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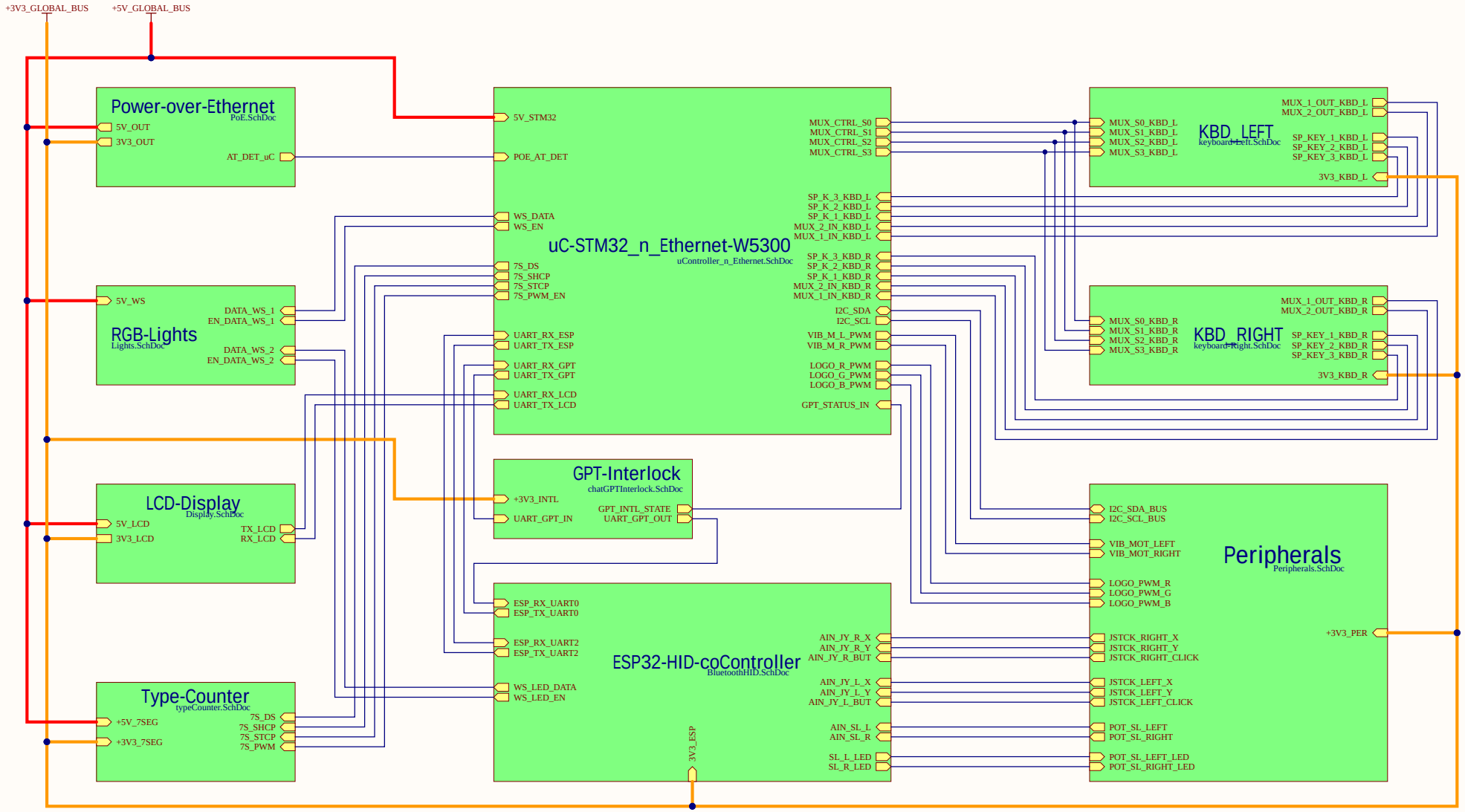
REVISION	DESCRIPTION	DATE	APPROVED



Summary of Known oversight to be corrected in the next design:
- In the type counter sheet, the MR should be connected to 3V# instead of Ground
- The wurth PoE Component drawing is mirrored. must be corrected on the footprint side. Error coming from Wurth!
-

Summary of nice to have improvement:
- Optional UART lines to the Nextion display, split the UART coming for the ESP for programming FW.
- Add neopixel directly as a component on the bottom side of the PCB, so no need to use LED strips
- To enable the LED on the interlock switch, must add additional inverterlogic
- Add physical reset STM32 reset to one of te key/switch

MP2 MP1 MP3 MP4 MP5 MP6 MP7 MP8 MP9

7466003 7466003 7466003 7466003 7466003 7466003 7466003 7466003 7466003

PROJECT	SUMASTA		
PROJECT REVISION:	DOCUMENT REVISION:	DESIGN ITEM:	
TITLE	Generative KAiBoard Main		
SIZE A3	CAGE CODE	DWG NO.	REV
SCALE:	FILE NAME Gen_Ai_Kbd-Main.SchDoc	SHEET 1 OF 11	

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REVISION	DESCRIPTION	DATE	APPROVED

SW1 SW2 SW3 SW4 SW5 SW6 SW7
SW8 SW9 SW10 SW11 SW12 SW13 SW14
SW15 SW16 SW17 SW18 SW19 SW20 SW21
SW22 SW23 SW24 SW25 SW26 SW27 SW28
SW29 SW30 SW31 SW32 SW33 SW34 SW35
MX1A-11NW
GND

+3V3_KBD_L
R47 10k
R48 10k

SP_KEY_1_KBD_L
SP_KEY_2_KBD_L
SP_KEY_3_KBD_L
MUX_1_OUT_KBD_L
MUX_2_OUT_KBD_L

3V3_KBD_L
100nF 10V
C6
C7

U2
U3
VCC
COMMON INPUT/OUTPUT
I0 I1 I2 I3 I4 I5 I6 I7 I8 I9 I10 I11 I12 I13 I14 I15
S0 S1 S2 S3
E
GND
CD74HC4067M96

RN1
RN2
YC164-JR-0710KL

MUX_S0_KBD_L
MUX_S1_KBD_L
MUX_S2_KBD_L
MUX_S3_KBD_L

PROJECT	SUMASTA		
PROJECT REVISION:	DOCUMENT REVISION:	DESIGN ITEM:	
TITLE	keyboard-Left.SchDoc		
SIZE A3	CAGE CODE	DWG NO.	REV
SCALE:	FILE NAME keyboard-Left.SchDoc	SHEET 2	OF 11

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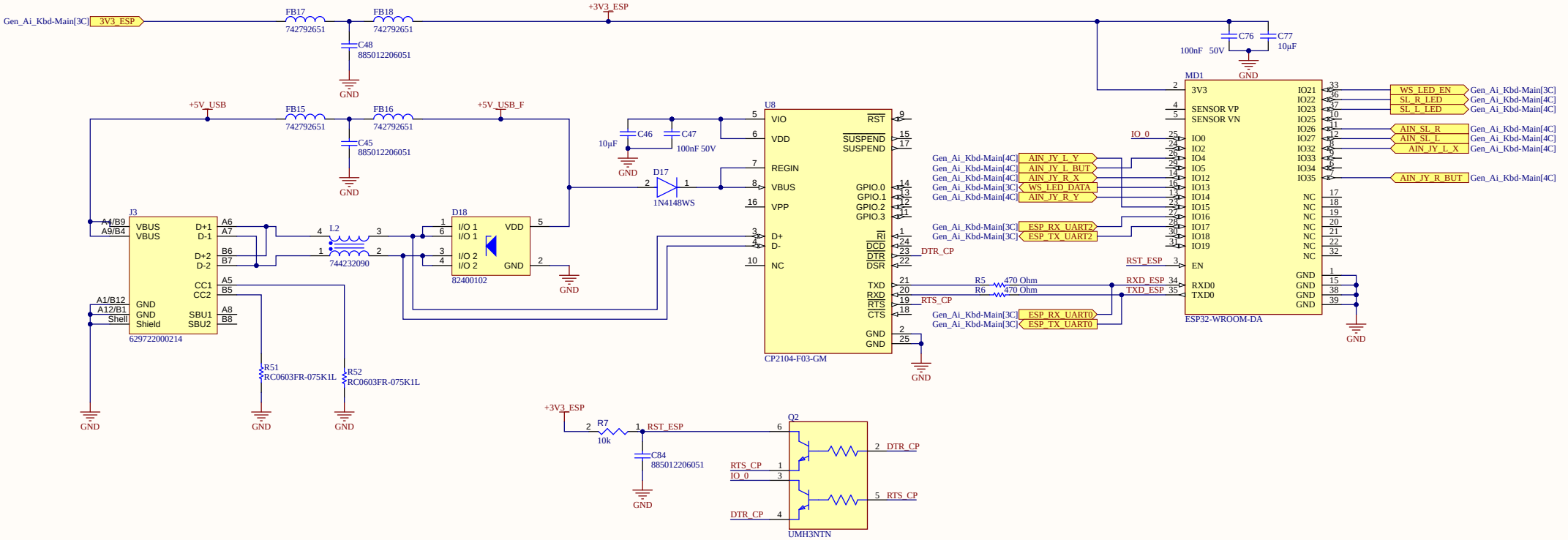
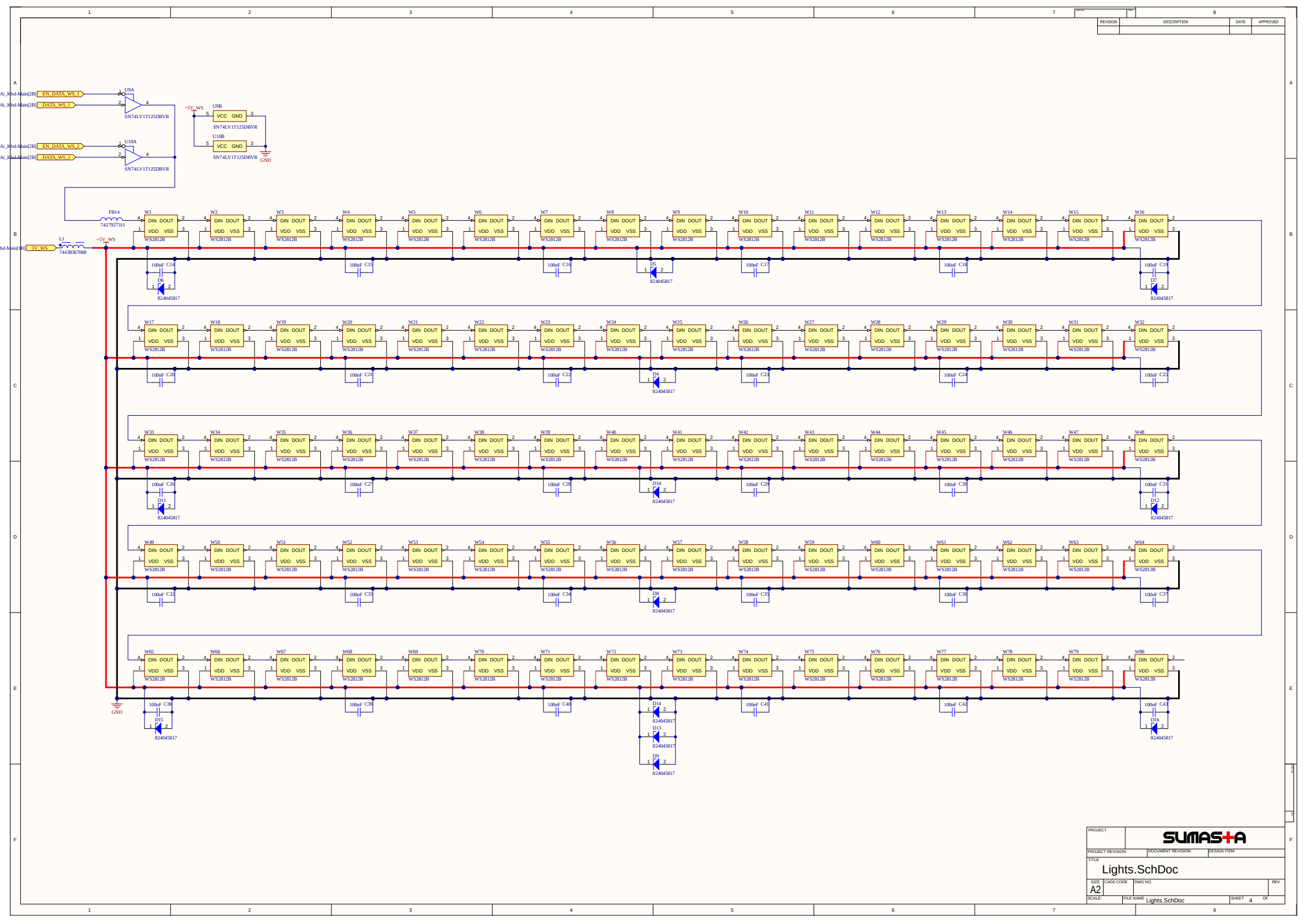
REVISION	DESCRIPTION	DATE	APPROVED



PROJECT	SUMASTA		
PROJECT REVISION:	DOCUMENT REVISION:	DESIGN ITEM:	
TITLE	BluetoothHID.SchDoc		
SIZE A3	CAGE CODE	DWG NO.	REV
SCALE:	FILE NAME BluetoothHID.SchDoc	SHEET 3	OF 11


REVISION
DESCRIPTION
DATE
APPROVED
Ai_Kbd-Main[2B]
EN_DATA_WS_1
DATA_WS_1
EN_DATA_WS_2
DATA_WS_2
U9A
U10A
SN74LV1T125DBVR
+5V_WS
U9B
U10B
VCC GND
GND
FB14
7427927311
L1
74438367068
5V_WS
W1
W2
W3
W4
W5
W6
W7
W8
W9
W10
W11
W12
W13
W14
W15
W16
W17
W18
W19
W20
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W56
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W58
W59
W60
W61
W62
W63
W64
W65
W66
W67
W68
W69
W70
W71
W72
W73
W74
W75
W76
W77
W78
W79
W80
DIN DOUT
VDD VSS
WS2812B
100nF C14
100nF C15
100nF C16
100nF C17
100nF C18
100nF C19
100nF C20
100nF C21
100nF C22
100nF C23
100nF C24
100nF C25
100nF C26
100nF C27
100nF C28
100nF C29
100nF C30
100nF C31
100nF C32
100nF C33
100nF C34
100nF C35
100nF C36
100nF C37
100nF C38
100nF C39
100nF C40
100nF C41
100nF C42
100nF C43
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
D16
824045817
PROJECT
SUMASTA
PROJECT REVISION:
DOCUMENT REVISION:
DESIGN ITEM:
TITLE
Lights.SchDoc
SIZE
A2
CAGE CODE
DWG NO.
REV
SCALE:
FILE NAME
Lights.SchDoc
SHEET
4
OF

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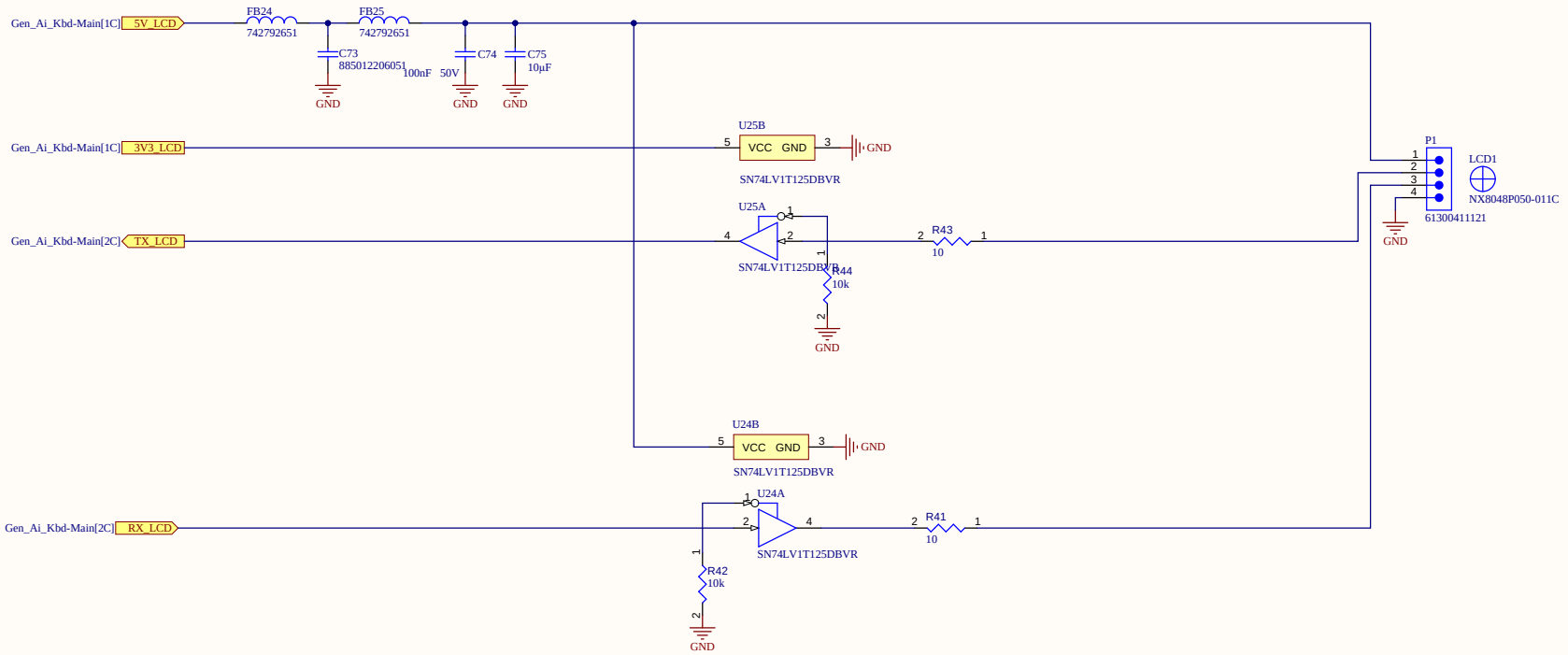
REVISION	DESCRIPTION	DATE	APPROVED



PROJECT	SUMASTA		
PROJECT REVISION:	DOCUMENT REVISION:	DESIGN ITEM:	
TITLE	Display.SchDoc		
SIZE A3	CAGE CODE	DWG NO.	REV
SCALE:	FILE NAME Display.SchDoc	SHEET 5 OF 11	

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REVISION	DESCRIPTION	DATE	APPROVED

Gen_Ai_Kbd-Main[6C] +3V3_PER
FB19 742792651
FB20 742792651
C55 885012206051
GND

Gen_Ai_Kbd-Main[5C] JSTCK_LEFT_X
Gen_Ai_Kbd-Main[5C] JSTCK_LEFT_Y
Gen_Ai_Kbd-Main[5C] JSTCK_LEFT_CLICK
R10 10
R11 10
C51 100nF 50V
C52 100nF 50V
R4
1_VR1 2_VR1 1_VR2 2_VR2 3_VR1 3_VR2
MNT 1 MNT 2 MNT 3 MNT 4
a b c d
RKJXK122400Y

Gen_Ai_Kbd-Main[5C] VIB_MOT_LEFT
D21 1N4148WS
C57 100nF 50V
J6 613002143121
R20 10
R22 10k
Q3 BSS123-7-F

FB21 742792651
FB22 742792651
C56 885012206051

Gen_Ai_Kbd-Main[5C] JSTCK_RIGHT_X
Gen_Ai_Kbd-Main[5C] JSTCK_RIGHT_Y
Gen_Ai_Kbd-Main[5C] JSTCK_RIGHT_CLICK
R13 10
R14 10
C53 100nF 50V
C54 100nF 50V
R3
1_VR1 2_VR1 1_VR2 2_VR2 3_VR1 3_VR2
MNT 1 MNT 2 MNT 3 MNT 4
a b c d
RKJXK122400Y

Gen_Ai_Kbd-Main[5C] VIB_MOT_RIGHT
D22 1N4148WS
C58 100nF 50V
J7 613002143121
R21 10
R23 10k
Q4 BSS123-7-F

FB23 742792651
C59 100nF 50V
C60 10µF
R24 47k
R25 47k
R26 2k2
R27 2k2
R28 47k
U12 VL53L5CX
IOVDD AVDD AVDD
RSVD6 RSVD5 RSVD1 RSVD2 RSVD3 RSVD4
LPn SCL SDA INT I2C_RST
PAD GND GND
R29 47k
R30 10
R31 10
I2C_SCL_BUS
I2C_SDA_BUS

P6 61300411121
R32 10
R33 10

U23 24LC1025-I/SM
A0 A1 A2 WP SCL SDA VCC VSS
C70 100nF 50V
R35 10
R36 10

Approximately 15mA to each LED

D19 155124M172400
R12 10
R15 15
R16 47

D20 155124M172400
R17 10
R18 15
R19 47

R37 10
C71 100nF 50V
R38 100
VR1 10kR

R39 10
C72 100nF 50V
R40 100
VR2 10kR

Gen_Ai_Kbd-Main[5C] LOGO_PWM_R
Gen_Ai_Kbd-Main[5C] LOGO_PWM_G
Gen_Ai_Kbd-Main[5C] LOGO_PWM_B
Gen_Ai_Kbd-Main[5C] POT_SL_LEFT
Gen_Ai_Kbd-Main[5C] POT_SL_LEFT_LED
Gen_Ai_Kbd-Main[5C] POT_SL_RIGHT
Gen_Ai_Kbd-Main[5C] POT_SL_RIGHT_LED

PROJECT	SUMASTA		
PROJECT REVISION:	DOCUMENT REVISION:	DESIGN ITEM:	
TITLE	Peripherals.SchDoc		
SIZE A3	CAGE CODE	DWG NO.	REV
SCALE:	FILE NAME Peripherals.SchDoc	SHEET 6 OF 11	

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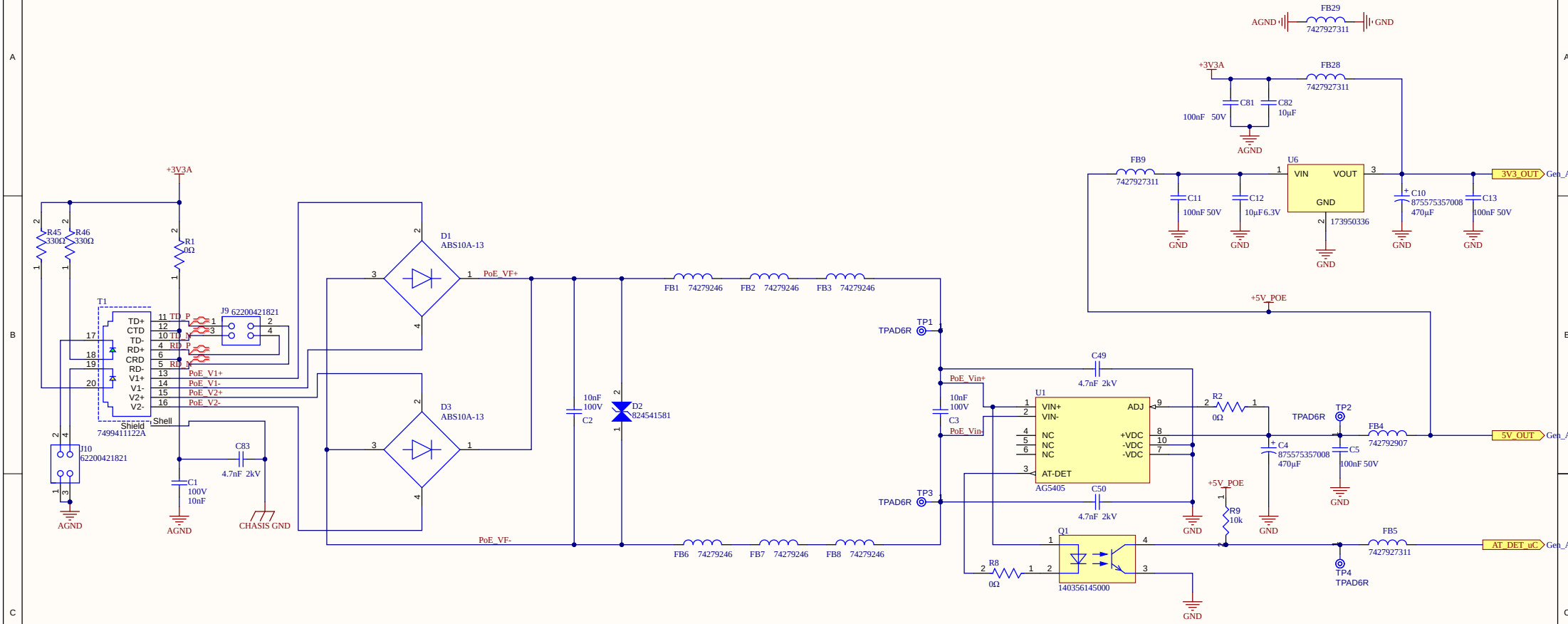
REVISION	DESCRIPTION	DATE	APPROVED



PROJECT	SUMASTA		
PROJECT REVISION:	DOCUMENT REVISION:	DESIGN ITEM:	
TITLE	PoE.SchDoc		
SIZE A3	CAGE CODE	DWG NO.	REV
SCALE:	FILE NAME PoE.SchDoc	SHEET 7	OF 11

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REVISION	DESCRIPTION	DATE	APPROVED

SW36 SW37 SW38 SW39 SW40 SW41 SW42
SW43 SW44 SW45 SW46 SW47 SW48 SW49
SW50 SW51 SW52 SW53 SW54 SW55 SW56
SW57 SW58 SW59 SW60 SW61 SW62 SW63
SW64 SW65 SW66 SW67 SW68 SW69 SW70
MX1A-11NW
GND

+3V3_KBD_R
R49 10k
R50 10k

SP_KEY_1_KBD_R
SP_KEY_2_KBD_R
SP_KEY_3_KBD_R
MUX_1_OUT_KBD_R
MUX_2_OUT_KBD_R
Gen_Ai_Kbd-M

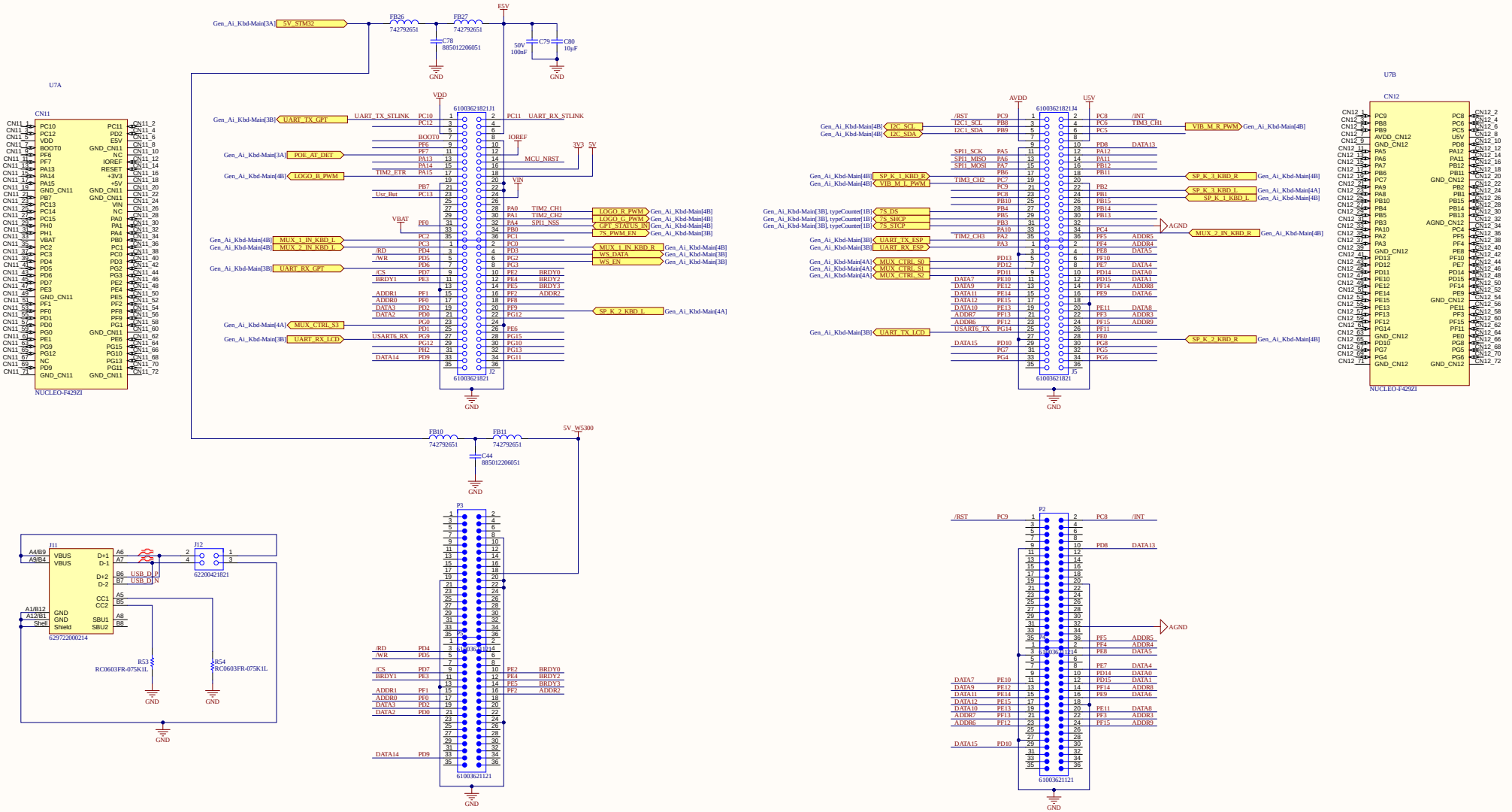
3V3_KBD_R
100nF 10V
C8
C9

U4
U5
VCC
COMMON INPUT/OUTPUT
I0 I1 I2 I3 I4 I5 I6 I7 I8 I9 I10 I11 I12 I13 I14 I15
S0 S1 S2 S3
E
GND
CD74HC4067M96

RN3
RN4
YC164-JR-0710KL

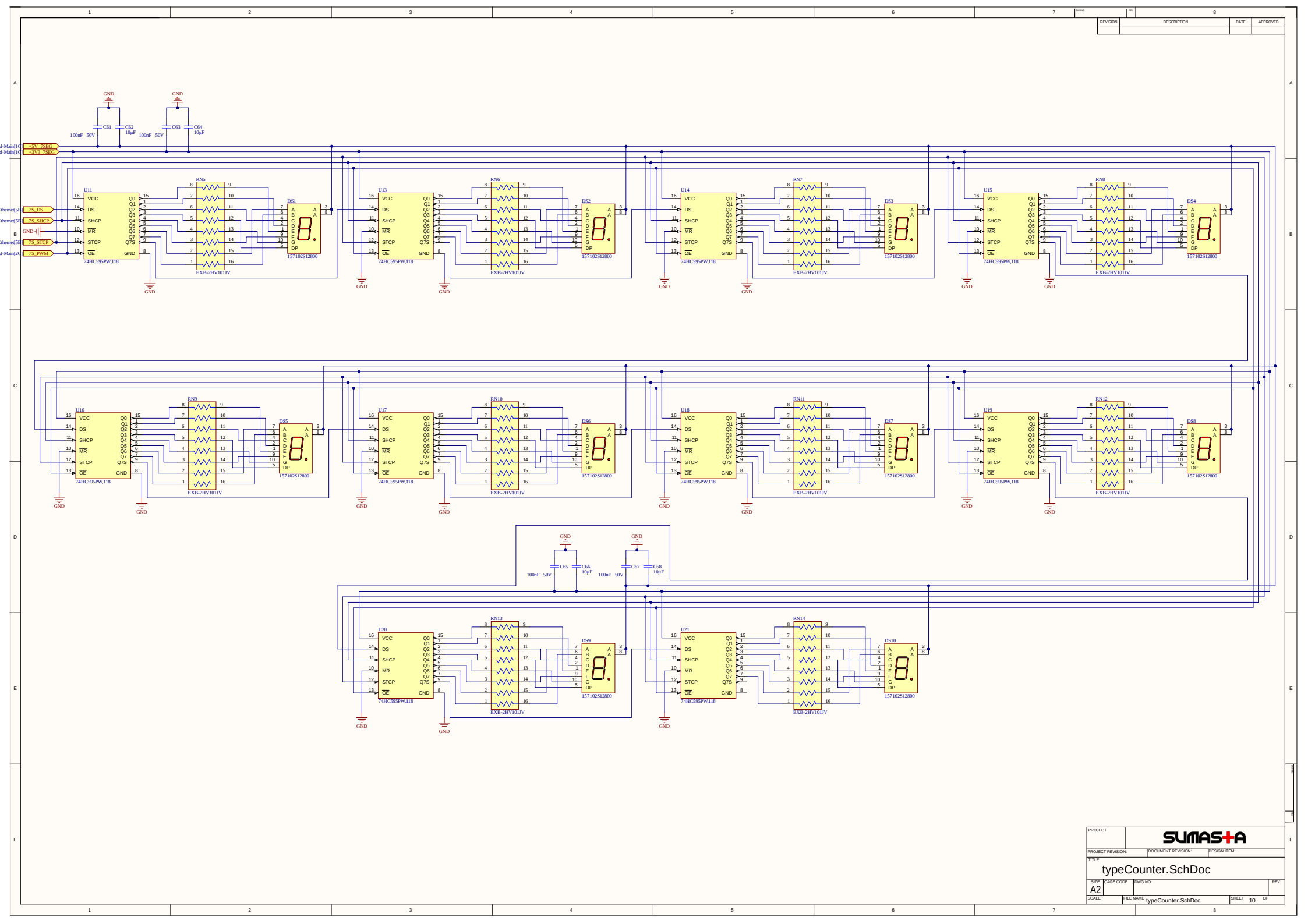
MUX_S0_KBD_R
MUX_S1_KBD_R
MUX_S2_KBD_R
MUX_S3_KBD_R

PROJECT	SUMASTA		
PROJECT REVISION:	DOCUMENT REVISION:	DESIGN ITEM:	
TITLE	keyboard-Right.SchDoc		
SIZE A3	CAGE CODE	DWG NO.	REV
SCALE:	FILE NAME keyboard-Right.SchDoc	SHEET 8	OF 11



REVISION	DESCRIPTION	DATE	APPROVED

PROJECT	SUMASTA
PROJECT REVISION:	DOCUMENT REVISION: DESIGN ITEM:
TITLE	uController_n_Ethernet.SchDoc
SIZE A2	CAGE CODE DWG NO. REV
SCALE:	FILE NAME uController_n_Ethernet.SchDoc SHEET 9 OF


REVISION
DESCRIPTION
DATE
APPROVED
+5V_7SEG
+3V3_7SEG
7S_DS
7S_SHCP
7S_STCP
7S_PWM
GND
C61
C62
10µF
100nF 50V
C63
C64
C65
C66
C67
C68
U11
U13
U14
U15
U16
U17
U18
U19
U20
U21
74HC595PW,118
RN5
RN6
RN7
RN8
RN9
RN10
RN11
RN12
RN13
RN14
EXB-2HV101JV
DS1
DS2
DS3
DS4
DS5
DS6
DS7
DS8
DS9
DS10
157102S12800
PROJECT
SUMASTA
PROJECT REVISION:
DOCUMENT REVISION:
DESIGN ITEM:
TITLE
typeCounter.SchDoc
SIZE
A2
CAGE CODE
DWG NO.
REV
SCALE:
FILE NAME
typeCounter.SchDoc
SHEET
10
OF

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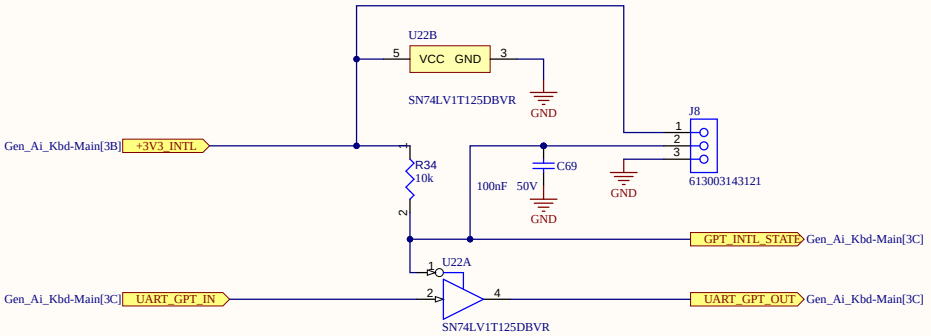
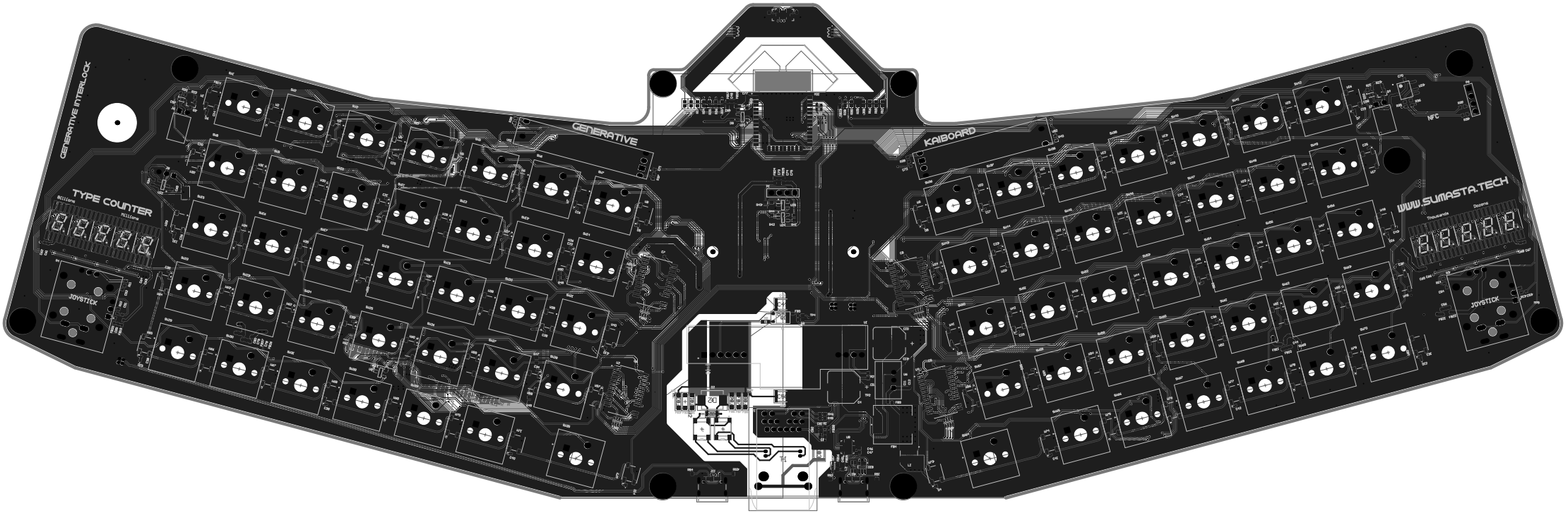
REVISION	DESCRIPTION	DATE	APPROVED



PROJECT	SUMASTA		
PROJECT REVISION:	DOCUMENT REVISION:	DESIGN ITEM:	
TITLE	chatGPTInterlock.SchDoc		
SIZE A3	CAGE CODE	DWG NO.	REV
SCALE:	FILE NAME chatGPTInterlock.SchDoc	SHEET 11 OF 11	


GENERATIVE INTERLOCK
GENERATIVE
KAIBOARD
TYPE COUNTER
JOYSTICK
NFC
WWW.SUMASTA.TECH
JOYSTICK

Line #	Name	Description	Designator	Revision ID	Revision Status	Quantity	Ordered Status	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
	885012206114	WCAP-CSGP Multilayer Ceramic Chip Capacitor, General Purpose, size 0603, X7R, 10nF, 100VDC	C1			1	Stock							
	885012008079	WCAP-CSGP Multilayer Ceramic Chip Capacitor, General Purpose, size 1206, NP0, 10nF, 100VDC	C2, C3			2	Stock							
	875575357008	875575357008 Cap, 470UF, 16V, Alu Elec, Hybrid, Smd Rohs Compliant: Yes	C4, C10			2	Ordered 4	Wurth Electronics	875575357008		Digi-Key	732-875575357008CT-ND	3.19	6.38
	885012206095	WCAP-CSGP Multilayer Ceramic Chip Capacitor, General Purpose, size 0603, X7R, 100nF, 50VDC	C5, C11, C13, C47, C51, C52, C53, C54, C57, C58, C59, C61, C63, C65, C67, C69, C70, C71, C72, C74, C75, C79, C81			23	Stock							
	885012206020	WCAP-CSGP Multilayer Ceramic Chip Capacitor, General Purpose, size 0603, X7R, 100nF, 10VDC	C6, C7, C8, C9			4	Stock							
	885012106006	WCAP-CSGP Multilayer Ceramic Chip Capacitor, General Purpose, size 0603, X5R, 10µF, 6.3VDC	C12, C46, C60, C62, C64, C66, C68, C75, C77, C80, C82			11	Stock							
	885012205018	WCAP-CSGP Multilayer Ceramic Chip Capacitor, General Purpose, size 0402, X7R, 100nF, 10VDC	C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43			30	Stock							
	885012206051	885012206051 Cap Cer 0.68UF 16V X7R 0603	C44, C45, C48, C55, C56, C73, C78, C84			8	Stock	Wurth Electronics	885012206051	Volume Production	Farnell	2534025	0.07158	0.71579
	885342211008	885342211008 470DPF 2000V X7R 1812 10% - Multilayer Ceramic Capacitors	C49, C50, C83			3	Ordered 9	Wurth Electronics	885342211008		Farnell	2812616	0.78494	2.35
	ABS10A-13	BRIDGE RECT 1PHASE 1KV 1A 4SOPA	D1, D3			2	Cart Digikey 14	Diodes	ABS10A-13		Farnell	3127182	0.07801	0.39005
	824541581	824541581 TVS diode [Würth Elektronik] 824541581 TVS diode	D2			1	Ordered 4	Wurth Electronics	824541581	Volume Production	Digi-Key	732-9823-1-ND	0.89	0.89
	824045817	824045817 Tvs Diode, Unidir, 7V, Dfn1610 Rohs Compliant: Yes	D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16			19	Ordered 20	Wurth Electronics	824045817		Mouser	710-824045817	0.567	7.37
	1N4148WS	DIODE GEN PURP 75V 150MA SOD323F	D17, D21, D22			3	Cart Digikey 25	ON Semiconductor / Fairchild	1N4148WS	Volume Production	Newark	08AK7787	0.022	0.066
	82400102		D18			1	Ordered 4	Wurth Electronics	82400102	Volume Production	Mouser	710-82400102	0.85	0.85
	155124M172400	155124M172400 Wl-sfsw SMT Full-color Side View	D19, D20			2	Ordered 8	Wurth Electronics	155124M172400		Digi-Key	732-155124M172400CT-ND	0.58	1.16
	157102512800	157102512800 WL-S7DS 7 Segments Display SMT Single Digit	D51, D52, D53, D54, D55, D56, D57, D58, D59, D510			10	Ordered 14	Wurth Electronics	157102512800		Digi-Key	732-157102512800CT-ND	3.14	31.4
	74279246	WE-CBF SMT EMI Suppression Ferrite Bead, size 1806, 10000hm, 1.5A	FB1, FB2, FB3, FB6, FB7, FB8			6	Ordered 10	Wurth Electronics	74279246		Digi-Key	732-74279246CT-ND	0.3	1.8
	742792907		FB4			1	Ordered 3	Wurth Electronics	742792907	Volume Production	Farnell	2082464	2.18	2.18
	742792311		FB5, FB9, FB14, FB28, FB29			5	Ordered 10	Wurth Electronics	742792311	Volume Production	Digi-Key	732-2366-1-ND	0.18	0.9
	742792651		FB10, FB11, FB15, FB16, FB17, FB18, FB19, FB20, FB21, FB22, FB23, FB24, FB25, FB26, FB27			15	Ordered 20	Wurth Electronics	742792651	Volume Production	Newark	24AC5677	0.103	1.55
	61003621821		J1, J2, J4, J5			4	Ordered 6	Wurth Electronics	61003621821					
	629722000214	Conenctor USB 2.0 Type C Horizontal SMT	J3, J11			2	Ordered 4	Wurth Electronics	629722000214		Farnell	4146212	2.98	5.97
	613002143121		J6, J7			2	NR	Wurth Electronics	613002143121		Newark	99AH1110	0.564	1.13
	613003143121		J8			1	NR	Wurth Electronics	613003143121		Newark	99AH1112	0.393	3.93
	622004218121		J9, J10, J12			3	NR	Wurth Electronics	622004218121		Newark	99AH1190	0.757	7.57
	744383367068	744383367068 Power Inductor, 6.8Uh, Shielded, 5.7A Rohs Compliant: Yes	L1			1	Ordered 4	Wurth Electronics	744383367068		Digi-Key	732-744383367068CT-ND	2.14	2.14
	744232030		L2			1	Ordered 4	Wurth Electronics	744232030	Volume Production	Newark	08F2547	0.828	0.828
	NX804BP050-011C	Nextion 5.5 Inch LCD	LCD1			1	Stock	S&F Fastener	MPM00200012PH	Volume Production				
	ESP32-WROOM-DA	WiFi-Modul 802.11/BT 2, 4-2, 5GHz 150Mb/s, dual antenna	MD1			1	Cart Digikey 3	Espressif Systems	ESP32-WROOM-32E(4MB)					
	7466003	7466003 WP-SMBU RECDUBE Bush, SMT_open	MP1, MP2, MP3, MP4, MP5, MP6, MP7, MP8, MP9			9	Ordered 10	Wurth Electronics	7466003	Volume Production	Farnell	2405984	2.23	22.32
	61300411121		P1, P6			2	NR	Wurth Electronics	61300411121	Volume Production	Digi-Key	732-5317-ND	0.19	0.38
	61003621121		P2, P3, P4, P5			4	Ordered 6	Wurth Electronics	61003621121	Volume Production	Mouser	710-61003621121	6.25	25
	140256145000	140256145000 Optocoupler, Transistor, 80V, Sop-4 Rohs Compliant: Yes	Q1			1	Ordered 4	Wurth Electronics	140256145000		Farnell	3619699	0.31301	0.31301
	UMH3NTN	TRANS 2NPN PREBIAS 0.15W UMT6	Q2			1	Cart Digikey 10	Rohm	UMH3NTN	Volume Production	Mouser	755-UMH3NTN	0.45	0.45
	BSS123-7-F	MOSFET N-CH 100V 170MA SOT23-3	Q3, Q4			2	Cart Digikey 15	Diodes	BSS123-7-F	Volume Production	Farnell	1943725	0.0495	0.24749
	RC0603FR-0709L	RES SMD 0 OHM JUMPER 1/10W 0603	R1, R2, R8, R45, R46			5	Stock	Yageo	RC0603FR-0709L	Volume Production	Newark	92K7761	0.002	0.01
	RK10K122400Y	Res POT 10K Ohm 0.025W (25.4 X 20.7 X 19.3mm) Pin Bracket Mount/Through Hole Tray	R3, R4			2	Cart Mouser	Alps Electric	RK10K122400Y	Volume Production				
	RC0603FR-07470RL	General Purpose Chip Resistor, 470 Ohm, +/- 1%, -55 to 155 degC, 0603 (1608 Metric), RoHS, Tape and Reel	R5, R6			2	Stock	Yageo	RC0603FR-07470RL	Volume Production	Newark	75X0155	0.003	0.006
	Resistor 10k +/-1% 0603 100 mW	Chip Resistor, 10 KOhm, +/- 1%, 01 W, -55 to 155 degC, 0603 (1608 Metric)	R7, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R47, R48, R49, R50			41	Stock	Yageo	RC0603FR-0710KL	Volume Production	Newark	68X3181	0.003	0.123
	RC0603FR-075K1L		R51, R52, R53, R54			4								
	YC164-JR-0710KL	RES ARRAY 4 RES 10K OHM 1206	RN1, RN2, RN3, RN4			4	Cart Digikey 100	Yageo	YC164-JR-0710KL	Volume Production	Digi-Key	YC164J-10KCT-ND	0.1	0.4
	EXB-2HV101JV	RES ARRAY 8 RES 100 OHM 1506	RN5, RN6, RN7, RN8, RN9, RN10, RN11, RN12, RN13, RN14			10	Cart Digikey 25	Panasonic	EXB-2HV101JV	Volume Production	Newark	12AC1258	0.071	0.71
	MX1A-11NW	Switch Key N.O. SPST 0.01A 12/AC 12VDC 0.58N PC Pins 50000000Cycles Thru-Hole	SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8, SW9, SW10, SW11, SW12, SW13, SW14, SW15, SW16, SW17, SW18, SW19, SW20, SW21, SW22, SW23, SW24, SW25, SW26, SW27, SW28, SW29, SW30, SW31, SW32, SW33, SW34, SW35, SW36, SW37, SW38, SW39, SW40, SW41, SW42, SW43, SW44, SW45, SW46, SW47, SW48, SW49, SW50, SW51, SW52, SW53, SW54, SW55, SW56, SW57, SW58, SW59, SW60, SW61, SW62, SW63, SW64, SW65, SW66, SW67, SW68, SW69, SW70			70	Stock	Cherry	MX1A-11NW	Volume Production	Digi-Key	CH160-ND	0.52	36.4
	7499411122A	7499411122A RJ45 Conn, R/A Jack, 8P8C, 1Port, Th Rohs Compliant: Yes	T1			1	Ordered 3	Wurth Electronics	7499411122A		Digi-Key	732-7499411122A-ND	14.77	14.77
	AG5405	PoE Module 802.3at	U1			1	Cart Mouser	STMicroelectronics	T-7805CV-DG	Volume Production	Mouser	511-L7805CV-DG	0.98	0.98
	CD74HC4067M96	IC MUX/DEMUX 1X16 24SOIC	U2, U3, U4, U5			4	Cart Mouser	Texas Instruments	CD74HC4067M96	Volume Production				
	173950336	173950336 WPME-FDSM Fixed Step Down Regulator Module	U6			1	Ordered 3	Wurth Electronics	173950336		Mouser	710-173950336	6.52	6.52
	NUCLEO-F429ZI	STM32F429ZI, mbed-Enabled Development Nucleo-144 STM32F4 ARMÂ® CortexÂ®-M4 MCU 32-Bit Embedded Evaluation Board	U7			1	Stock							
	CP2104-F03-GM	IC SGL USB-TO-UART BRIDGE 24QFN	U8			1	Cart Digikey 3	Silicon Labs	CP2104-F03-GM	Volume Production	Newark	74AC8648	3.36	3.36
	SN74LV1T125DBVR	Single Power Supply, Single BUFFER GATE w/ 3-State Output (active low enable), DBV0005A, LARGE T&R	U9, U10, U22, U24, U25			5	Cart Digikey 15	Texas Instruments	SN74LV1T125DBVR	Volume Production	Arrow Electronics	SN74LV1T125DBVR	0.5289	2.64
	74HC595PW,118	IC SHIFT REGISTER 8BIT 16TSSOP	U11, U13, U14, U15, U16, U17, U18, U19, U20, U21			10	Cart Mouser	Nexperia	74HC595PW,118	Volume Production	Newark	26AC8674	0.128	1.28
	VL53L5CX	VL53L5CX - 8X8 Segment, Light, 3D Time-of-Flight ToF Sensor Evaluation Board	U12			1	Cart Mouser							
	24LC1025-I/SM	1 Mbit, 400kHz, 2.5V, I2C Serial EEPROM, 8-Pin SOIC 208mil, Industrial Temperature	U23			1	Cart Mouser	Microchip	24LC1025-I/SM	Volume Production	Mouser	579-24LC1025-I/SM	3.83	3.83
	PTL3D-15R0-103B1	Linear Trimpot(R) Trimming Potentiometer, 10 KOhm, +/- 10%, 0.5 W, -55 to 125 degC, 3-Pin THD, RoHS, Tube	VR1, VR2			2	Cart Digikey 4	Bourns	3296W-1-103LF	Volume Production	Arrow Electronics	3296W-1-103LF	1.65	3.29
	WS2812B	NeoPixel 5050 RGB LED with Integrated Driver Chip - 10 Pack	W1, W2, W3, W4, W5, W6, W7, W8, W9, W10, W11, W12, W13, W14, W15, W16, W17, W18, W19, W20, W21, W22, W23, W24, W25, W26, W27, W28, W29, W30, W31, W32, W33, W34, W35, W36, W37, W38, W39, W40, W41, W42, W43, W44, W45, W46, W47, W48, W49, W50, W51, W52, W53, W54, W55, W56, W57, W58, W59, W60, W61, W62, W63, W64, W65, W66, W67, W68, W69, W70, W71, W72, W73, W74, W75, W76, W77, W78, W79, W80			80	Stock	Adafruit Industries	1655	Volume Production	Mouser	485-1655	4.5	360