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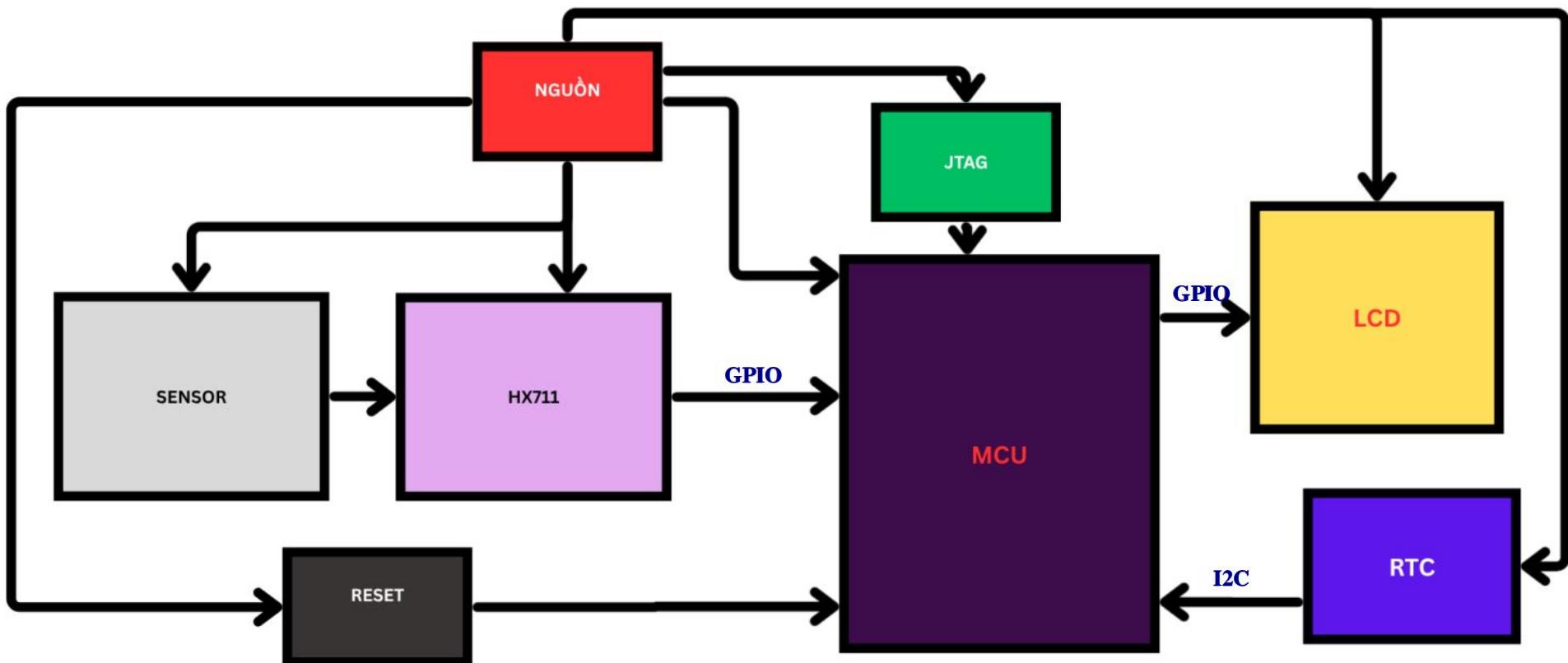
# PROJET: SMART BOTTLE WATER

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## BLOCK DIAGRAM



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A

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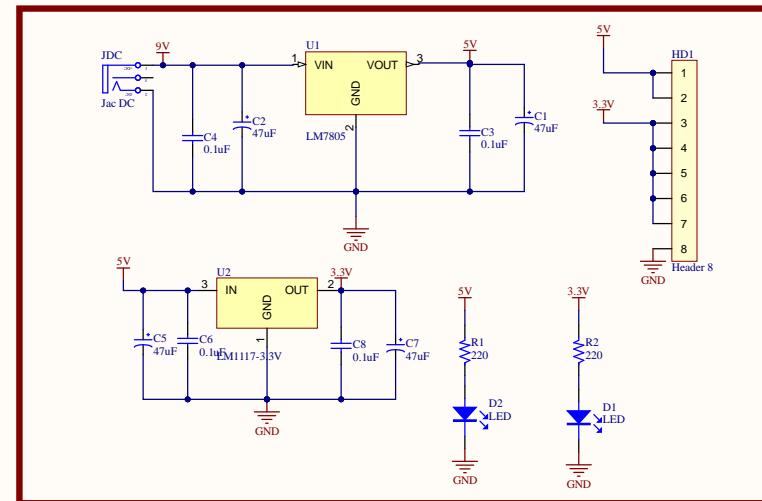
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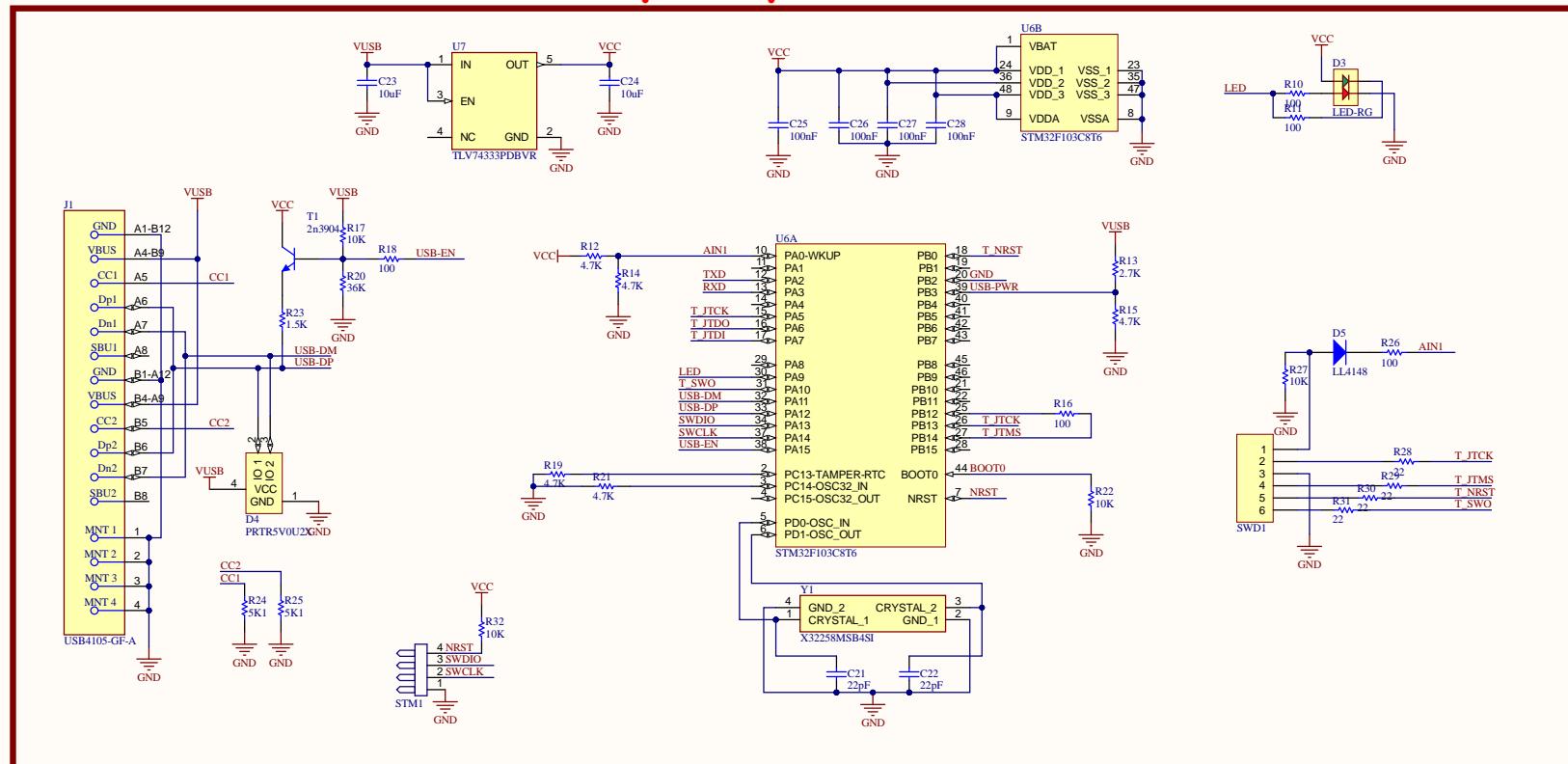
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## POWER



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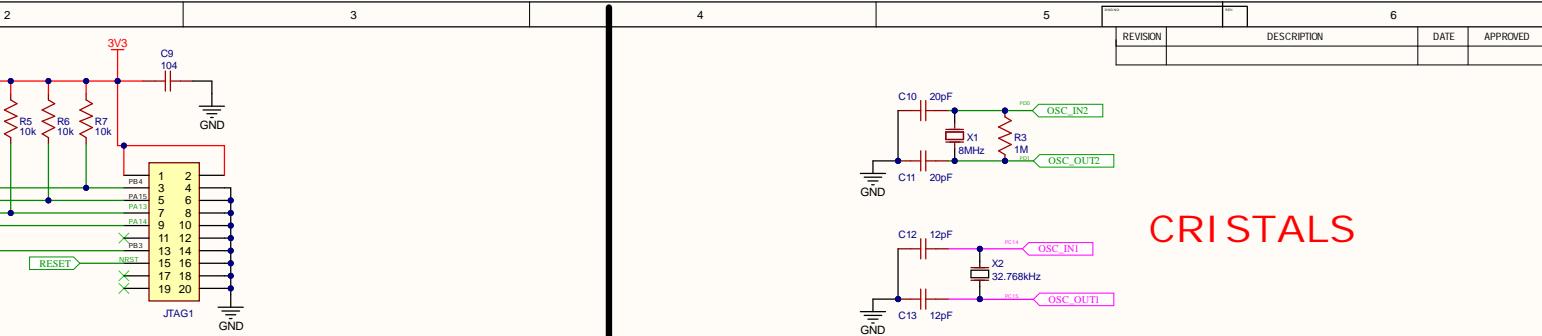
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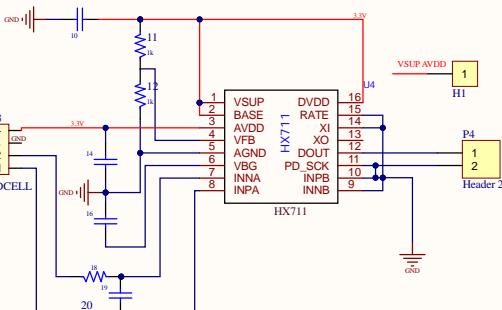
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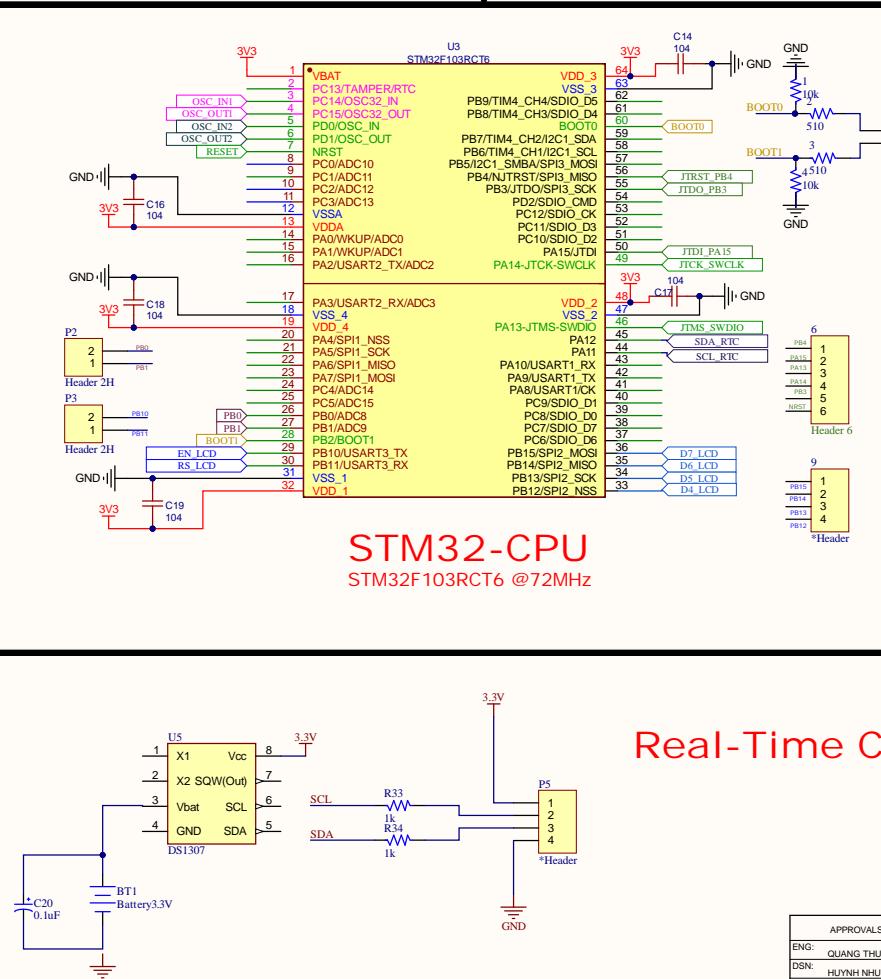
RESET

C

LOADCELL + HX711

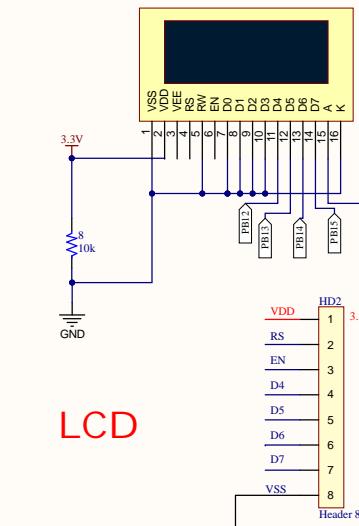


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STM32-CPU  
STM32F103RCT6 @72MHz

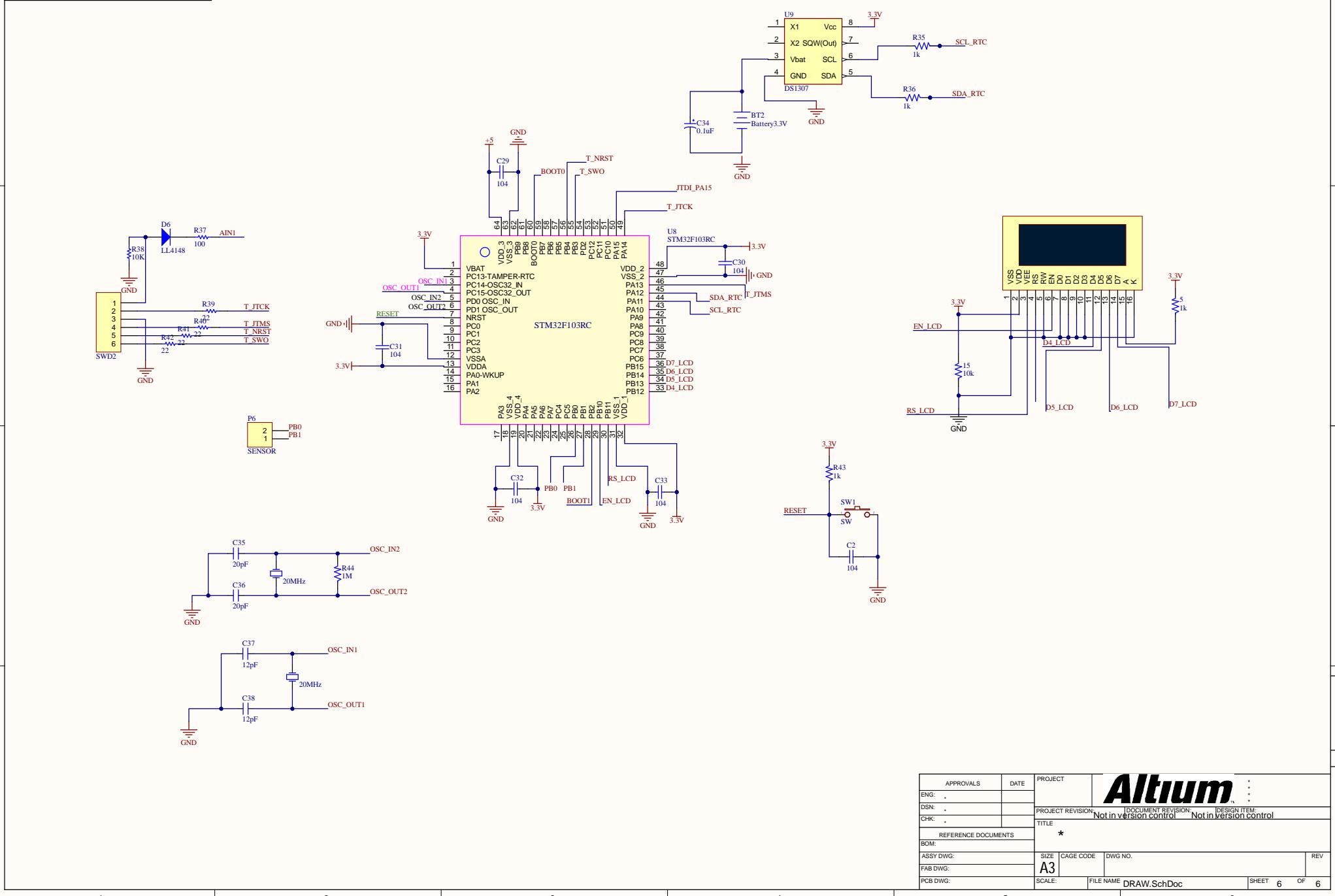
Real-Time Clock

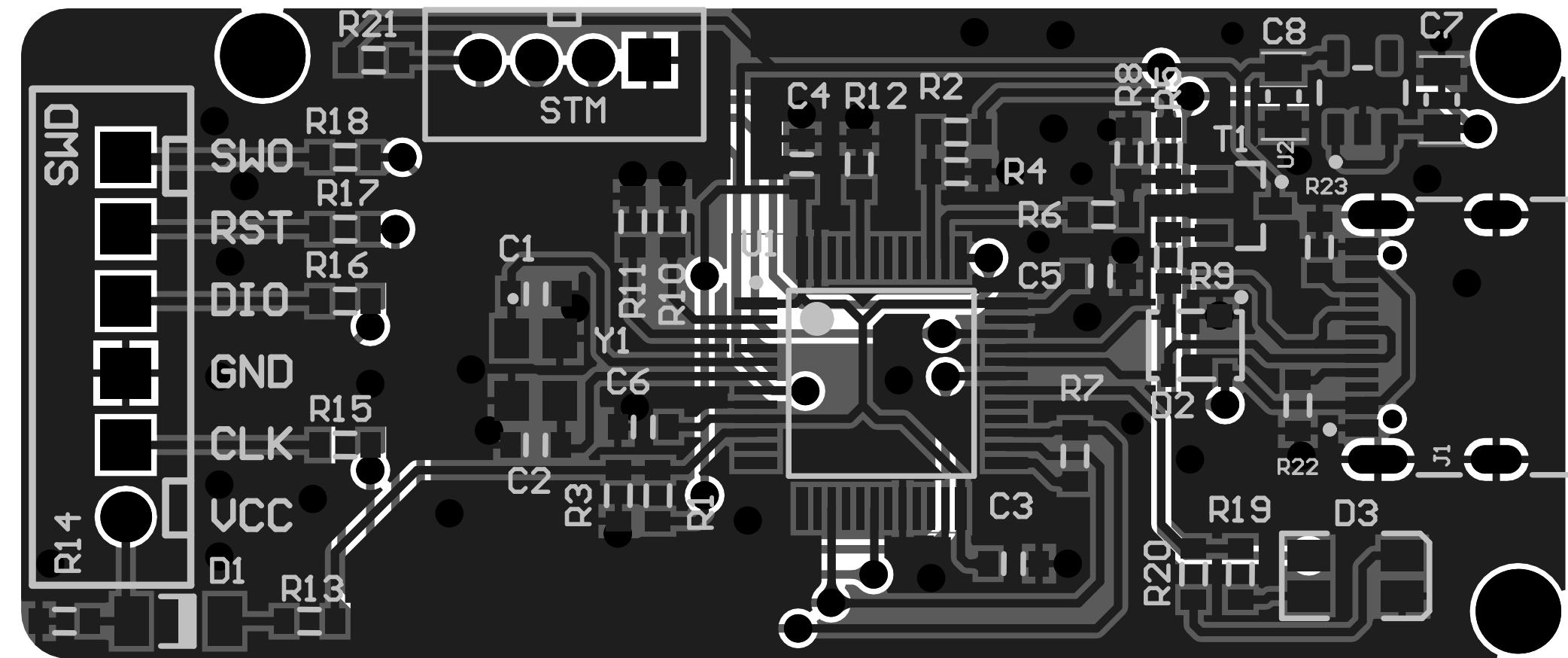


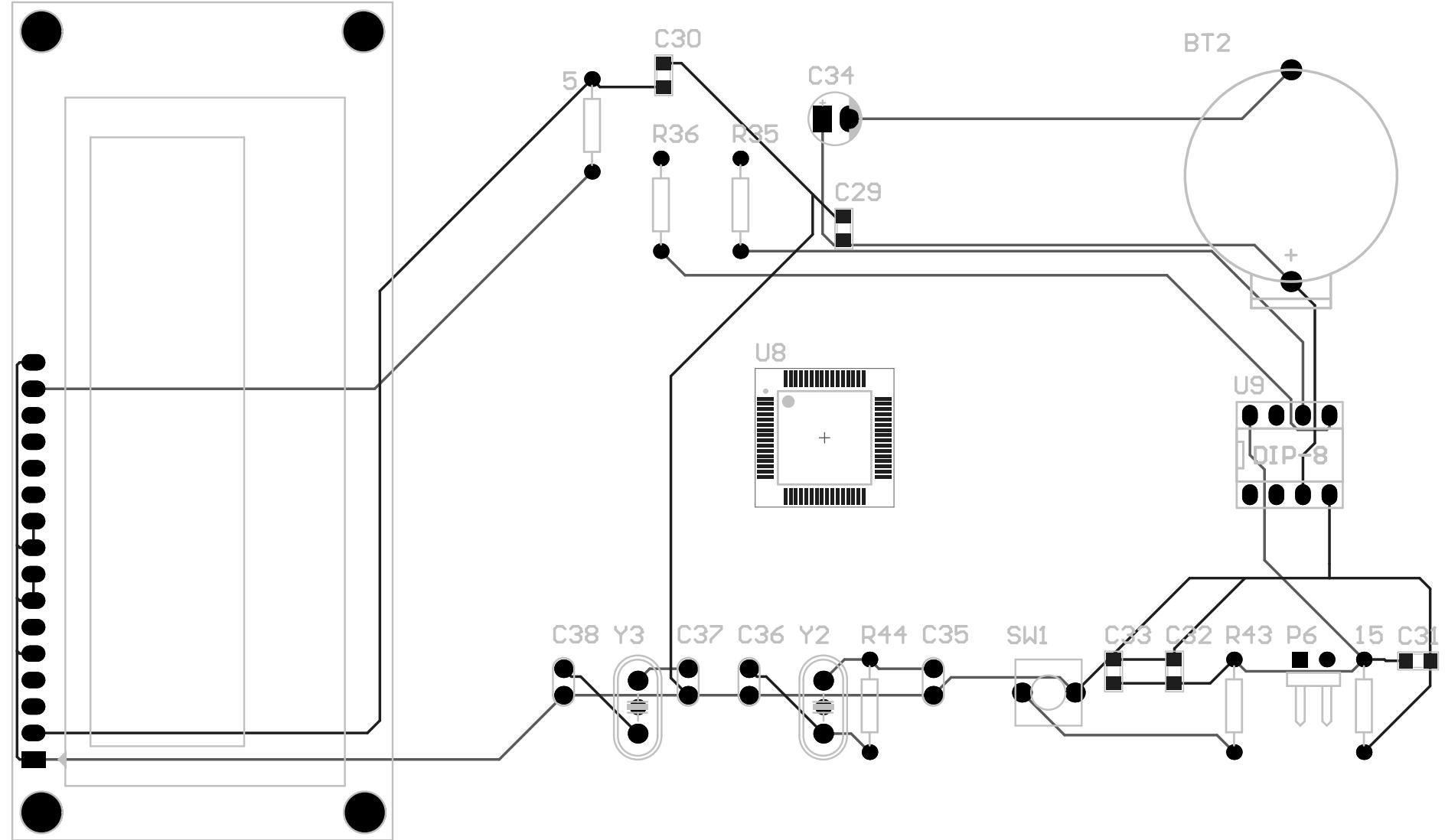
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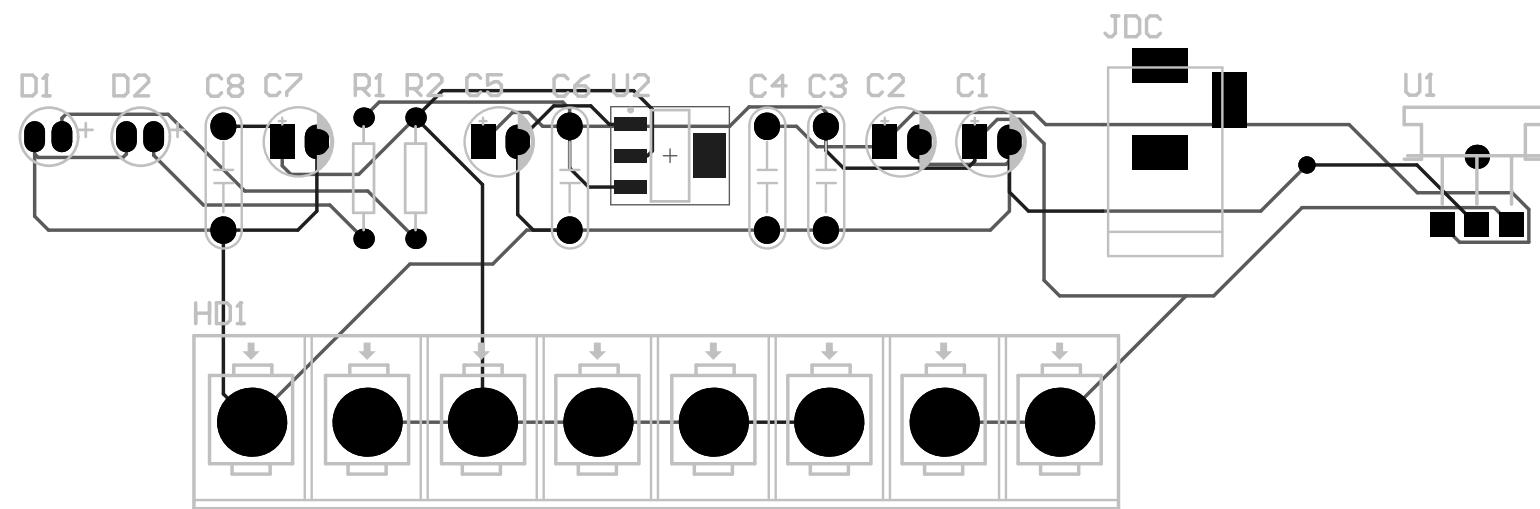
CONNECTER

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Comment	Description	Designator	Footprint	LibRef	Quantity
LCD			LCD16X2	LCD	2
10k	Resistor 1/4W	1, 4, 8, 15	R1/6W	Res	4
510	Resistor 1/4W	2, 3	R1/6W	Res	2
1k	Resistor 1/4W	5, 7, 11, 12, R33, R34 R35, R36, R43	R1/6W	Res	9
Header 6	Header, 6-Pin	6	HDR1X6	Header 6	1
*Header	Header, 4-Pin, Right Angle	9, P5	HDR1X4	Header 4	2
	Capacitor	10, 14, 16, 19	R1206	CAP	4
LOADCELL	JF4 PIN	13	JF4	JF4	1
100	Resistor 1/4W	18	R1/6W	Res	1
	Resistor 1/4W	20	R1/6W	Res	1
Battery3.3V	Multicell Battery	BT1, BT2	CR2032 Holder	Battery3.3V	2
47uf	Cap P 0.1uf < 22uf , 16 - 50V	C1, C2, C5, C7	CP1/2	CP1	4
	Capacitor (Semiconductor SIM Model)	C2	CAP104	Cap 104	1
0.1uF	Capacitor (Semiconductor SIM Model)	C3, C4, C6, C8	CN3	CAP 102 2KV	4
104		C9, C14, C15, C16, C17, C18, C19	C0603	104	7
20pF		C10, C11	C0603	20pF	2
12pF		C12, C13	C0603	12pF	2
0.1uF	Cap P 0.1uf < 22uf , 16 - 50V	C20, C34	CP1/2	CP1	2
22pF	Capacitor	C21, C22	C603	Cap	2
10uf	Capacitor	C23, C24	C805	Cap	2
100nF	Capacitor	C25, C26, C27, C28	C603	Cap	4
104	Capacitor (Semiconductor SIM Model)	C29, C30, C31, C32, C33	0805	Cap 104_SMD	5
20pF	Cap np 1pF - 472pF	C35, C36	CN1	CN1	2
12pF	Cap np 1pF - 472pF	C37, C38	CN1	CN1	2
LED		D1, D2	CAP10UF	LED	2
LED-RG		D3	LED-1210	LED-RG-4	1
PRTR5V0U2X	Ultra low capacitance double rail-to-rail ESD protection diode	D4	SOT-143B	PRTR5V0U2X	1
LL4148		D5, D6	SOD-80	LL4148	2
Header 1	Header, 1-Pin, Right Angle	H1	HLAD1	Header 1	1
Header 8	Header 8 VIT Broad	HD1, HD2	HED8V	Header 8	2
USB4105-GF-A	CONN RCPT USB2.0 TYPEC SA	J1	FP-USB4105-GF-A-MFG	CMP-245163-000001	1
Jac DC	Jac DC Input	JDC	DC-IN	DCIN	1
		JTAG1	JTAG	Header 10X2	1
Header 2H	Header, 2-Pin, Right Angle	P1, P2, P3, P4	HDR1X2H	Header 2H	4
SENSOR	Header, 2-Pin, Right Angle	P6	HDR1X2H	Header 2H	1
220	Resistor 1/4W	R1, R2	R1/6W	Res	2
1M		R3	R0603	1M	1
10k	[NoValue], Resistor	R4, R5, R6, R7, R8, R9, R17, R22, R27, R32, R38	R0603	10k, Resistor	11
100	Resistor	R10, R11, R16, R18, R26, R37	R0603	Resistor	6
4.7K	Resistor	R12, R14, R15, R19, R21	R0603	Resistor	5
2.7K	Resistor	R13	R0603	Resistor	1
36K	Resistor	R20	R0603	Resistor	1
1.5K	Resistor	R23	R0603	Resistor	1
5K1	Resistor	R24, R25	R0603	Resistor	2
22	Resistor	R28, R29, R30, R31, R39, R40, R41, R42	R0603	Resistor	8
1M	Resistor 1/4W	R44	R1/6W	Res	1
K2-3.6x6.1_SMD		RESET1	KEY-SMD_L6.0-W3.5-LSB.0	K2-3.6x6.1_SMD	1
PHDR 4	PinHeader	STM1	PH-4	PHDR 4	1
SW	Switch button 2 pin	SW1	SW2	SW2	1
CONN-6		SWD1, SWD2	XH-6	CONN-6	2
2n3904		T1	SOT-23-3	2n3904	1
LM7805	TO-220	U1	TO-220	LM7805	1
LM1117-3.3V	800mA Low-Dropout Linear Regulator	U2	SOT223-4N	LM1117	1
STM32F103RCT6		U3	STM32F103RCT6	STM32F103RCT6	1
		U4	SOP-16_1.10.0-W3.9-P1.27-L5.0-BL	HX711	1
DS1307	64 X8 Serial Real-Time Clock	U5, U9	DIP 100/8/W/300/L.4	DS1307	2
STM32F103C8T6	ARM Cortex-M3 32-bit MCU, 64 KB Flash, 20 KB Internal RAM, 37 I/Os, 48-pin LQFP, 40 to 85 degC, Tray	U6	LOFP-48	STM32F103C8T6	1
TLV74333PDBV	IC REG LINEAR 3.3V 300mA SOT23.5	U7	FP-DBV0005A-MFG	CMP-04917-000051	1
STM32F103RC	Performance line, ARM-based 32-bit MCU with up to 512 KB Flash, USB, CAN, 11 timers, 3 ADCs and 13 communication interfaces	U8	STM32F103RC_TSOP	STM32F103RC	1
8MHz		X1	HC-49SMD	8MHz	3
32.768kHz		X2	CRYSTAL_TH_BD3.1-L8.0-P2.00-1	32.768kHz	1
X32258MSB4SI	Crystal or Oscillator	Y1	SMD3225_4P12288M HZ12PF10PPM4085	3225_4P_12.288MHz 40+-85	1
20MHz	Crystal Oscillator	Y2, Y3	XT2	Crystal	2