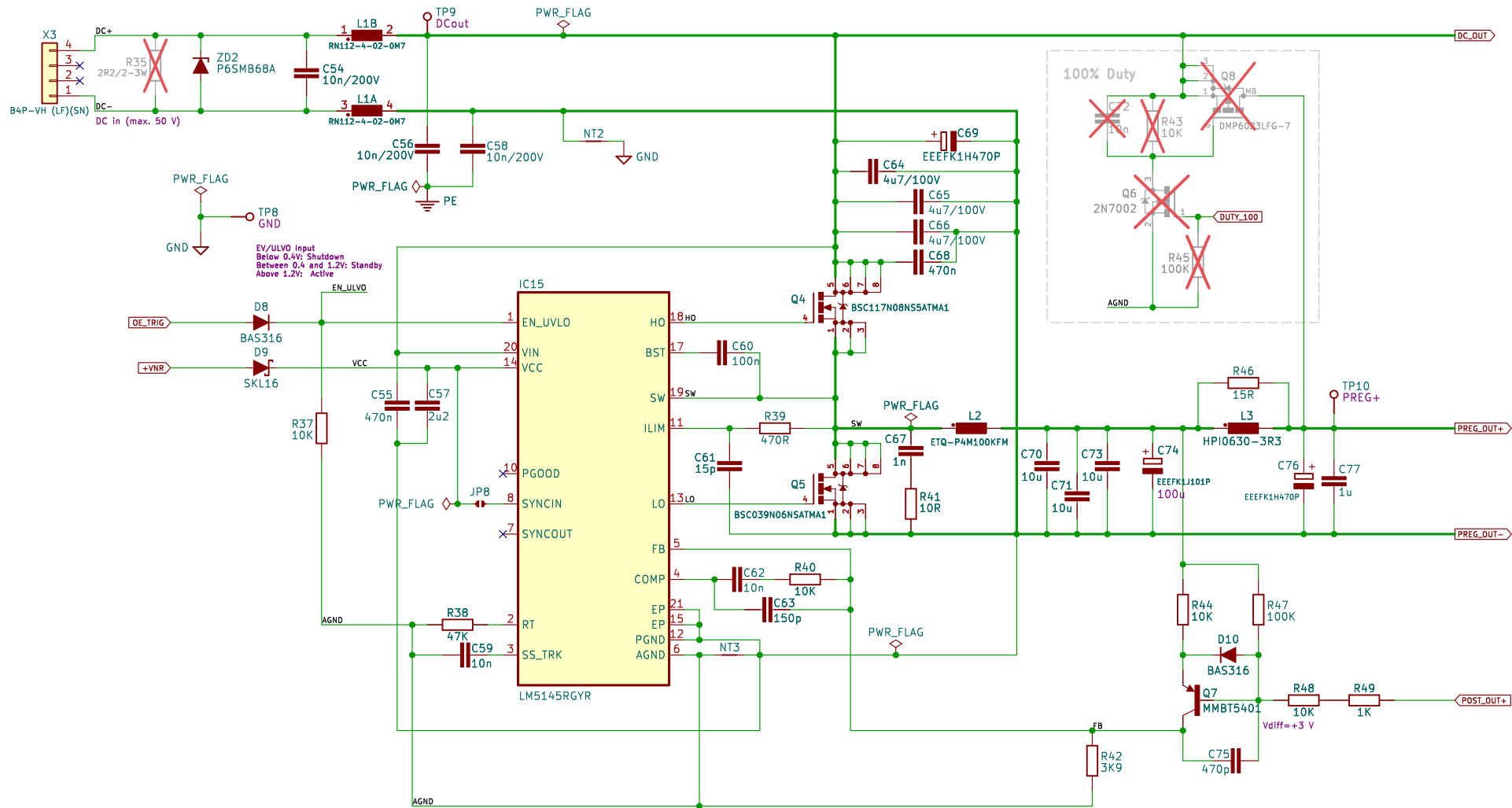
Date: 2025-10-22

Rev: r4B2

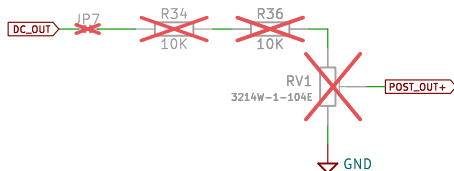
KiCad E.D.A. 9.0.5

Id: 3/8

# Low EMI power pre-regulator



## Test point



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**Envox d.o.o.**

Sheet: /Power pre-regulator/

File: Power\_pre-regulator.kicad\_sch

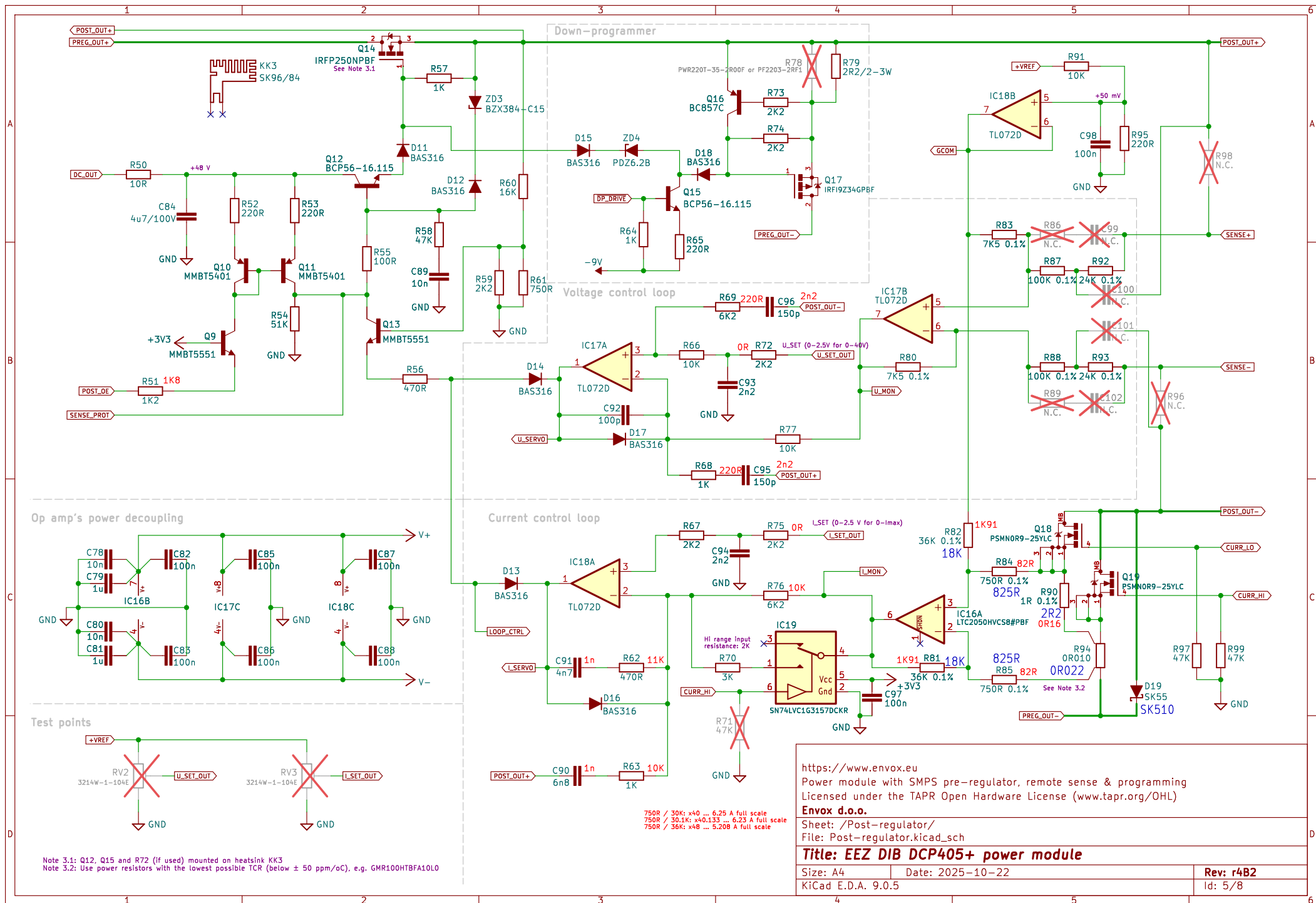
**Title: EEZ DIB DCP405+ power module**

Size: A4 Date: 2025-10-22

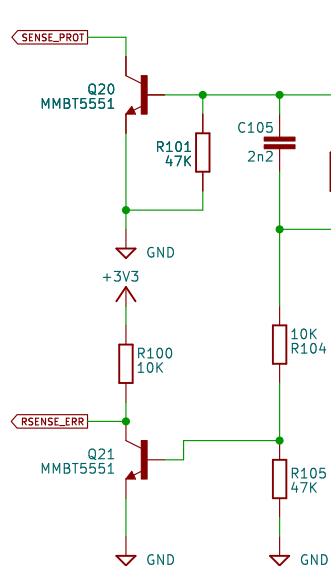
KiCad E.D.A. 9.0.5

**Rev: r4B2**

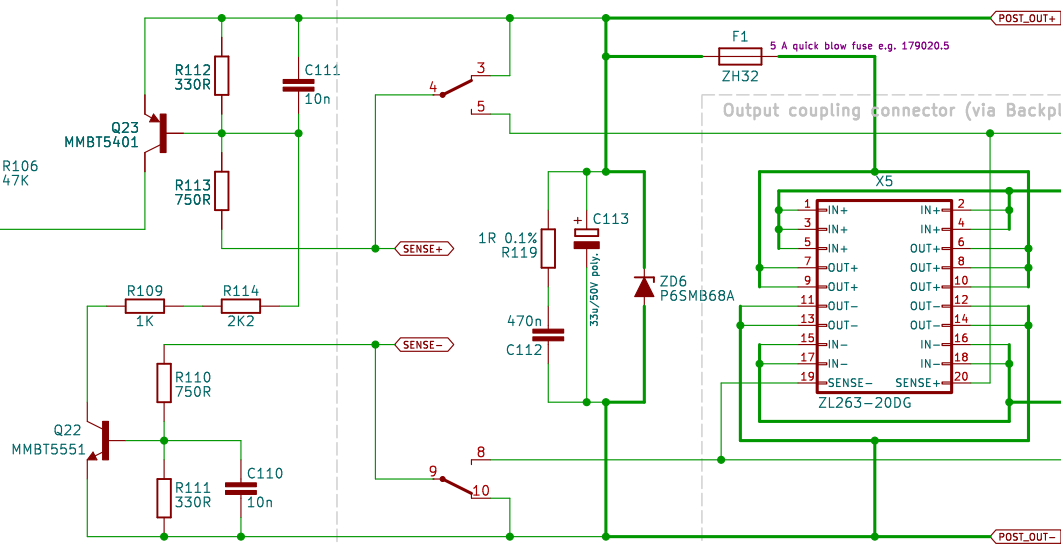
Id: 4/8



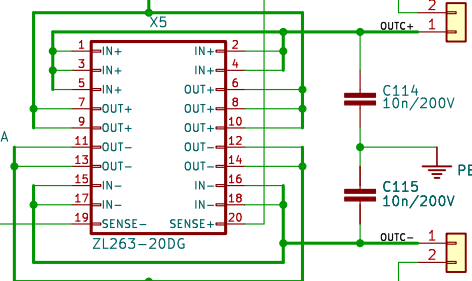
## Remote sense reverse polarity detection



## Power output section



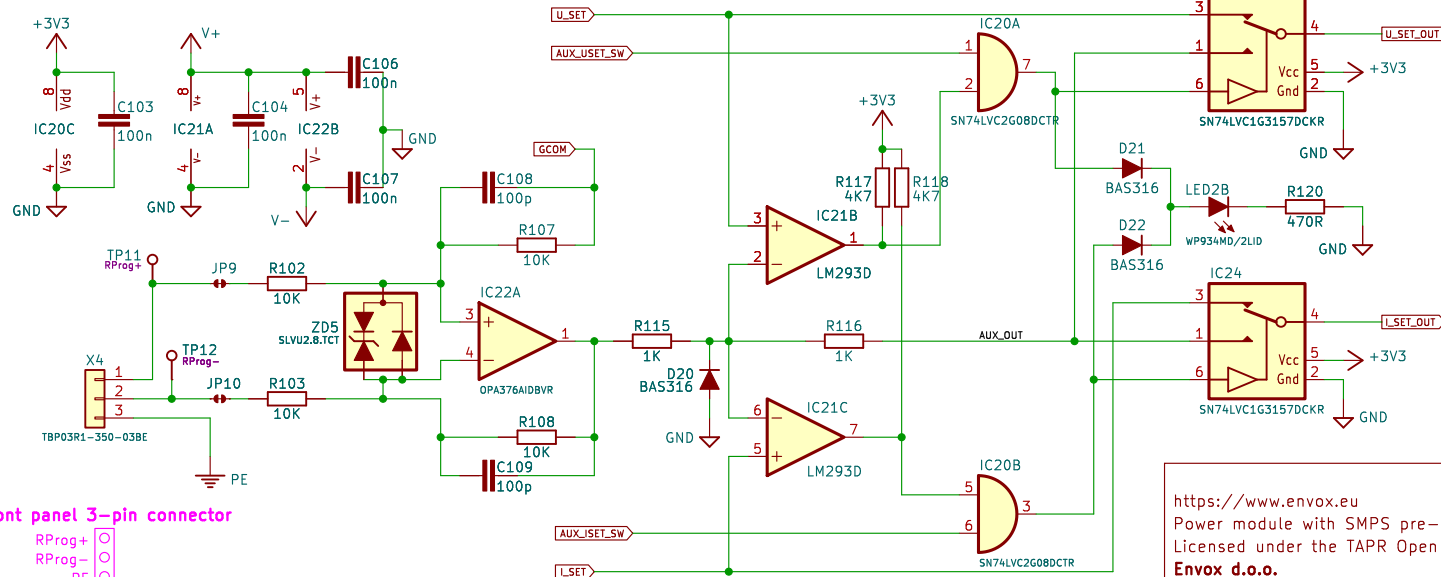
## Output coupling connector (via Backplane PCB)



## 24-pin DIB 1.3 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-
OUTC- 19	20	OUTC-
SENSE- 21	22	SENSE+
PE 23	24	PE

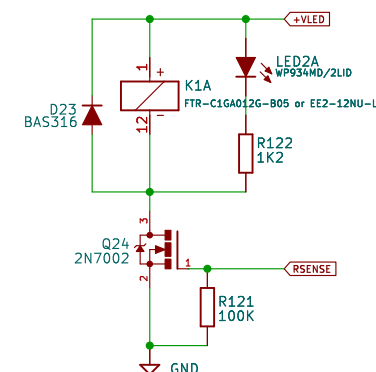
## Remote programming (Voltage / Current)



## Front panel 3-pin connector

RProg+	1
RProg-	2
PE	3

## Remote sense selection



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**Envox d.o.o.**

Sheet: /Rsense protection, power output, Rprog/

File: Rsense\_protection\_power\_output.kicad\_sch

**Title: EEZ DIB DCP405+ power module**

Size: A4

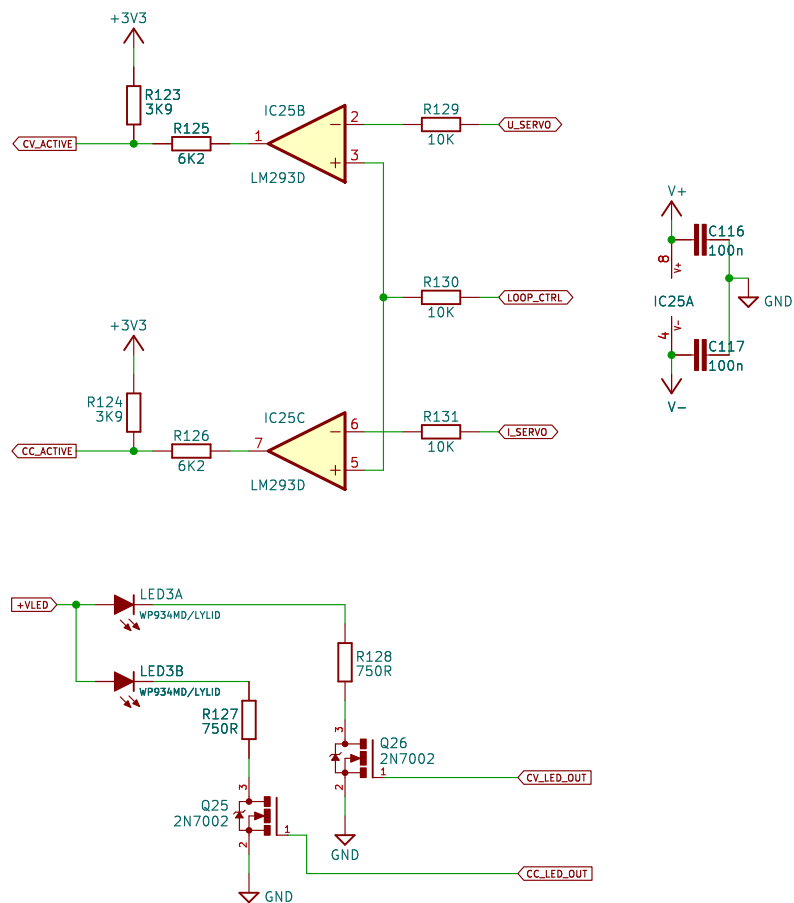
Date: 2025-10-22

KiCad E.D.A. 9.0.5

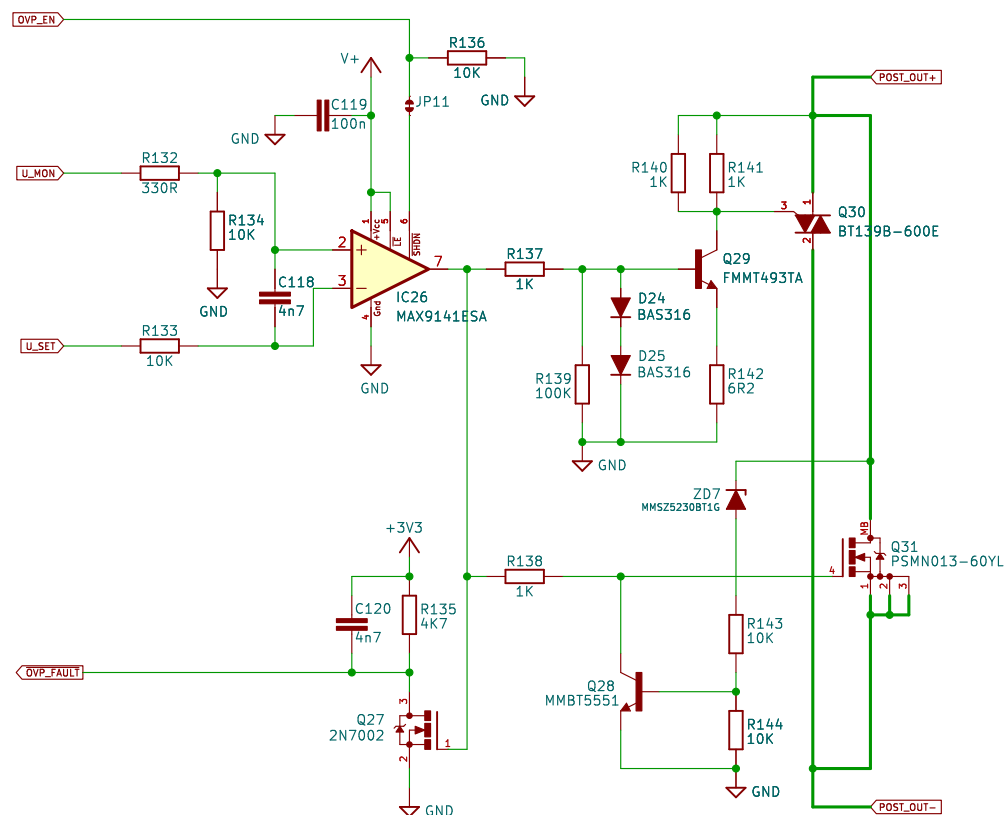
Rev: r4B2

Id: 6/8

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



# Over-voltage protection (OVP)



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**Envox d.o.o.**

Sheet: /Mode detection, OVP/

File: CC\_CV\_OVP.kicad\_sch

**Title: EEZ DIB DCP405+ power module**

Size: A4

Date: 2025-10-22

Rev: r4B2

KiCad E.D.A. 9.0.5

Id: 7/8