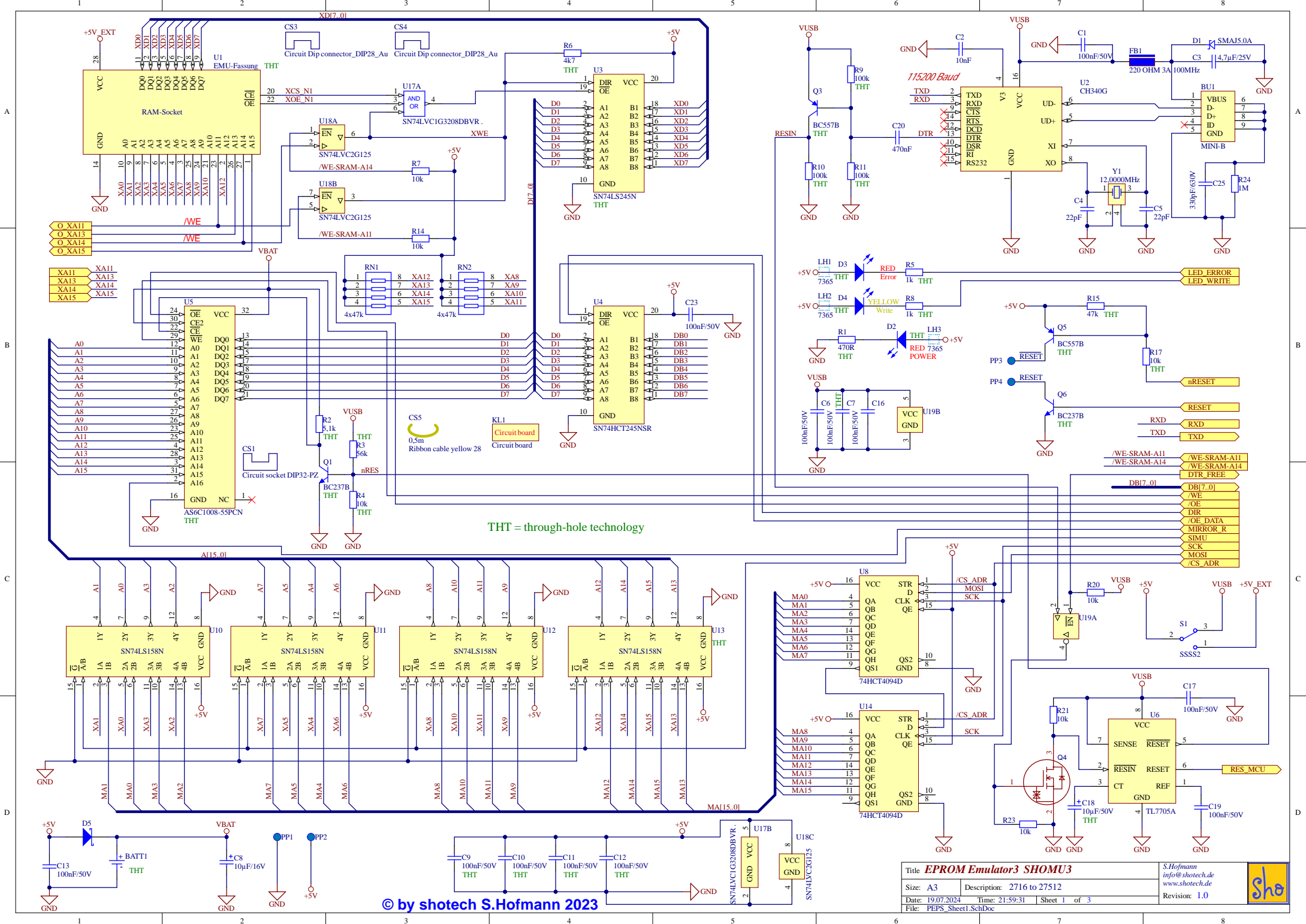


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Title <b>EPROM Emulator3 SHOMU3</b>		S.Hofmann info@shotech.de www.shotech.de	
Size: A3	Description: Overview		Revision: 0.0
Date: 19.07.2024	Time: 21:59:31	Sheet 0 of 3	
File: PEPS_Sheet0.SchDoc			



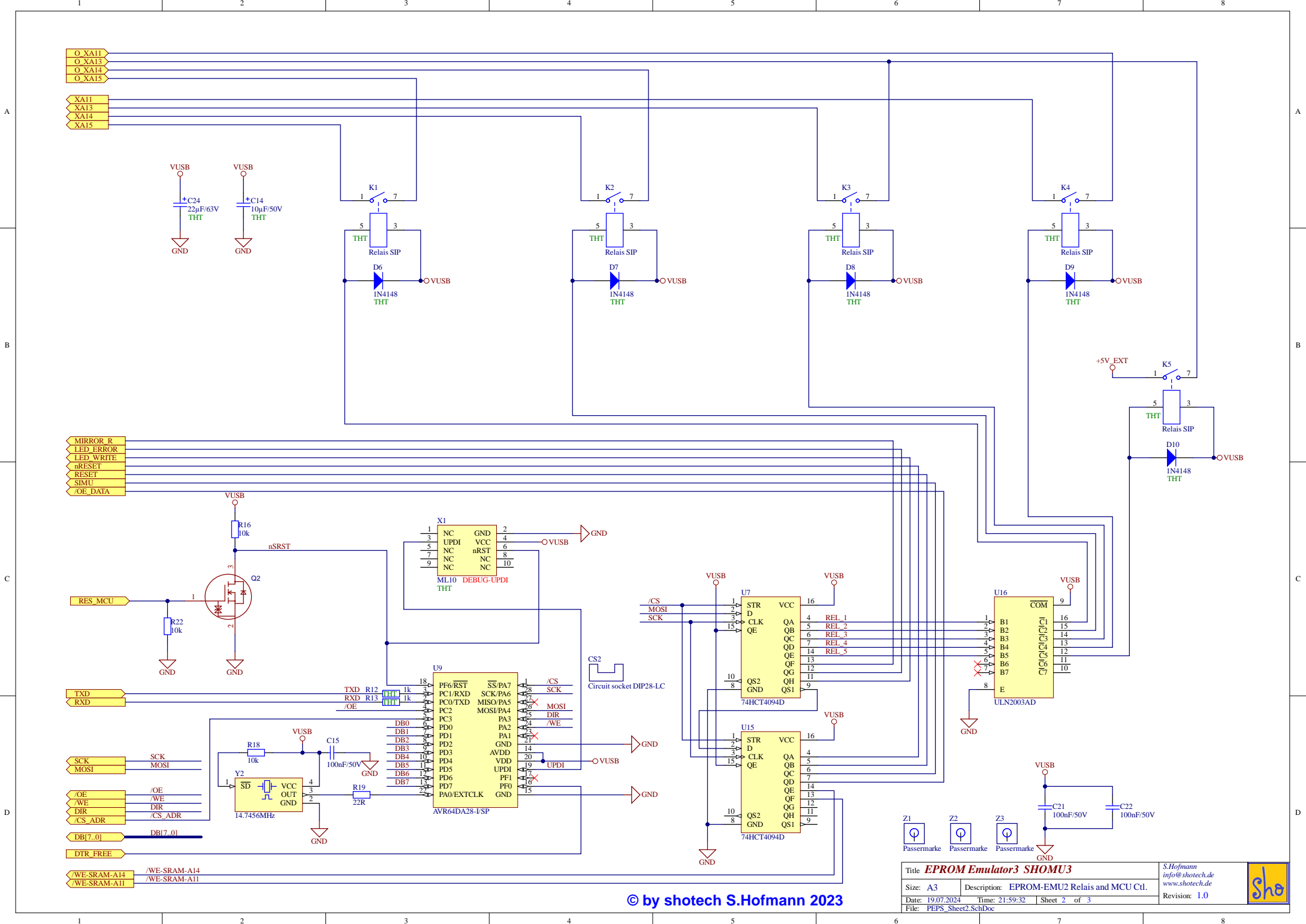


THT = through-hole technology

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Title <b>EPROM Emulator3 SHOMU3</b>		S.Hofmann info@shotech.de www.shotech.de	
Size: A3	Description: 2716 to 27512		
Date: 19.07.2024	Time: 21:59:31	Sheet 1 of 3	Revision: 1.0
File: PEPS_Sheet1.SchDoc			

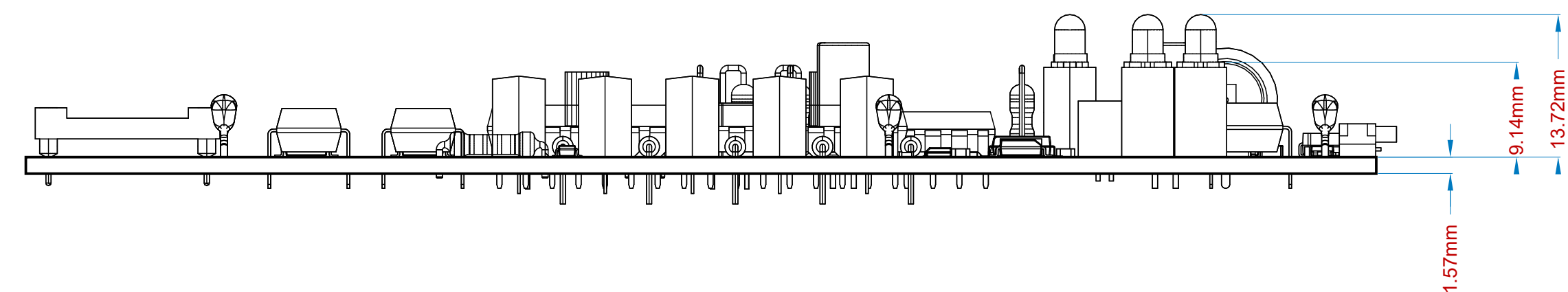
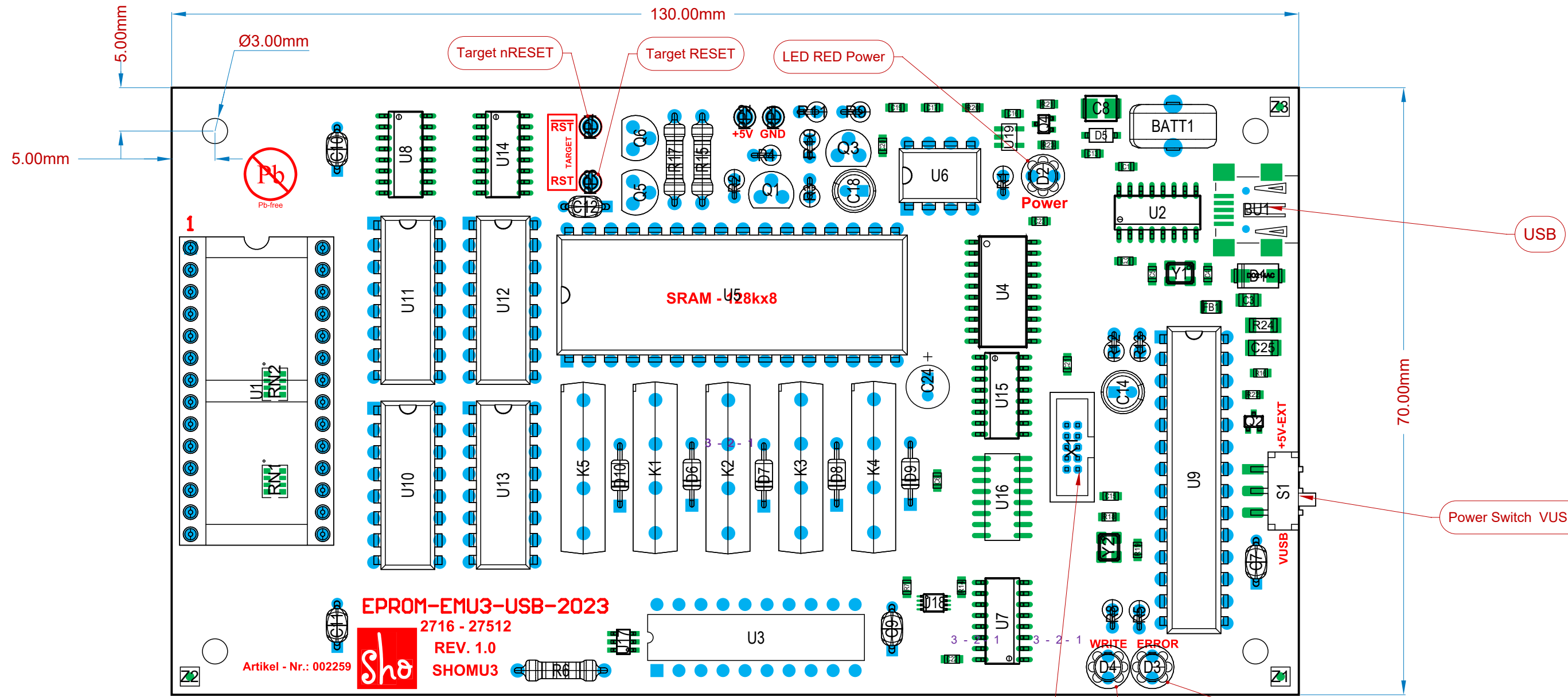




Title <b>EPROM Emulator3 SHOMU3</b>		S.Hofmann info@shotech.de www.shotech.de	
Size: A3	Description: EPROM-EMU2 Relais and MCU Ctl.		Revision: 1.0
Date: 19.07.2024	Time: 21:59:32	Sheet 2 of 3	
File: PEPS_Sheet2.SchDoc			

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**Bill Of Materials**

Line #	Designator	Comment	Quantity
1	BATT1	EECS0HD334V	1
2	BU1	MIN-B	1
3	C1, C6, C13, C15, C16, C17, C19, C21, C22, C23	100nF/50V	10
4	C2	10nF	1
5	C3	4.7µF/25V	1
6	C4, C5	22pF	2
7	C7, C9, C10, C11, C12	100nF/50V	5
8	C8	10µF/16V	1
9	C14, C18	10µF/50V	2
10	C20	470nF	1
11	C24	22µF/63V	1
12	C25	330pF/630V	1
13	D1	SMAJ5.0A	1
14	D2, D3	LED 3mm ROT	2
15	D4	LED 3mm Gelb	1
16	D5	BAT46W-7-F	1
17	D6, D7, D8, D9, D10	1N4148	5
18	FB1	UPB201209T-221Y-N	1
19	K1, K2, K3, K4, K5	Relais SIP	5
20	PP1, PP2, PP3, PP4	Prüfpunkt	4
21	Q1, Q6	BC237B	2
22	Q2, Q4	DMN601WK-7	2
23	Q3, Q5	BC557B	2
24	R1	470R	1
25	R2	5,1k	1
26	R3	56k	1
27	R4, R17	10k	2
28	R5, R8, R12, R13	1k	4
29	R6	4k7	1
30	R7, R14, R16, R18, R20, R21, R22, R23	10k	8
31	R9, R10, R11	100k	3
32	R15	47k	1
33	R19	22R	1
34	R24	1M	1
35	RN1, RN2	4x47k	2
36	S1	SSSS2	1
37	U1	RAM-Socket	1
38	U2	CH340G	1
39	U3	SN74LS245N	1
40	U4	SN74HCT245NSR	1
41	U5	AS6C1008-55PCN	1
42	U6	TL7705A	1
43	U7, U8, U14, U15	74HCT4094D	4
44	U9	AVR64DA28-I/SP	1
45	U10, U11, U12, U13	SN74LS158N	4
46	U16	ULN2003AD	1
47	U17	SN74LVC1G3208DBVR	1
48	U18	SN74LVC2G125	1
49	U19	SN74LVC1G240	1
50	X1	ML10	1
51	Y1	XTAL	1
52	Y2	14.7456MHz	1
53	Z1, Z2, Z3	Passermarke	3

**Layer Stack Legend**

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
Copper	Top Layer	0.04mm		Signal	GTL
		1.50mm	FR-4	Dielectric	
Copper	Bottom Layer	0.04mm		Signal	GBL
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO
<b>Total thickness: 1.59mm</b>					



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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE	shotech Steffen Hofmann	
		DIMENSIONS ARE IN INCHES		DRAWN	19.07.2024	TITLE	
		TOLERANCES:		CHECKED		Eprom Emulator2 - 2716 - 27512	
		FRACTIONAL ±		ENG APPR.		SIZE DWG. NO.	
		ANGULAR: MACH ± BEND ±		MFG APPR.		00232019	
		TWO PLACE DECIMAL ±		Q.A.		SCALE: 1:1 WEIGHT: SHEET 1 OF 1	
		THREE PLACE DECIMAL ±		COMMENTS:			
		INTERPRET GEOMETRIC TOLERANCING PER:					
		MATERIAL					
NEXT ASSY		USED ON		FINISH			
APPLICATION				DO NOT SCALE DRAWING			

130,00

70,00

# EPROM-EMU3-USB-2023

2716 - 27512



REV. 1.0  
SHOMU3

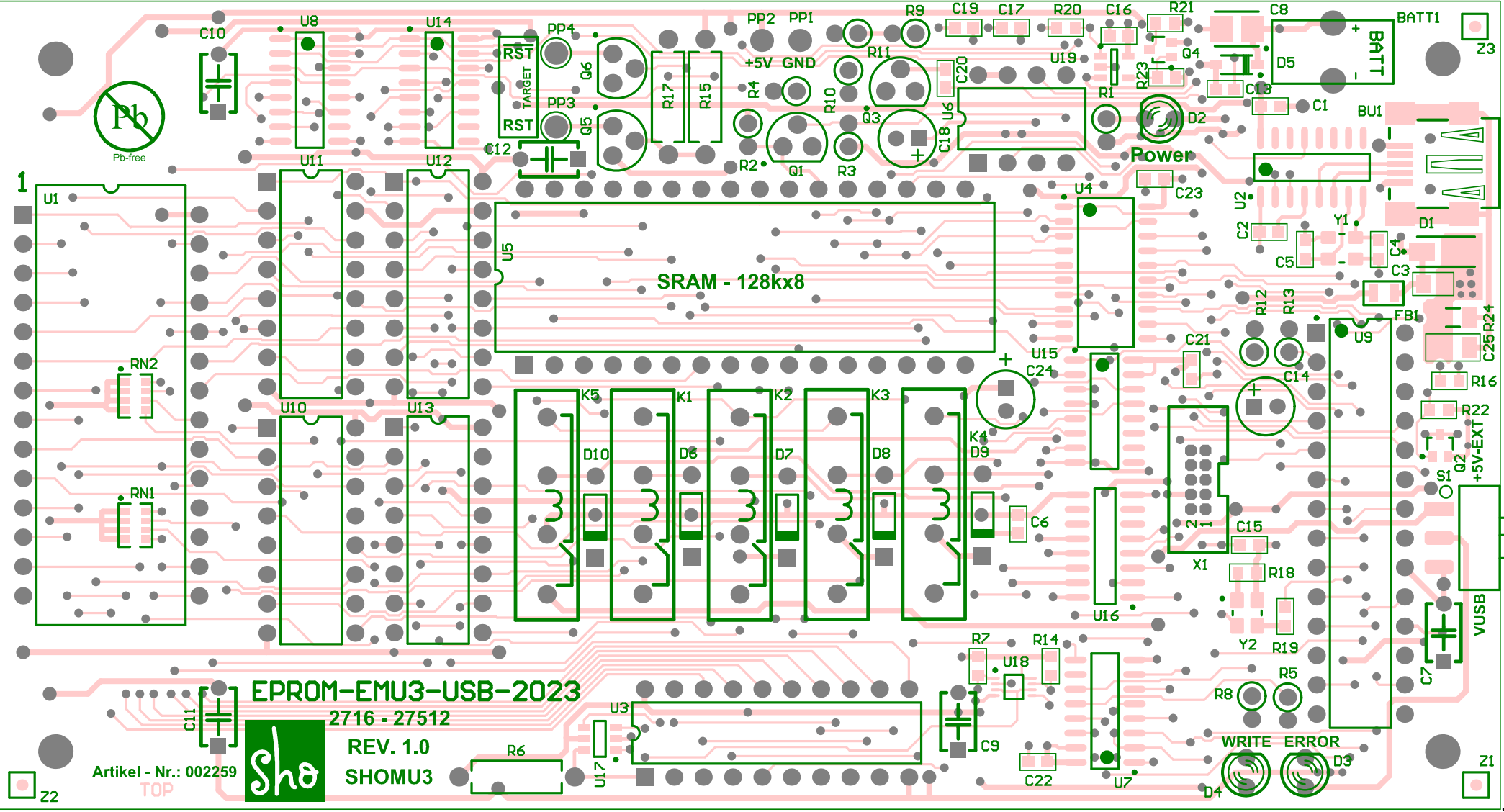
Artikel - Nr.: 002259

TOP



Pb-free

1



Z2

Z1



Bearbeiter: S. Hofmann  
 Tel: 040 /  
 Fax: 040 / 76906856  
 Email: [shop@shotech.de](mailto:shop@shotech.de)

## Bill of Materials

<b>Datum:</b>	19. Juli 2024
<b>Zeit:</b>	21:59:42
<b>Variante:</b>	None
<b>Bezeichnung:</b>	EPROM Emulator3 SHOMU3
<b>Revision:</b>	0.0
<b>Description:</b>	Overview

Quantity	Designator	Footprint	Bemerkung	Value	MFT	Order-Code	Second-source	shotech
1	BATT1	Gold-Cap EECSHD	Gold Cap-Elko 0,33F 5,5V RM5,0 V	EECS0HD334V	Panasonic	EECS0HD334V	Electric GmbH	1749
5	C7, C9, C10, C11, C12	CAP_Radial_5MM	X7R 5mm LS	100nF/50V	Vishay / BC Components	K104K15X7RF53H5		1347
2	C14, C18	CAPPR2-5x11	10uF/50V/20%/RM2.5/105 °C /2000h	10uF/50V	Chang	RL1H100MC110B25CEH		1339
1	C24	CAPPR2-5x11	22uF/63V/20%/2000h/RM2.5/85 °C	22uF/63V	Samwha	SD1J226M05011PC359		1338
1	CS1		Circuit socket DIP32-PZ	Circuit socket DIP32-PZ	ASS	AR32-HZL-TT		1329
1	CS2		Circuit socket DIP28-PZ	Circuit socket DIP28-LC	ASS	AR28-HZL-TT		1328
2	CS3, CS4		Circuit Flatcable Dip connector_DIP28_Au	connector_DIP28_Au	W+P	139-28-6-60		2293
1	CS5		Ribbon cable yellow 28	Ribbon cable yellow 28	shotech			2398
2	D2, D3	LED3MM - spacer - red		RED	frei			1321
1	D4	LED3MM - spacer - yellow		YELLOW	frei			1322
5	D6, D7, D8, D9, D10	DO-35	Diode (Allzweck, Leistung, Schaltung) Vr/75V Iq/150mA T/R	1N4148	On Semiconductors	1N4148TR		1594
5	K1, K2, K3, K4, K5	Relais_SIP	Relais 5V	SIP-1A05	PAN CHANG	SIP-1A05	Excel Cell	1624
1	KL1		Circuit board	Circuit board	frei			2259
3	LH1, LH2, LH3		LED 3mm Abstandshalter 9,14mm	7365	Keystone	7365		1326
4	PP1, PP2, PP3, PP4	VERO_Testpoint_Blue	Prüfpunkt					
2	Q1, Q6	SC_TO-92	NPN 45V 0,1A 0,5W B:200-450 TO92	BC237B	frei	BC237B	BC548B	1069
2	Q3, Q5	SC_TO-92	TRANSISTOR PNP 45V 0,1A TO-92	BC557B	Diotec	BC557BBK		1622
1	R1	RESADV200W55L630D240P	WIDERSTAND, 207, axial, 10k, 1%	470R	free			1748
1	R2	RESADV200W55L630D240P	WIDERSTAND, 207, 1%	5,1k	Vishay / Dale			2261
1	R3	RESADV200W55L630D240P	WIDERSTAND, 207, axial, 1%	56k	frei	RMGK047		1750
1	R4	RESADV200W55L630D240P	WIDERSTAND, 207, axial, 1%	10k	frei	RMGK010		1233
4	R5, R8, R12, R13	RESADV200W55L630D240P	Metallsch. 0207 1/4W 1%	1k	frei	RMGK001		1235
1	R6	RES10-7.8X2.8	WIDERSTAND, 207, axial, 1%	4k7				1587
3	R9, R10, R11	RESADV200W55L630D240P	WIDERSTAND, 207, axial, 1%	100k				1610
1	R15	RES10-7.8X2.8 - 47k	WIDERSTAND, 207, axial, 1%	47k	frei	RMGK047		1237
1	R17	RES10-7.8X2.8 - 10k	WIDERSTAND, 207, axial, 1%	10k	frei	RMGK010		1233
1	U1	PDIP28	RAM Fassung					1328
1	U3	N020	Bustransceiver Octal Bus	SN74LS245N	Texas Instruments	SN74LS245N	SN74HCT245N	1527
1	U5	PDIP32	SRAM 1Mb, 2.7V-5.5V, 55ns 128K x 8 Asynch SRAM	AS6C1008-55PCN	Alliance Memory	AS6C1008-55PCN	AMIC LP621024D-70LLF	1487
1	U6	P008	SUPPLY VOLTAGE SUPERVISORS	TL7705A	Texas Instruments	TL7705A		1283
1	U9	28P3		AVR64DA28-I/SP	Atmel	AVR64DA28-I/SP		2104
4	U10, U11, U12, U13	N016	Quadruple 2-Line To 1-Line Data Selectors/Multiplexers	SN74LS158N	frei	SN74LS158N	74HCT158N	1317
1	X1	ML10 - 1.27mm	CONN, HEADER, 10POS, 2ROW, 1.27MM	ML10	AMPHENOL ICC	20021511-00010T4LF		2345