

controller+DAC

16 bit DAC
Vref = 3.0 V 0.5 %
1/N ≈ 46 μV
3 A ∞ 0xFFFF

DAC1D	DAC1
CUR1C	CUR1
DIR1D	DIR1
ES1C	ES1
SPAN1C	SPAN1
DAC2D	DAC2
CUR2C	CUR2
DIR2D	DIR2
ES2C	ES2
SPAN2C	SPAN2
DAC3D	DAC3
CUR3C	CUR3
DIR3D	DIR3
ES3C	ES3
SPAN3C	SPAN3
A_SPANC	A_SPAN

File: control.kicad_sch

Power amplifier 1

DIR1	DIR1
DAC1	DAC1
CUR1	CUR1
ES1	ES1
SPAN1	QTO_SPAN

File: power1.kicad_sch

Power amplifier 2

DIR2	DIR2
DAC2	DAC2
CUR2	CUR2
ES2	ES2
SPAN2	QTO_SPAN

File: power2.kicad_sch

Power amplifier 3

DIR3	DIR3
DAC3	DAC3
CUR3	CUR3
ES3	ES3
SPAN3	QTO_SPAN

File: power3.kicad_sch

Power grid

A_SPAND A_SPAN

File: power_grid.kicad_sch

Kasli interface

File: kasli_interface.kicad_sch

digitalInputs

File: digitalInputs.kicad_sch

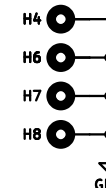
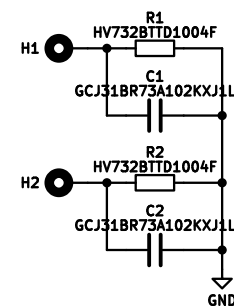
J4_1	+15V	1
J4_2	GNDPWR	2
J4_3	I1+	3
J4_4	I1-	4
J4_5	I2+	5
J4_6	I2-	6
J4_7	I3+	7
J4_8	I3-	8

MSTBA2.5/8-G-5.08 1757307

J1

HS1
Chłodnica miedziana by Janusz

GNDPWR



- FID1 Fiducial
- FID2 Fiducial
- FID3 Fiducial



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Sheet: /
File: current3x3A_Artiq.kicad_sch

Title: Compensation coils driver 3x3A for Kasli system

Size: A4 Date: 2023-11-17

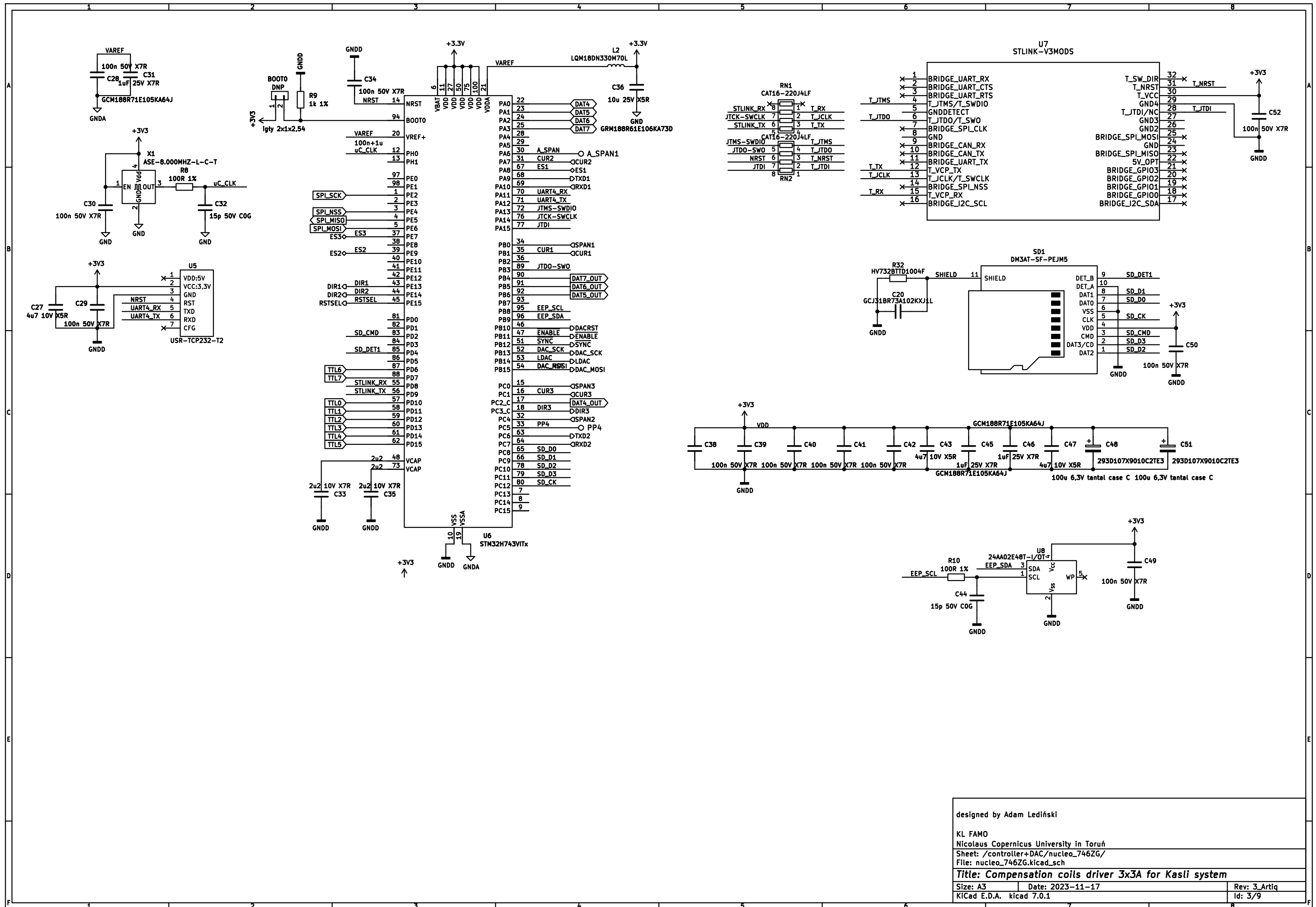
KiCad E.D.A. kicad 7.0.1

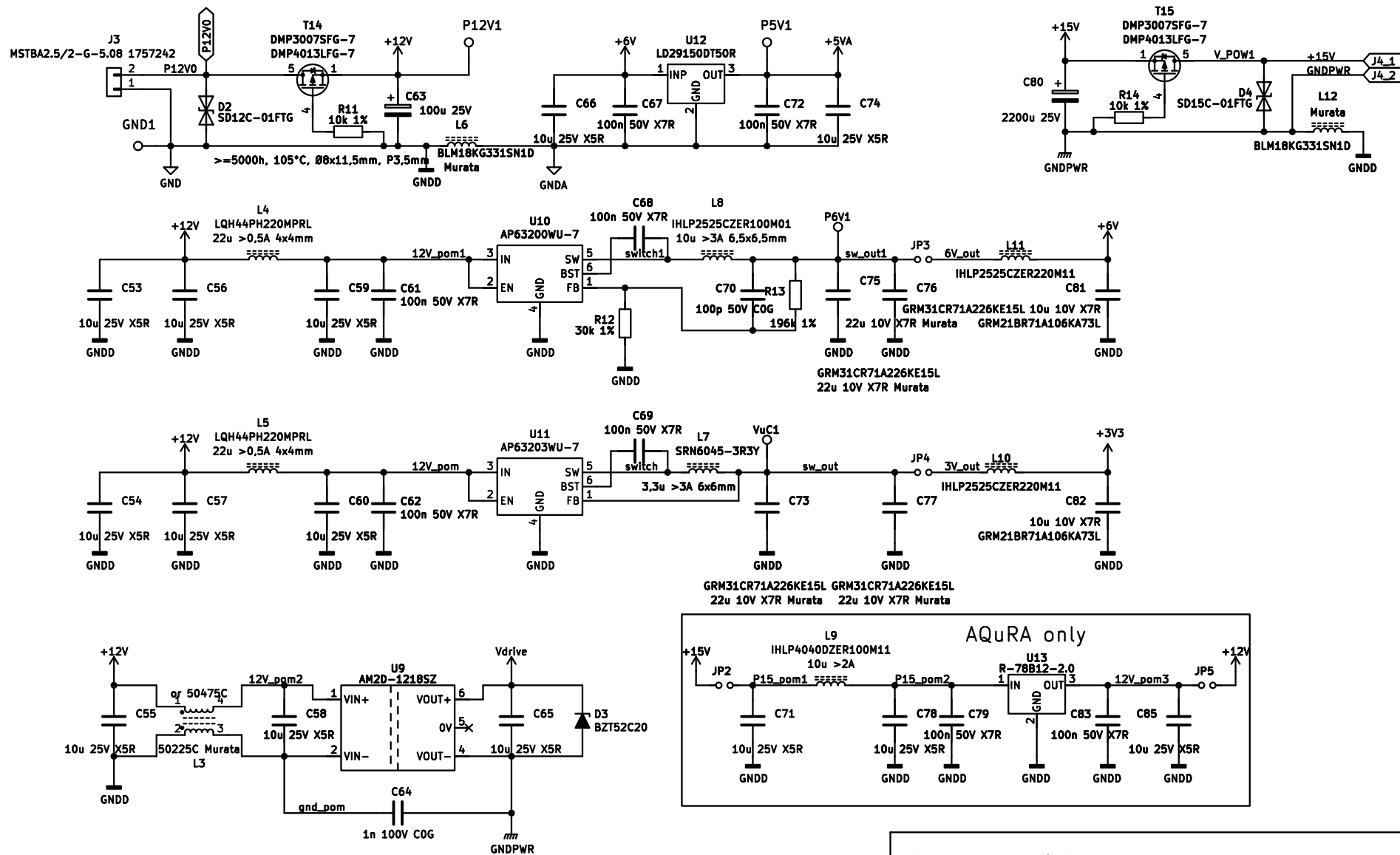
Rev: 3_Artiq

Id: 1/9

Mount with: M3X10/D7985-A2 - 2pcs, K3.2/D125-A2 - 2pcs, K3/D127-A2 - 2 pcs, Bossard 1405322 - 4pcs.







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Sheet: /Power grid/

File: power_grid.kicad_sch

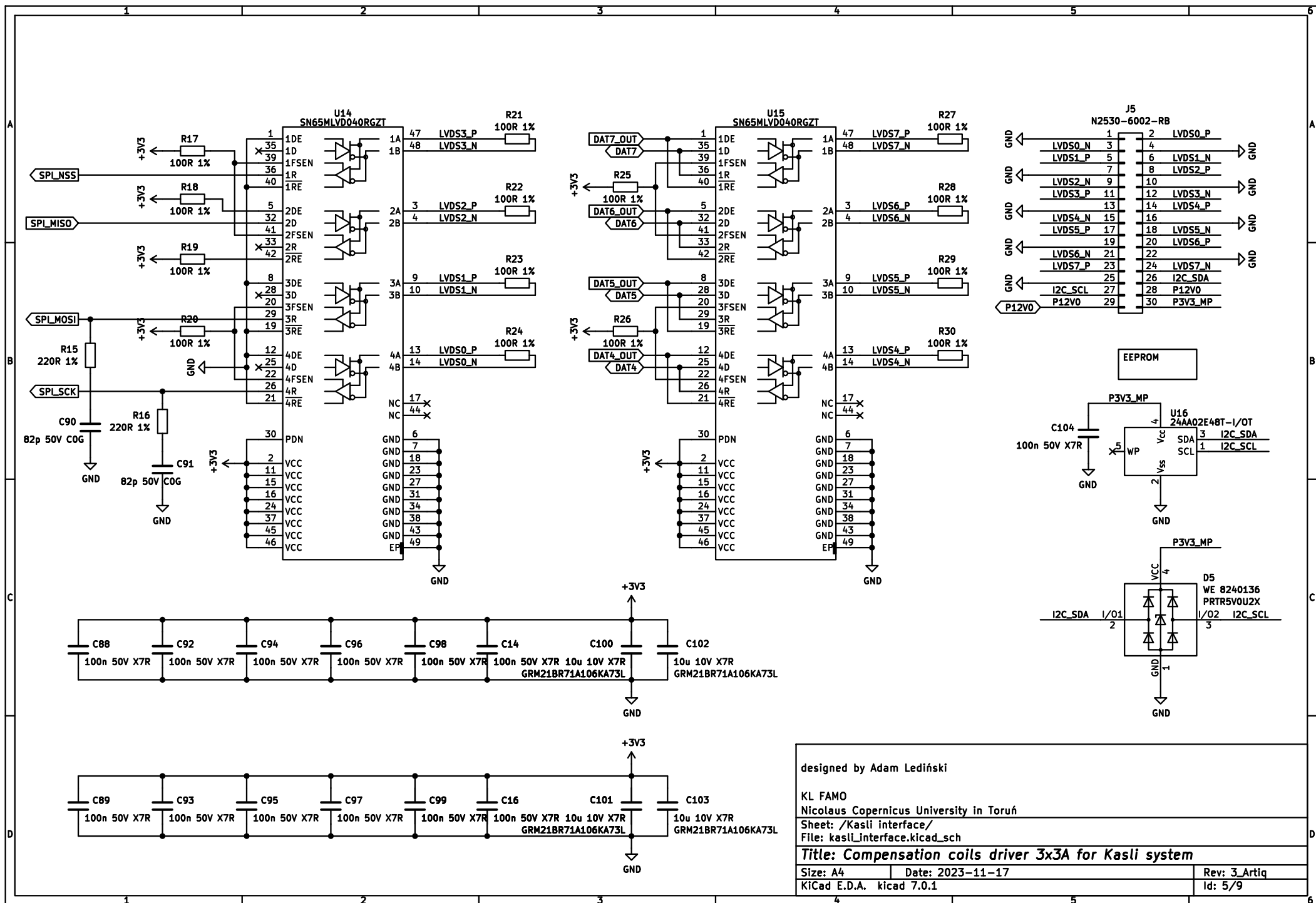
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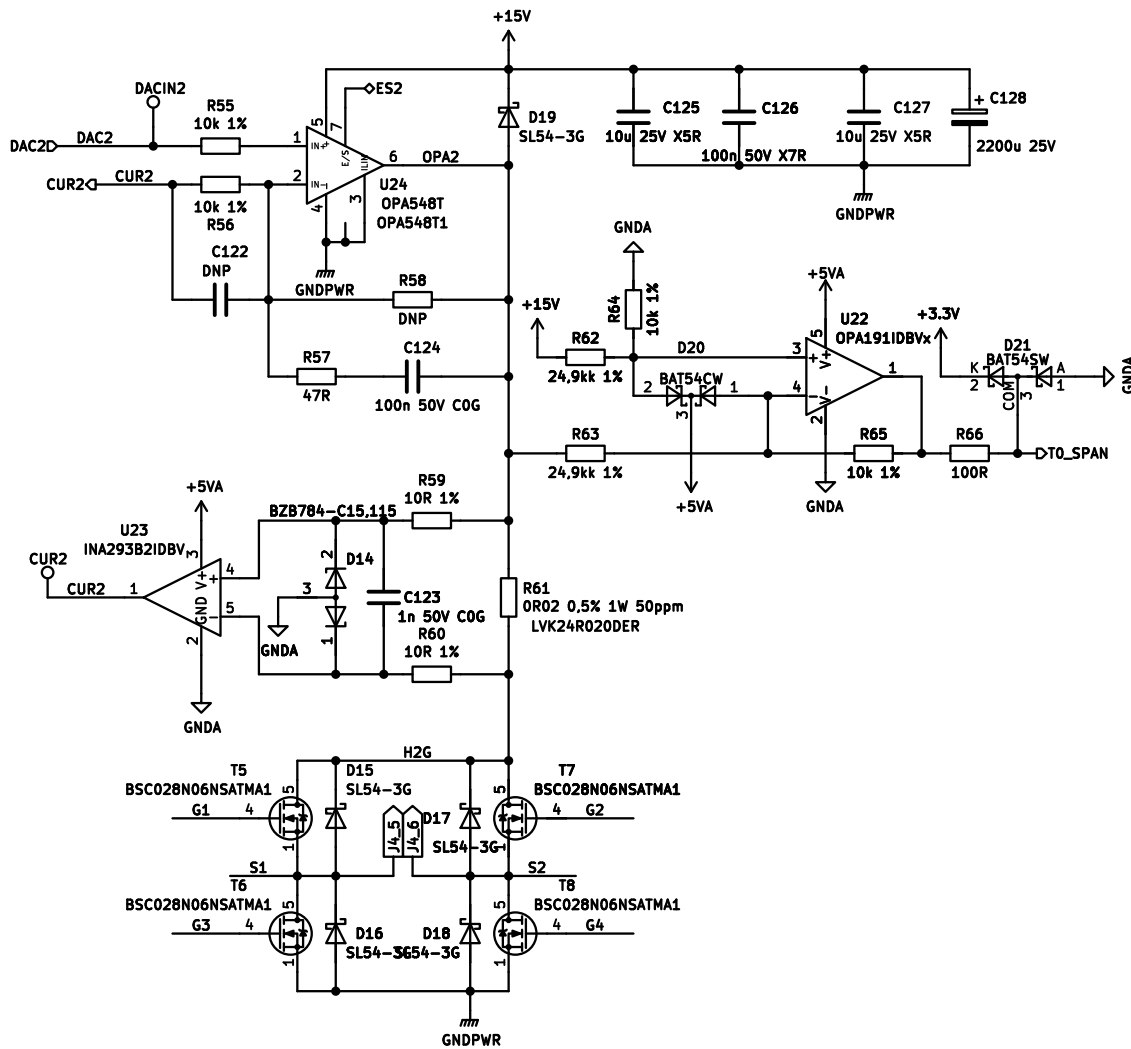
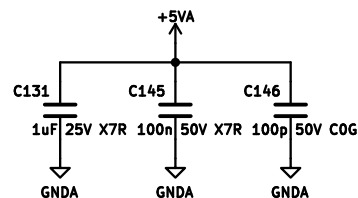
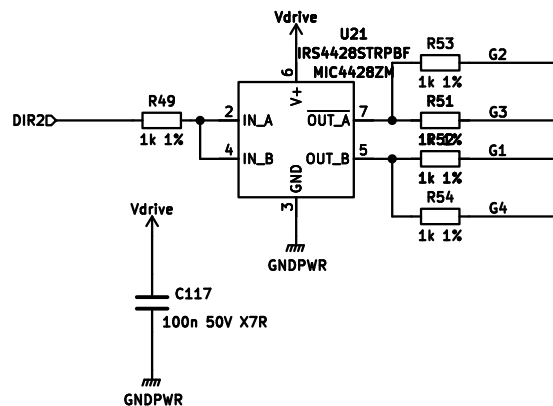
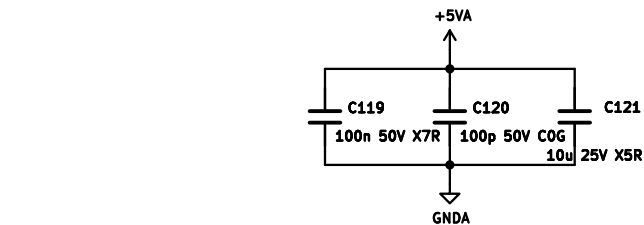
Size: A4 Date: 2023-11-17

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Rev: 3_Artiq

Id: 4/9





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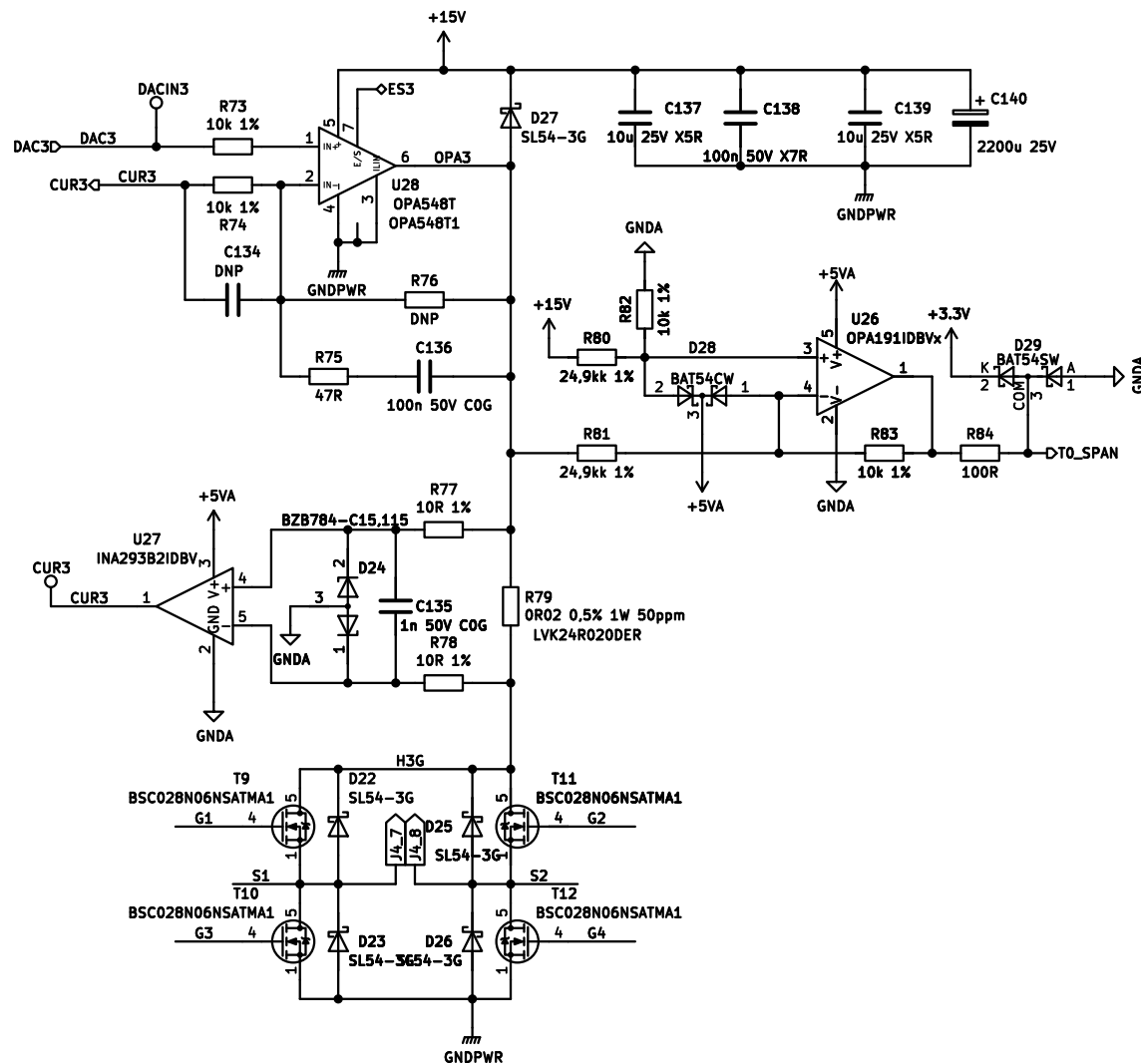
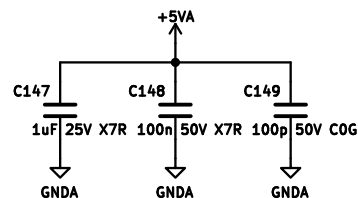
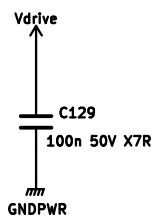
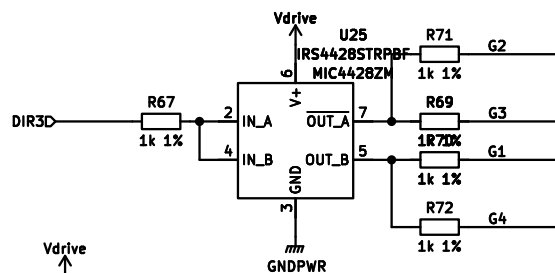
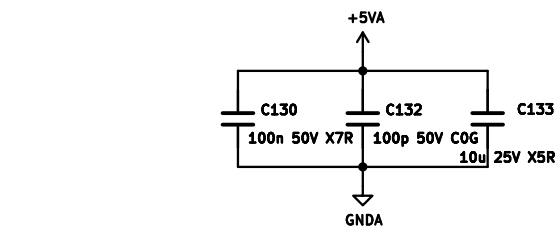
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File: power2.kicad_sch

Title: Compensation coils driver 3x3A for Kasli system

Size: A4 Date: 2023-11-17

KICad E.D.A. kicad 7.0.1

Rev: 3_Artiq
Id: 7/9



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Sheet: /Power amplifier 3/
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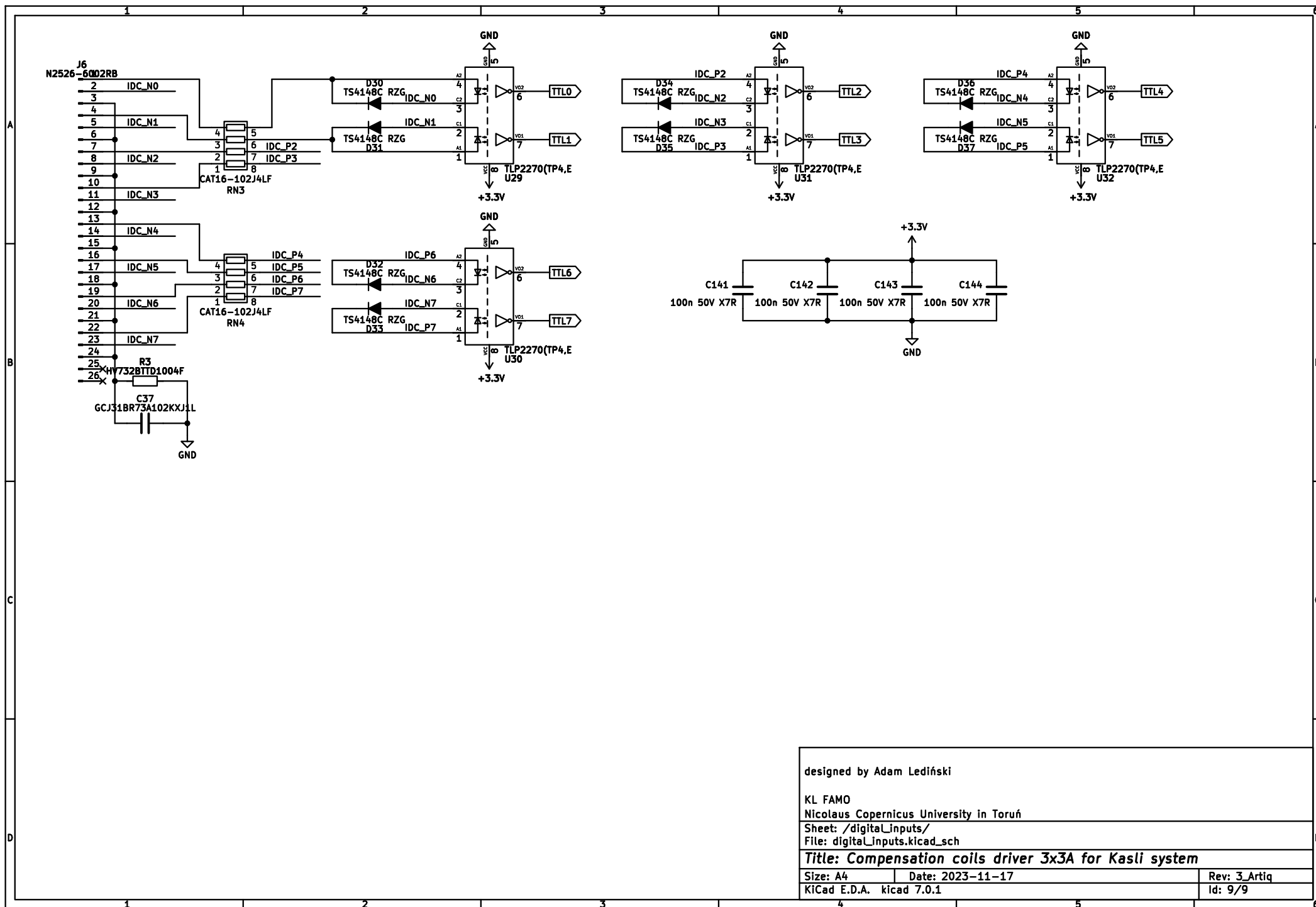
Title: Compensation coils driver 3x3A for Kasli system

Size: A4 Date: 2023-11-17

KICad E.D.A. kicad 7.0.1

Rev: 3_Artiq

Id: 8/9



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Sheet: /digital_inputs/
File: digital_inputs.kicad_sch

Title: Compensation coils driver 3x3A for Kasli system

Size: A4 Date: 2023-11-17

KiCad E.D.A. kicad 7.0.1

Rev: 3_Artiq

Id: 9/9