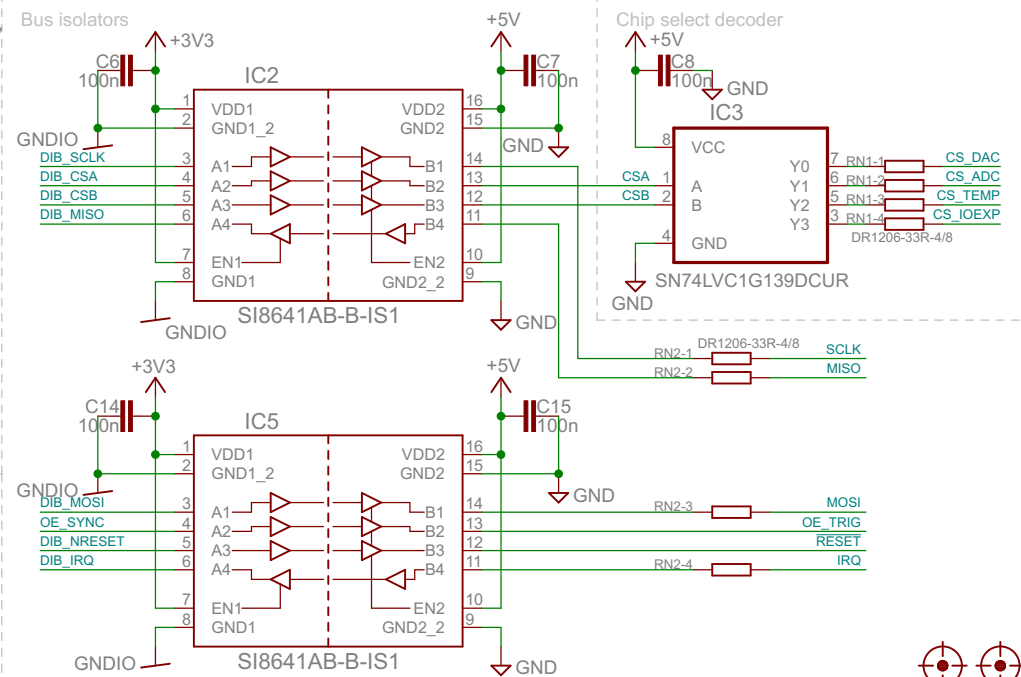


26-pin module socket

+3V3 1	2	+Vaux
NFAULT 3	4	NRESET
DIB_SCL 5	6	OE_SYNC
Gnd 7	8	DIB_SDA
DIB_CSA 9	10	DIB_IRQ
Gnd 11	12	DIB_CSB
DIB_SCLK 13	14	DIB_MISO
DIB_MOSI 15	16	Gnd
DIB_A0 17	18	DIB_A2
DIB_A1 19	20	Gnd
+12V 21	22	+12V
+5V 23	24	+5V
Gnd 25	26	Gnd



Plastic parts



LDOs, I2C EEPROM, digital isolators, CS demux, Temp sensor

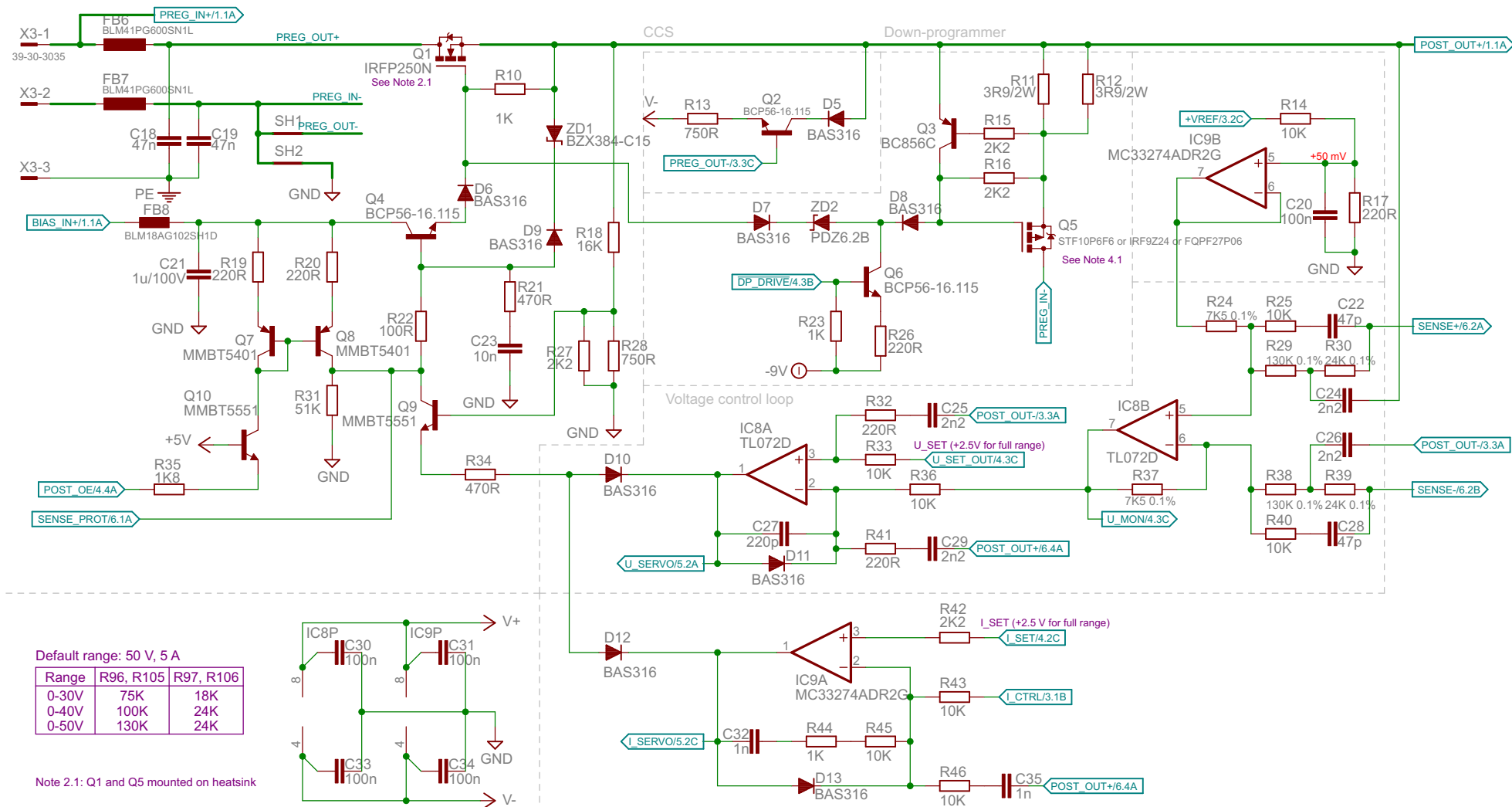
TITLE: EEZ DIB DCP505 r1B2

Document Number:

REV:

Date: 30.12.2018. 15:46

Sheet: 1/6



CV/CC control loop, Output enable
Down-programmer

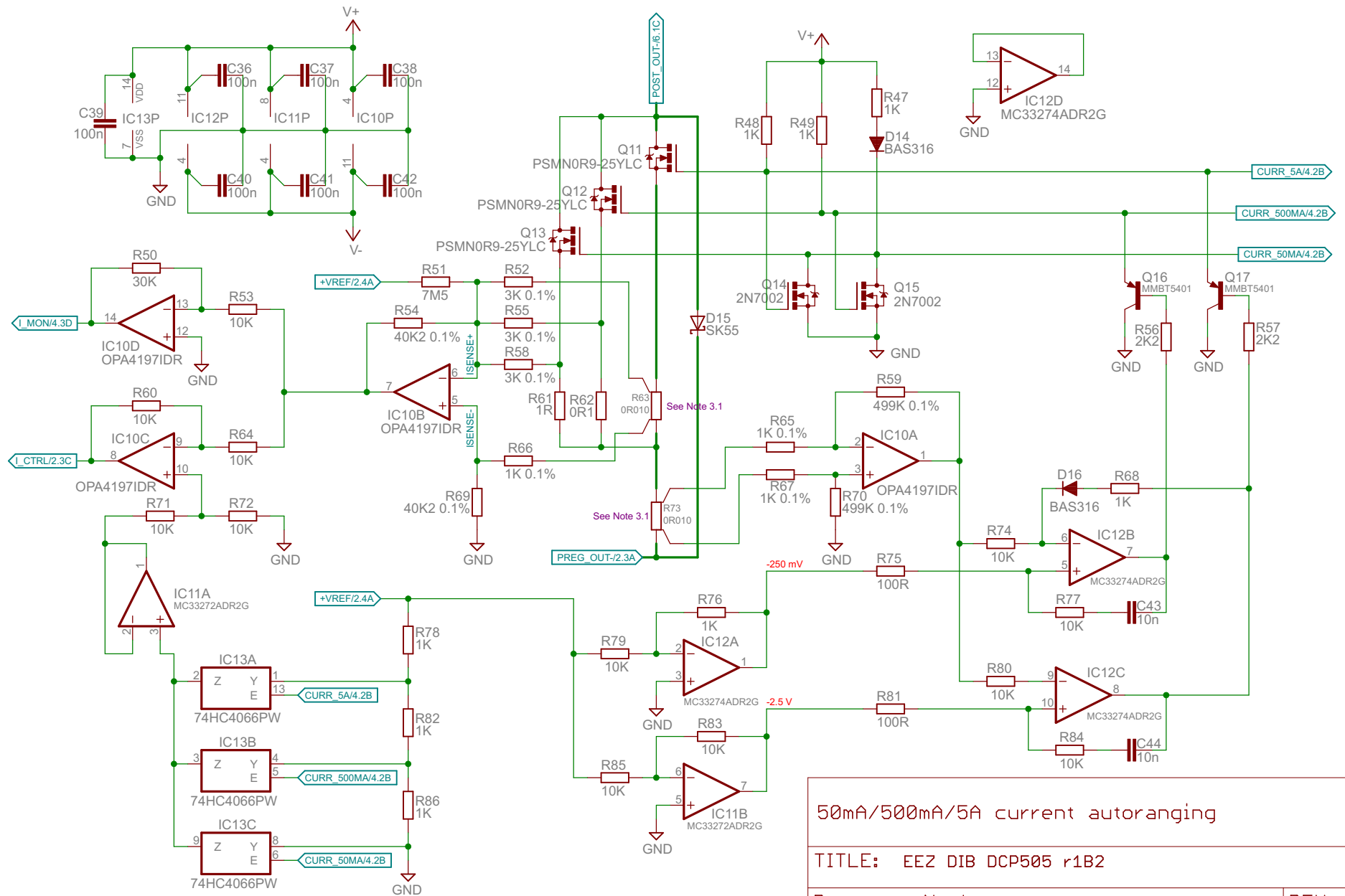
TITLE: EEZ DIB DCP505 r1B2

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REV:

Date: 30.12.2018. 15:46

Sheet: 2/6



Note 3.1: Use power resistors with the lowest possible TCR (± 50 ppm/oC or better), e.g. CRA2512-FZ-R020ELF

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 More info at <http://www.envox.hr/eez>
 Repository: <https://github.com/eez-open>

50mA/500mA/5A current autoranging

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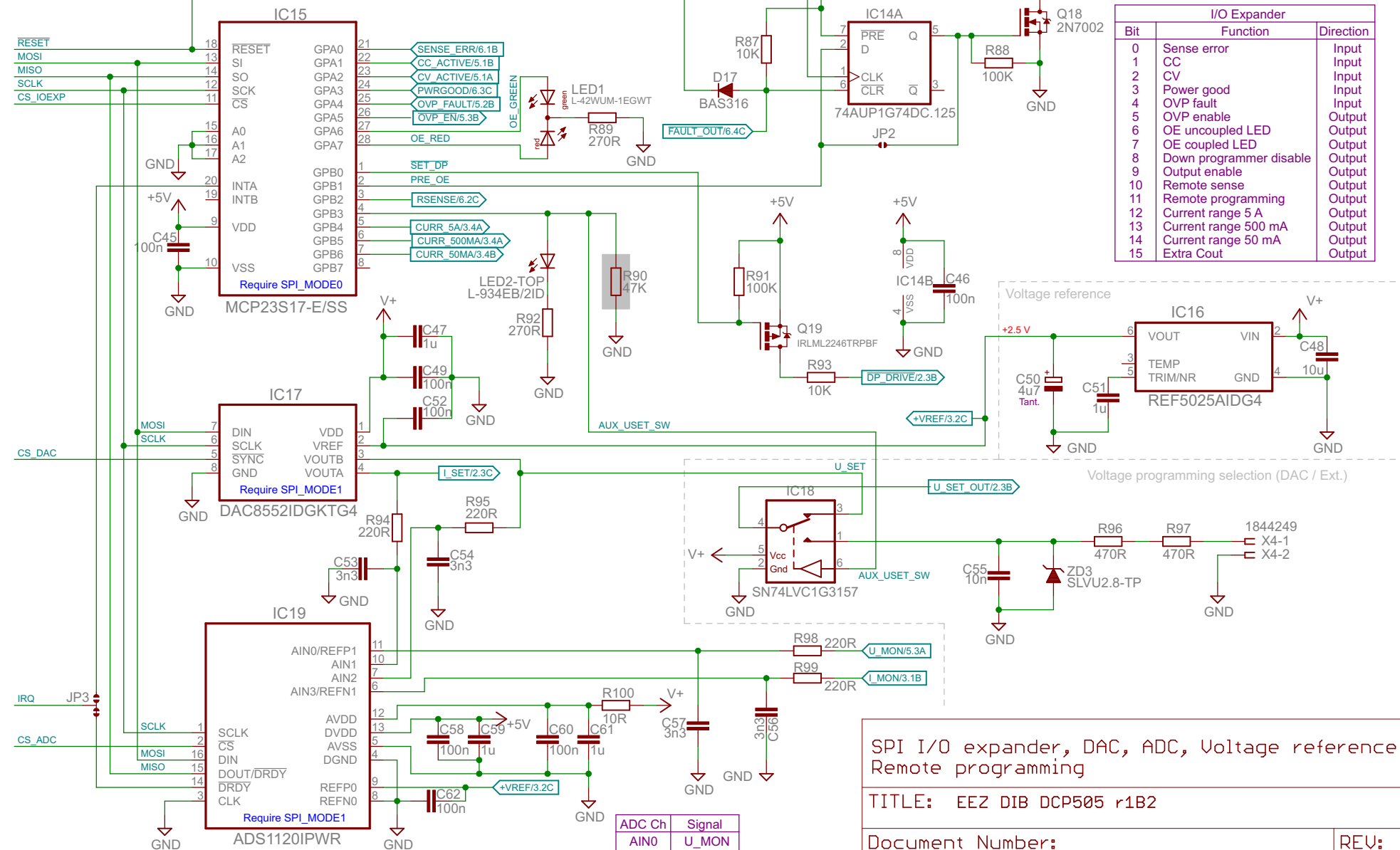
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Date: 30.12.2018. 15:46

Sheet: 3/6

Digital control (SPI)

OE_TRIG



I/O Expander		
Bit	Function	Direction
0	Sense error	Input
1	CC	Input
2	CV	Input
3	Power good	Input
4	OVP fault	Input
5	OVP enable	Output
6	OE uncoupled LED	Output
7	OE coupled LED	Output
8	Down programmer disable	Output
9	Output enable	Output
10	Remote sense	Output
11	Remote programming	Output
12	Current range 5 A	Output
13	Current range 500 mA	Output
14	Current range 50 mA	Output
15	Extra Cout	Output

SPI I/O expander, DAC, ADC, Voltage reference
Remote programming

TITLE: EEZ DIB DCP505 r1B2

Document Number:

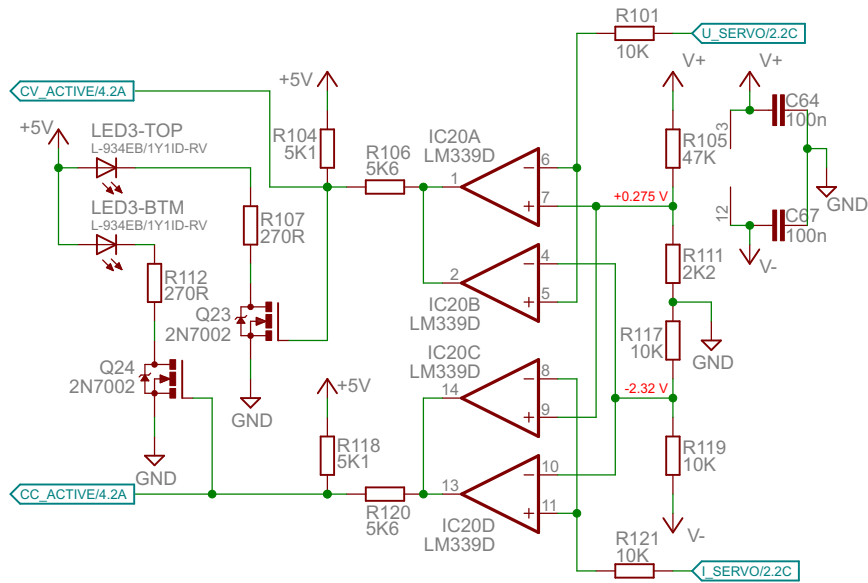
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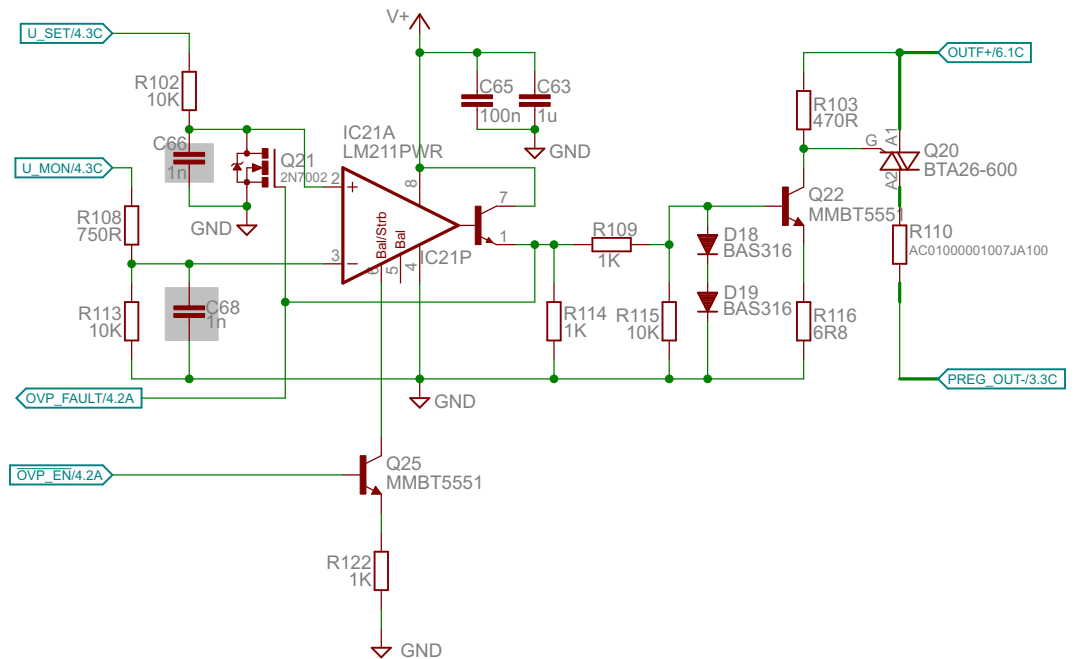
Sheet: 4/6

ADC Ch	Signal
AIN0	U_MON
AIN1	I_SET
AIN2	U_SET
AIN3	I_MON

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



Over-voltage protection (OVP)



CC/CV mode detection and indication, OVP

TITLE: EEZ DIB DCP505 r1B2

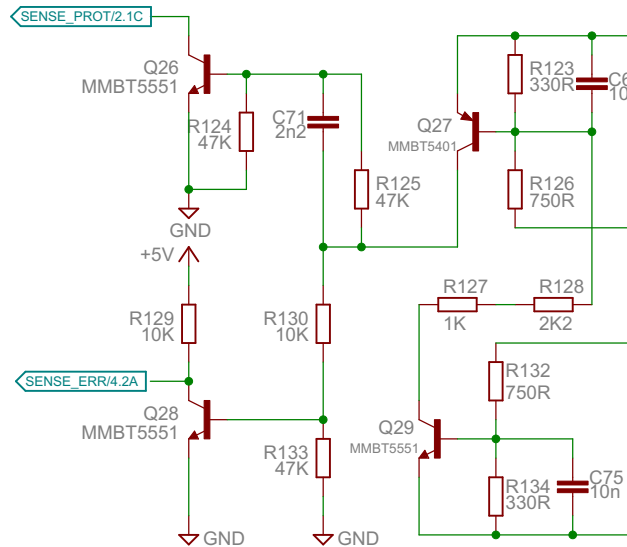
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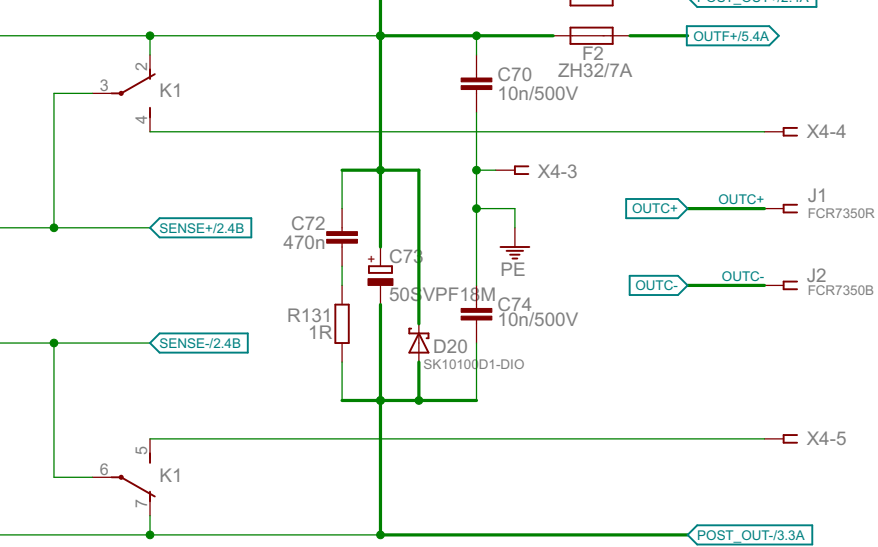
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Sheet: 5/6

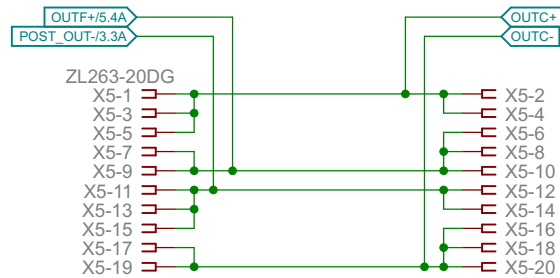
Remote sense reverse polarity detection



Power output section



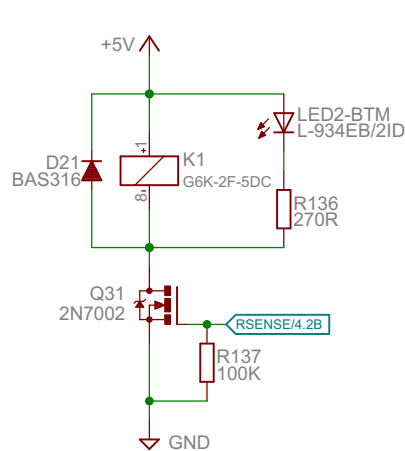
Output coupling connector (via Backplane PCB)



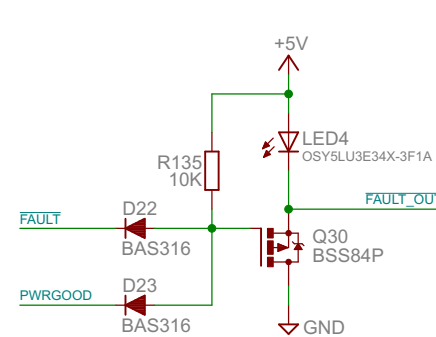
20-pin power socket

OUTC+ 1	2 OUTC+
OUTC+ 3	4 OUTC+
OUTC+ 5	6 POST_OUT+ (fused)
POST_OUT+ (fused) 7	8 POST_OUT+ (fused)
POST_OUT+ (fused) 9	10 POST_OUT+ (fused)
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-

Remote sense selection



Fault indicator (optional)



Rsense polarity protection, Extra Cout switch
Output coupling, Rsense relay, Fault LED

TITLE: EEZ DIB DCP505 r1B2

Document Number:

REV:

Date: 30.12.2018. 15:46

Sheet: 6/6