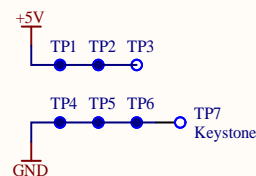
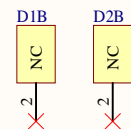
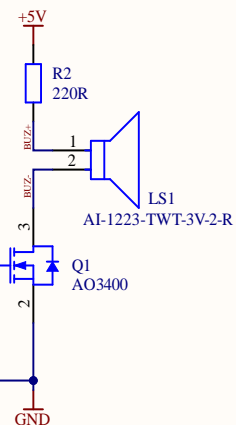
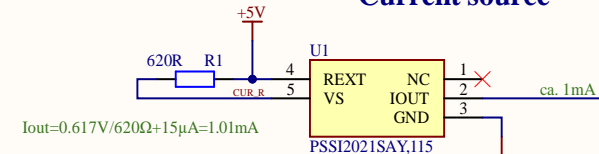


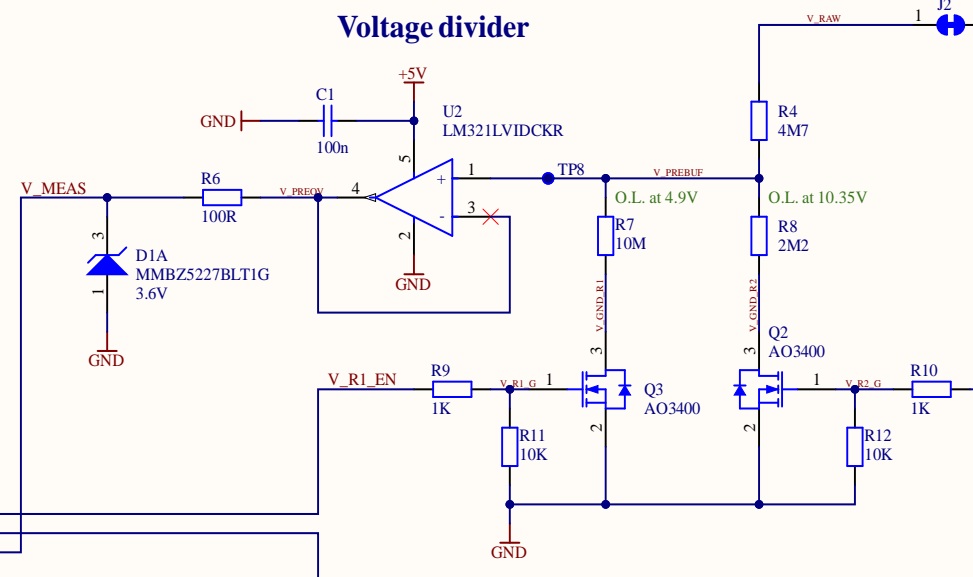
Buzzer



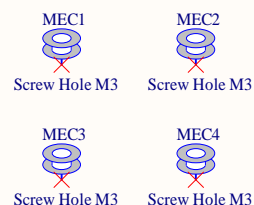
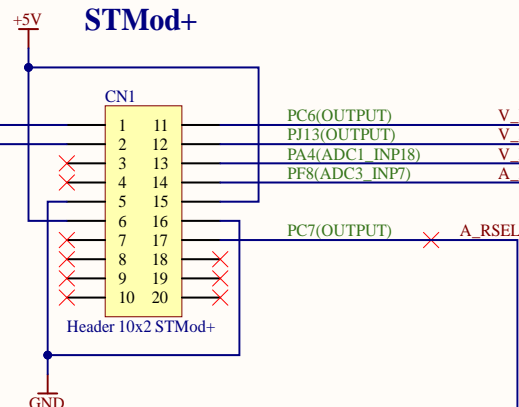
Current source



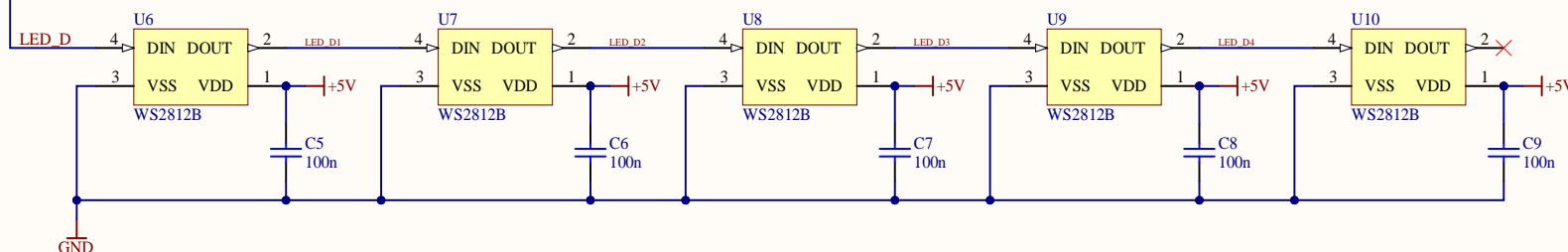
Voltage divider



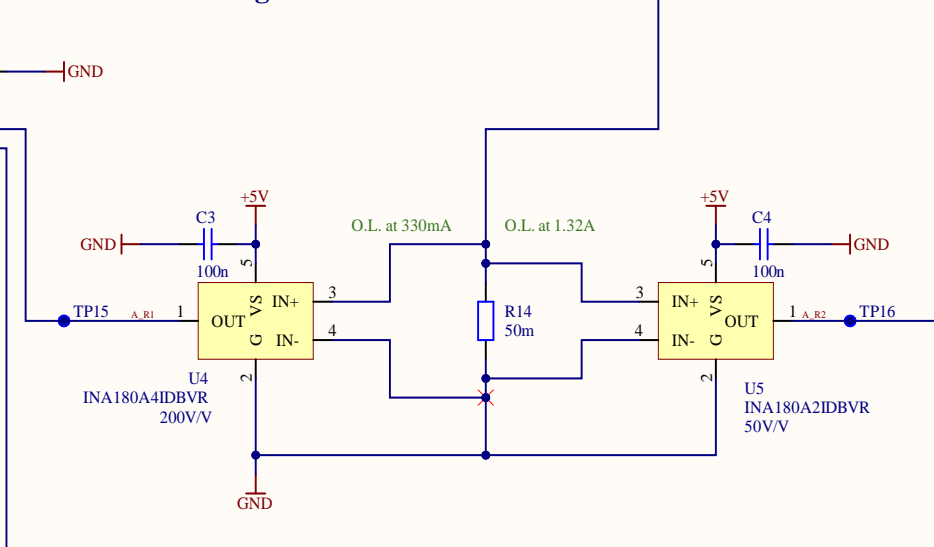
DevBoard STMod+



Adressable LEDs



Current measuring



Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Project:

Extension PCB CircuitVoyager pre1

Drawing number: 1

Rev: 1.0

Format:

Laboratory: SED / TBZ

Sheet: Main.SchDoc

Date: 03.11.2023 22:49:18

A3

Drawn by: Joel Schaller

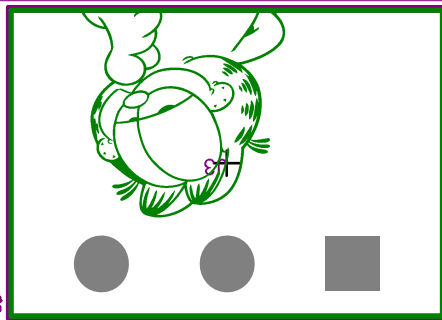
Page 1 of 1

File: D:\OneDrive\Beruflich\TBZ\Projects\CircuitVoyager_pre1\5_Hardware\PCB_EXTENSION_CircuitVoyager_pre1Main.SchDoc

MEC1

MEC2

J3



R14

TP16

TP1

J1

J2

U4

U5

U3

U1

TP7

C3

C4

TP15

TP6

TP8

TP9

TP10

TP11

TP12

D1

TP2

R4

C1

R7

R8

Q3

Q2

R9

R11

R10

R12

D2

R13

TP4

TP3

R3

R5

Q1

LS1

S1

CN1

CircuitVoyager Pre1 Extension PCB

V1.0 | 02.11.23 | Joel Schaller

R3

R5

Q1

LS1

U6

C5

R2

U10

C9

TP3

TP5

C8

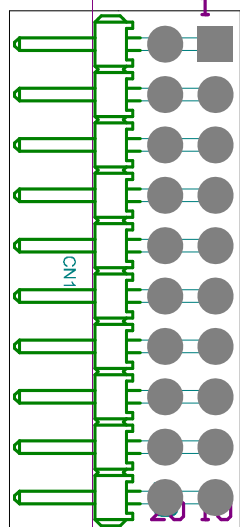
MEC3

C6

U8

C7

MEC4



MEC1

MEC2

J3

R14

TP16

TP1

J1

J2

U4

U5

U3

U1

TP7

C3

C4

TP15

TP6

TP9

D1

TP2

TP8

TP10

R6

C1

R7

R8

TP12

D2

R13

TP4

R9

R11

Q3

Q2

TP13

R10

R12

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R5

Q1

LS1

U6

C5

R2

U10

C9

U7

TP3

TP5

C8

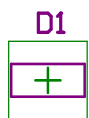
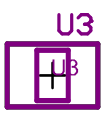
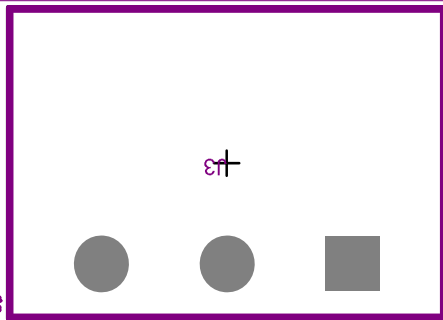
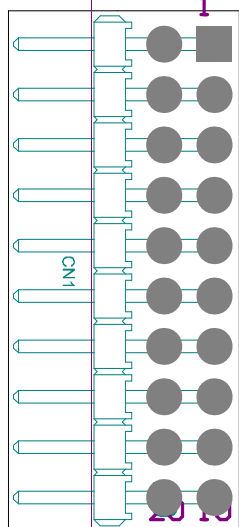
MEC3

C6

U8

C7

MEC4



Designator	Comment	Value	Description	Quantity
C1, C2, C3, C4, C5, C6, C7, C8, C9	C0402	100n	CERCAP 100n 16V 5% X7R 0402	9
CN1	Header 10x2 STMod+	Header 10x2 STMod+	Header 10x2, 2mm, RA, TH, Height 3.20mm/3.50mm,BF060-20A-B-0200-0280-0305-L-D	1
D1, D2	MMBZ5227BLT1G		Zener Voltage Regulator, 225 mW, 3-Pin SOT-23, Pb-Free, Tape and Reel	2
J3	1757488		TERM BLOCK HDR 3POS 90DEG 5MM	1
LS1	AI-1223-TWT-3V-2-R		BUZZER MAGNETIC 3V 12MM TH	1
Q1, Q2, Q3	AO3400		N-channel Enhancement Mode Field-Effect Transistor; 5.8A/30V	3
R1	R0402	620R	RES 620R 62.5mW 1% 0402	1
R2	R0402	220R	RES 220R 62.5mW 1% 0402	1
R3, R9, R10	R0402	1K	RES 1K 62.5mW 1% 0402	3
R4	R0402	4M7	RES 4M7 62.5mW 1% 0402	1
R5, R11, R12	R0402	10K	RES 10K 62.5mW 1% 0402	3
R6, R13	R0402	100R	RES 100R 62.5mW 1% 0402	2
R7	R0402	10M	RES 10M 62.5mW 1% 0402	1
R8	R0402	2M2	RES 2M2 62.5mW 1% 0402	1
R14	R0805	50m	RES 0R05 125mW 1% 0805	1
TP7	Keystone		TP SMD 3.81x 2.03mm	1
U1	PSSI2021SAY,115		NEXPERIA - PSSI2021SAY,115 - IC, CURRENT SOURCE, 50MA, 75V,SOT353	1
U2	LM321LVIDCKR		IC OPAMP GP 1 CIRCUIT SC70-5	1
U3	TMUX1248DCKR		3- LOW RON, 5-V, 2:1 (SPDT) GENE	1
U4	INA180A4IDBVR	200V/V	Operational Amplifier, 1 Func, 500uV Offset-Max, PDSO5	1
U5	INA180A2IDBVR	50V/V	Operational Amplifier, 1 Func, 500uV Offset-Max, PDSO5	1
U6, U7, U8, U9, U10	WS2812B		Intelligent Control LED Integrated Light Source, 3.5 to 5.3 V, -25 to 80 degC, 4-Pin SMD, RoHS, Bulk	5