

Schaltplan für Oszilloskop  
Semesterarbeit MT2 SS 2020  
Jügen Markl, 3187441

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Date:

**Rev:**  
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# Attenuation-Netzwerk

K1

SANYOU\_SRD\_Form\_C

Relais\_ACDC

5

4

3

2

1

J3

Conn\_01x02\_Male

3,3V\_Eingangsspannungsteiler

R12 330

R13 330

GND

Relais\_Atten\_1

5

4

3

2

1

K2

SANYOU\_SRD\_Form\_C

Relais\_Atten\_2

5

4

3

2

1

K3

SANYOU\_SRD\_Form\_C

5

4

3

2

1

U1A

LM324

3

2

1

V\_prefilter

5

4

3

2

1

R4 500k

R5 170k

R6 220k

R7 110k

+5V

C1 C

GND

Relais\_Atten\_1

5

4

3

2

1

## LowPass Filter 5. Ordnung

GND

C2 1n

U2C

LM324

10

9

8

V\_prefilter

R1 256,5

R3 1568,2

C3 2,2n

GND

U2B

LM324

5

4

3

2

1

R9 739,2

R11 9858,8

C6 0,1n

GND

U2A

LM324

3

2

1

V\_trigger

R2 10k

C4 220n

GND

U2D

LM324

12

13

14

TTL\_Trigger\_Interrupt

R10 10k

R8 100

## Überspannungsschutz

+3V3

D1 1N4148

D2 1N4148

GND

V\_adc

V\_trigger

R14 169,3

R20 330

C7 4,7n

GND

## Nicht verwendete OP Amps

U1B

LM324

5

6

7

R16 10k

GND

U1C

LM324

10

9

8

R17 10k

GND

U1D

LM324

12

13

14

R18 10k

GND

## Trigger-Einheit

V\_trigger

U2A

LM324

3

2

1

V\_trigger

R2 10k

C4 220n

GND

U2D

LM324

12

13

14

TTL\_Trigger\_Interrupt

R10 10k

R8 100

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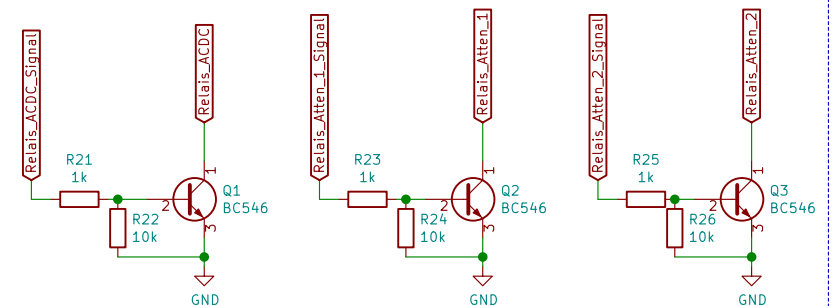
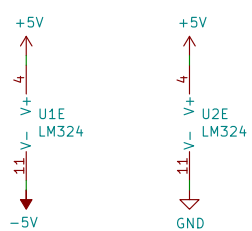
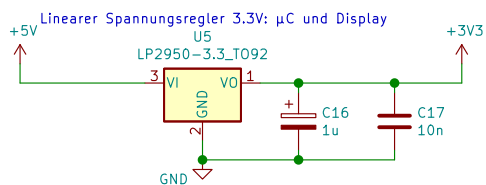
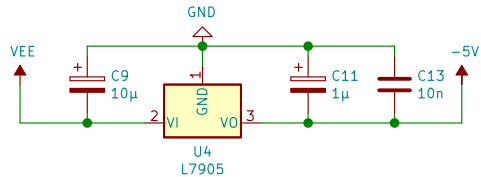
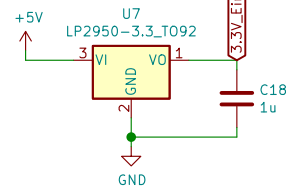
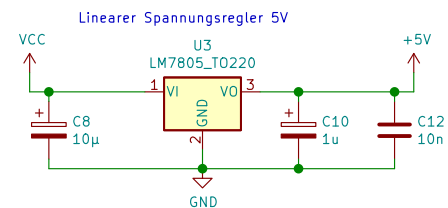
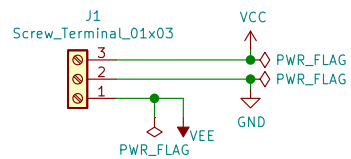
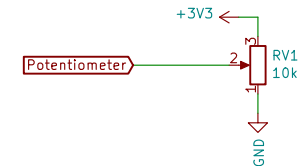
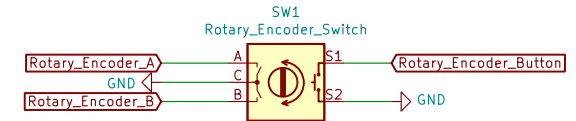
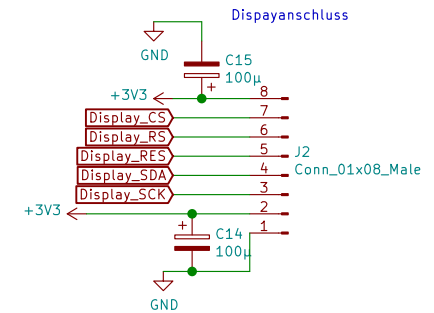
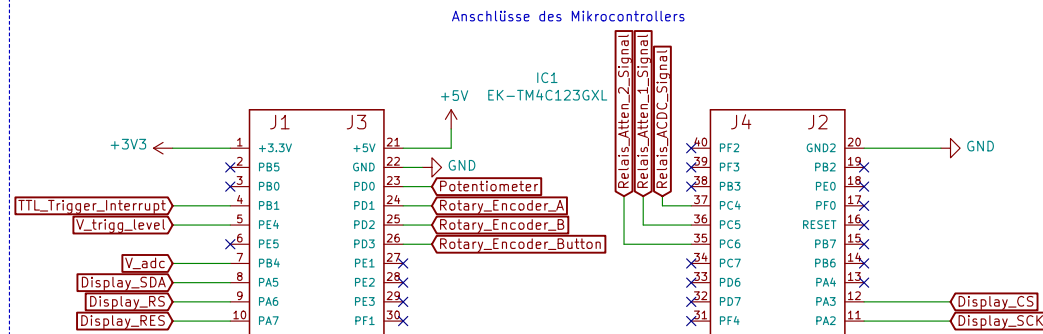
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