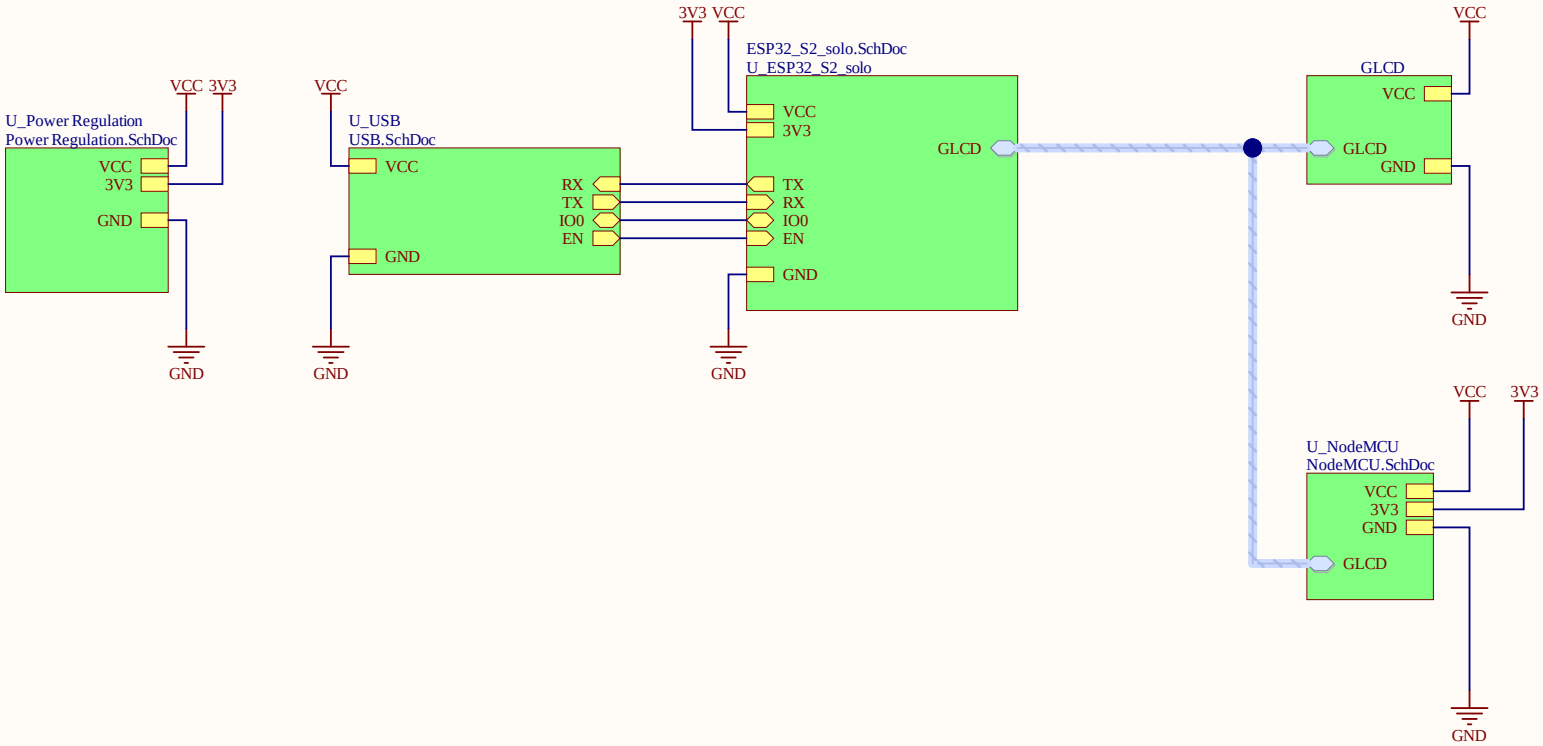
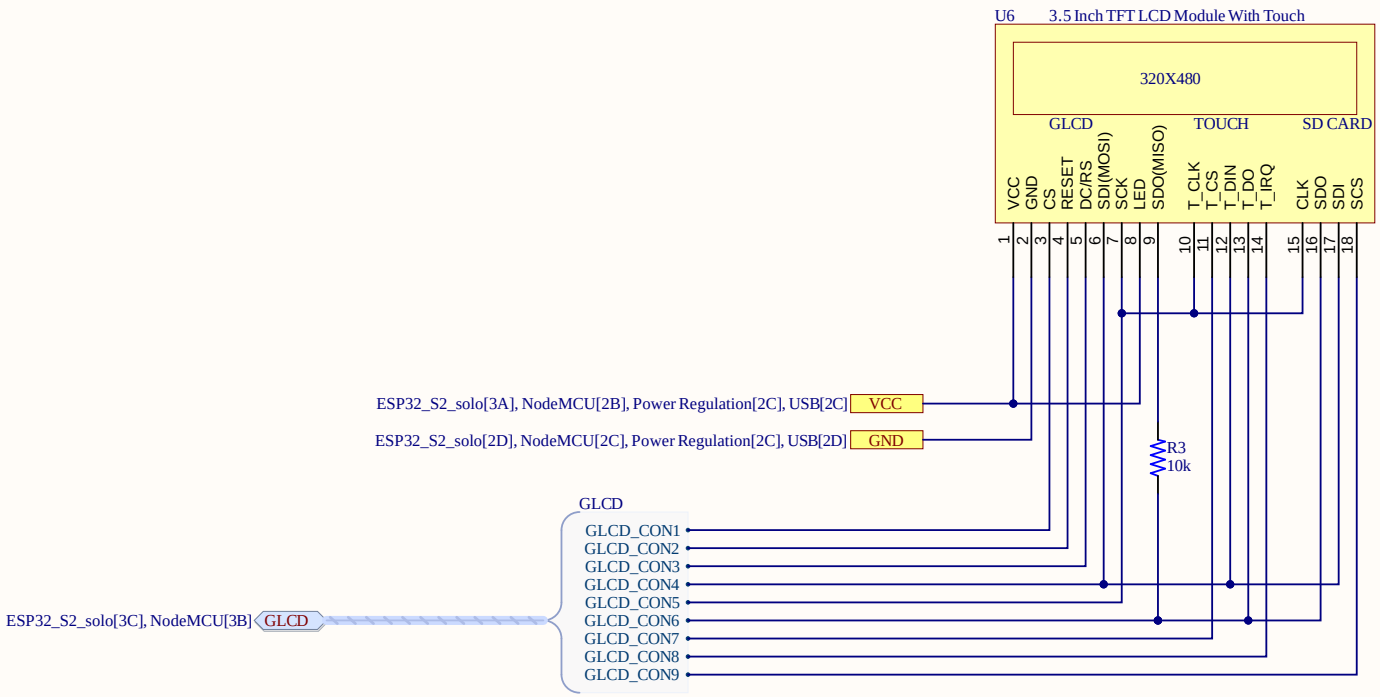
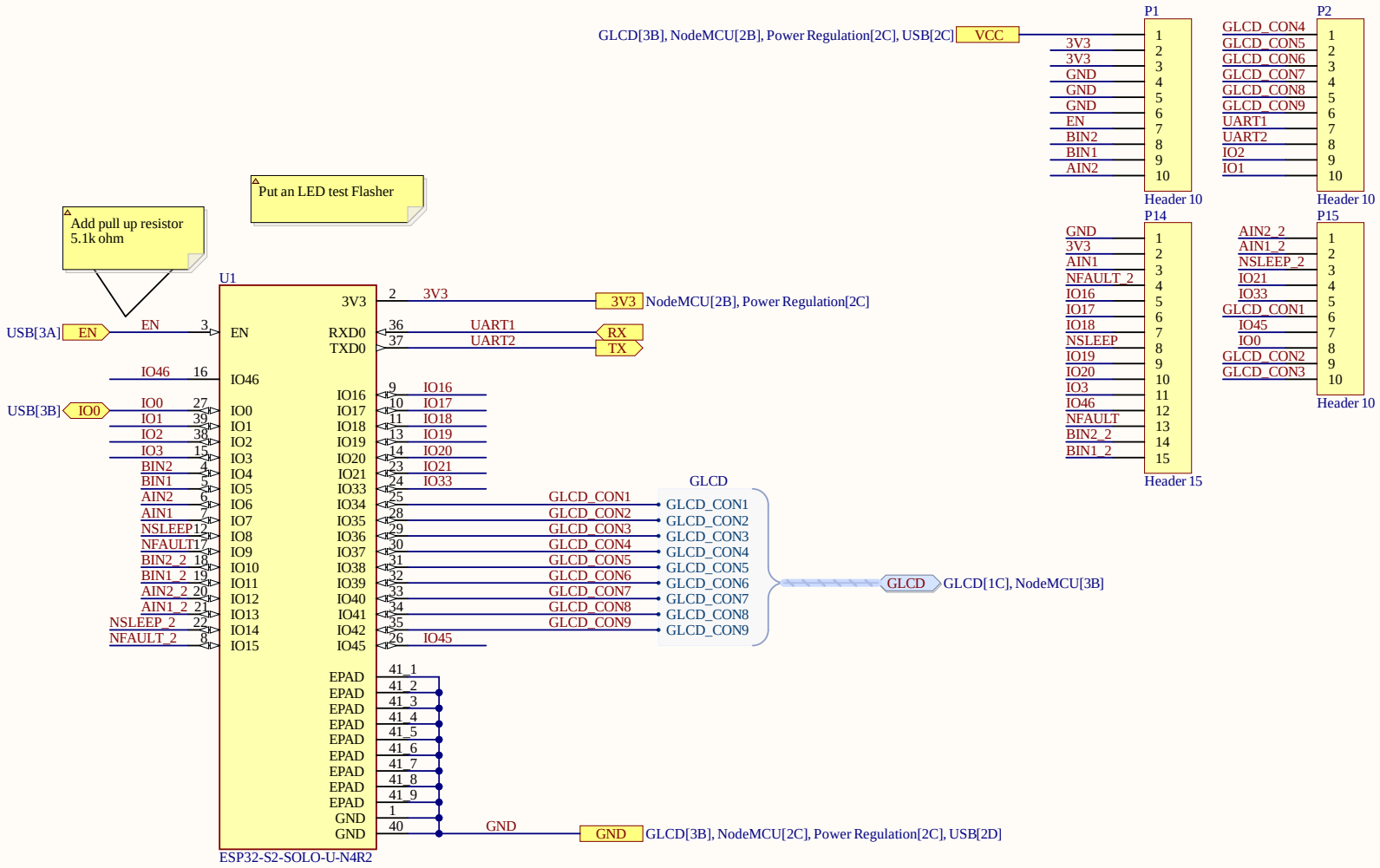


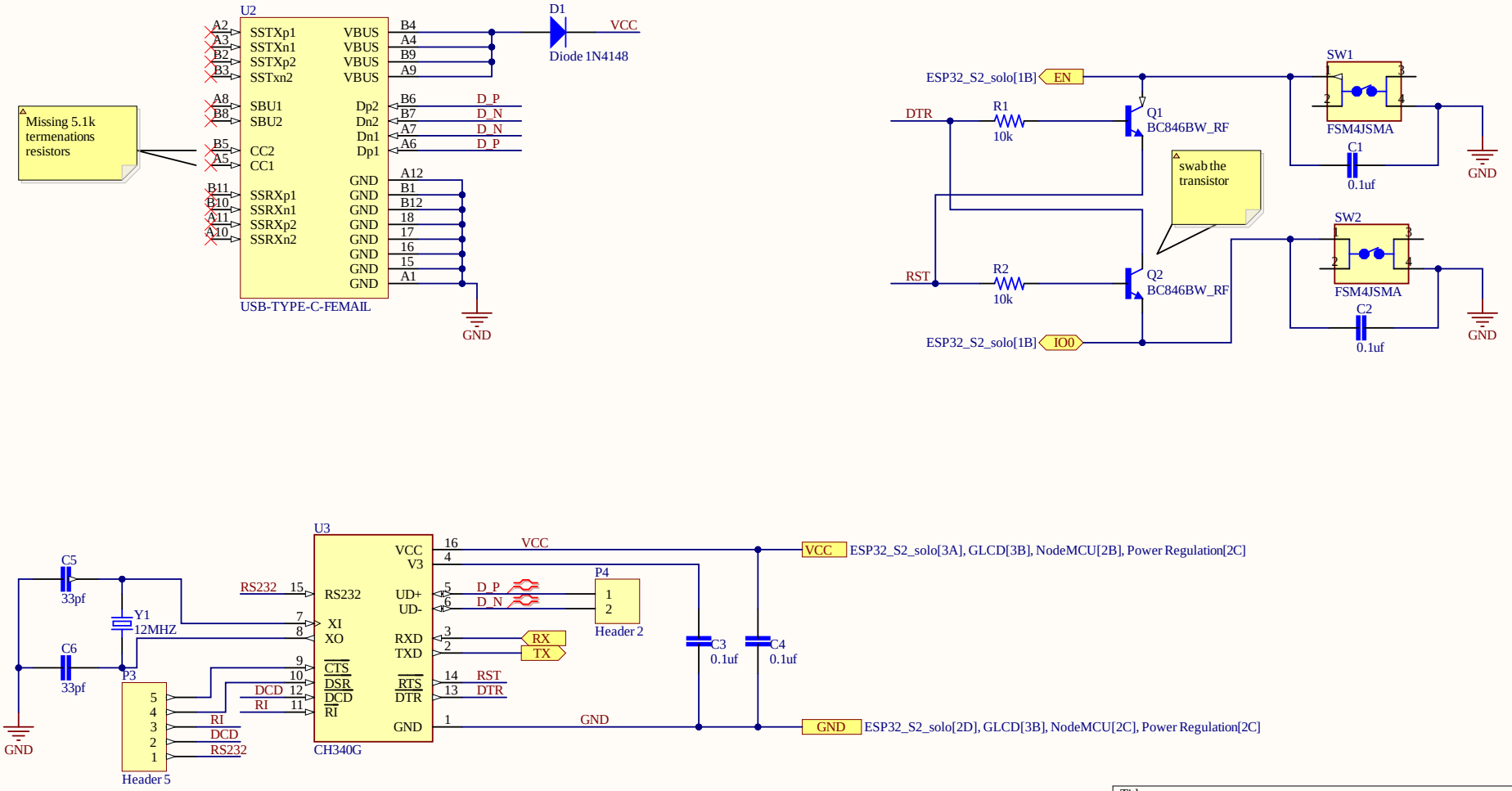
Title	Block diagram		
Size: A4	Number: 1	Revision: V1.0	
Date: 3/23/2024	Sheet of		
File: F:\HID_esp32_s2\..\Block Diagram.SchDoc	Drawn By: Naif Aljophani		



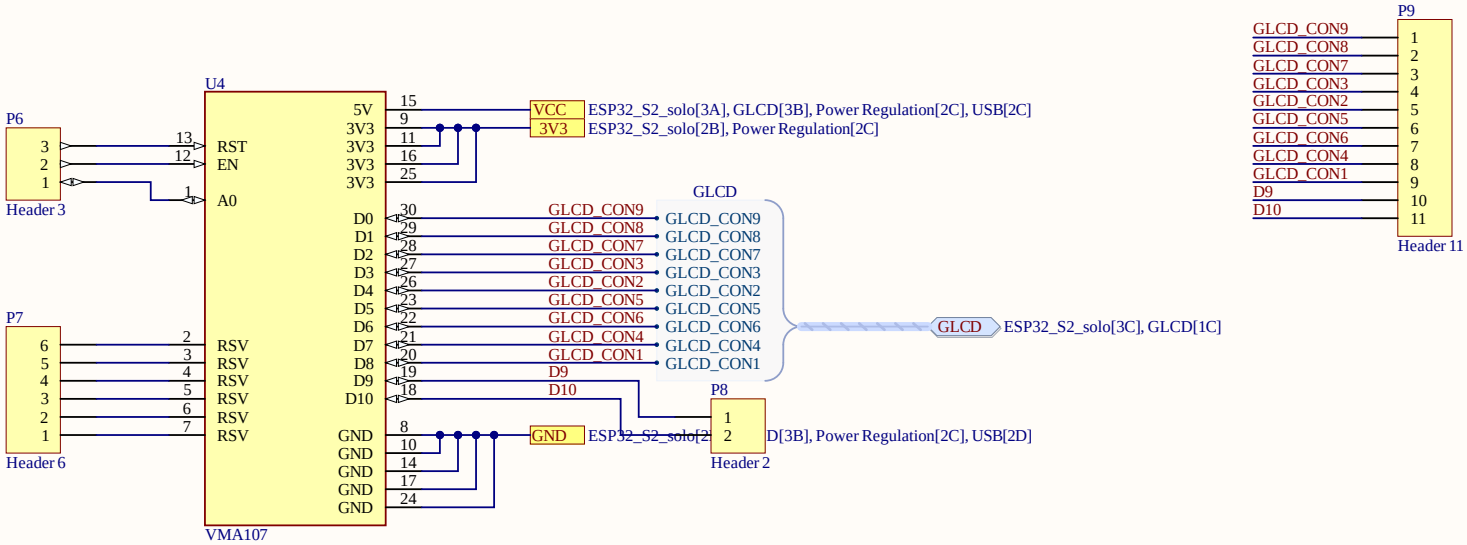
Title	GLCD ILI9488		
Size: A4	Number: 2		Revision: V1.0
Date: 3/23/2024		Sheet of	
File: F:\HID_esp32_s2\..\GLCD.SchDoc		Drawn By: Naif Aljohani	



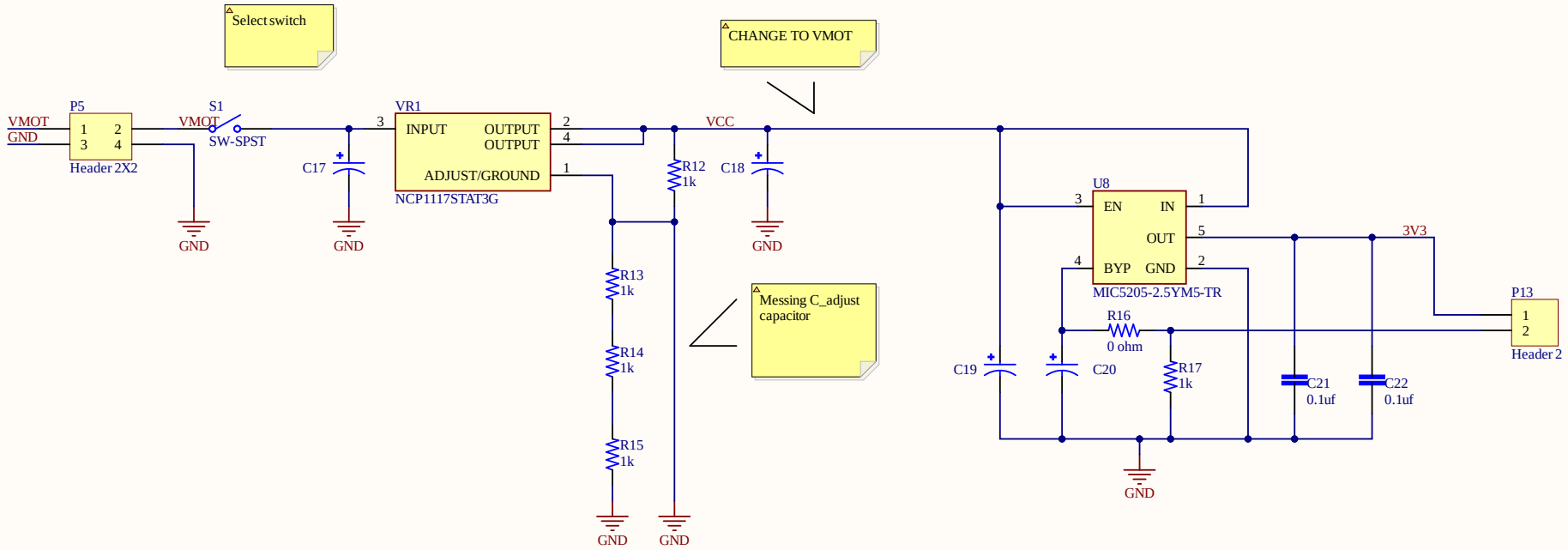
Title	ESP32_S2_solo.SchDoc	
Size: A4	Number: 3	Revision: v1.0
Date: 3/23/2024	Sheet of	
File: F:\HID_esp32_s2\..\ESP32_S2_solo.SchDoc	Drawn By: Naif Aljohani	



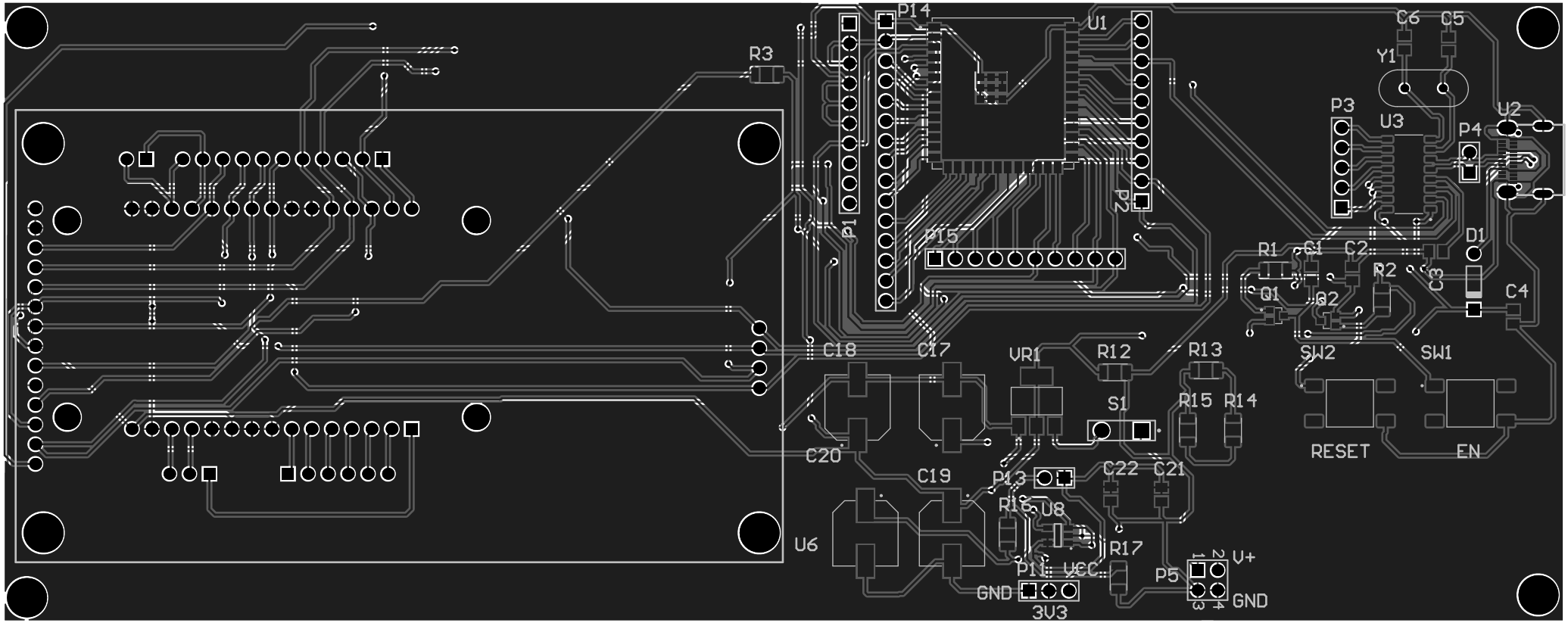
Title	USB.SchDoc		
Size: A4	Number: 4	Revision: v1.0	
Date: 3/23/2024		Sheet of	
File: F:\HID_esp32_s2\..\USB.SchDoc		Drawn By: Naif aljohani	



Title	NodeMCU.SchDoc		
Size: A4	Number: 5	Revision: v1.0	
Date: 3/23/2024		Sheet of	
File: F:\HID_esp32_s2\..\NodeMCU.SchDoc		Drawn By: Naif Aljohani	



Title	Power Regulation.SchDoc	
Size: A4	Number: 6	Revision: v1.0
Date: 3/23/2024	Sheet of	
File: F:\HID_esp32_s2\..\Power Regulation.SchDoc	Drawn By: Naif Aljohani	


P14
U1
C6
C5
Y1
R3
P3
U3
U2
P4
P1
P2
P15
R1
C1
C2
D1
R2
C3
Q1
Q2
C4
C18
C17
VR1
R12
R13
SW2
SW1
S1
R15
R14
RESET
EN
C20
C19
P13
C22
C21
R16
U8
R17
U6
P11
VCC
P5
V+
GND
GND
3V3

Comment	Description	Designator	Footprint	LibRef	Quantity
0.1uf	120PF 100V 10% 0805	C1, C2, C3, C4, C21, C22	CAPC2012X140N	LD051A121KAB2A	6
33pf	120PF 100V 10% 0805	C5, C6	CAPC2012X140N	LD051A121KAB2A	2
EEEHA1V101UP		C17, C18, C19, C20	CAP_EEEHA1V101UP	EEEHA1V101UP	4
Diode 1N4148	High Conductance Fast Diode	D1	DO-35	Diode 1N4148	1
Header 10	Header, 10-Pin	P1, P2, P15	HDR1X10	Header 10	3
Header 5	Header, 5-Pin	P3	HDR1X5	Header 5	1
Header 2	Header, 2-Pin	P4, P8, P13	HDR1X2	Header 2	3
Header 2X2	Header, 2-Pin, Dual row	P5	HDR2X2	Header 2X2	1
Header 3	Header, 3-Pin	P6, P11	HDR1X3	Header 3	2
Header 6	Header, 6-Pin	P7	HDR1X6	Header 6	1
Header 11	Header, 11-Pin	P9	HDR1X11	Header 11	1
Header 15	Header, 15-Pin	P14	HDR1X15	Header 15	1
BC846BW_RF		Q1, Q2	TRANS_BC846BW_RF	BC846BW_RF	2
10k	RL73H 2B R43 1% 10 RL	R1, R2, R3	RESC3115X65N	1-1879462-4	3
1k	RL73H 2B R43 1% 10 RL	R12, R13, R14, R15, R17	RESC3115X65N	1-1879462-4	5
0 ohm	RL73H 2B R43 1% 10 RL	R16	RESC3115X65N	1-1879462-4	1
SW-SPST	Single-Pole, Single-Throw Switch	S1	SPST-2	SW-SPST	1
FSM4JSMA	Switch Tactile OFF (ON) SPST Round Button Gull Wing 0.05A 24VDC 2.6N SMD T/R	SW1, SW2	TE_FSM4JSMA	FSM4JSMA	2
ESP32-S2-SOLO-U-N4R2		U1	XCVR_ESP32-S2-SOLO-U-N4R2	ESP32-S2-SOLO-U-N4R2	1
USB-TYPE-C-FEMAIL		U2	C5156605	USB-TYPE-C-FEMAIL	1
CH340G		U3	SOIC127P600X180-16N	CH340G	1
VMA107	NodeMCU V2 Lua Based ESP8266 Development Board	U4	MODULE_VMA107	VMA107	1
3.5 Inch TFT LCD Module With Touch	3.5 Inch TFT LCD Module With Touch	U6	PCBComponent_1	ILI9488	1
MIC5205-2.5YM5-TR	MIC5205 Series 3 V Fixed Output 150 mA SMT Low-Noise LDO Regulator - SOT-23-5	U8	SOT95P280X145-5N	MIC5205-2.5YM5-TR	1
NCP1117STAT3G	Linear Voltage Regulator IC 1 Output 1A SOT-223	VR1	VREG_NCP1117STAT3G	NCP1117STAT3G	1
12MHZ		Y1	XTAL_ECS-51-S-1	ECS-51-S-1	1