

Circuit board label	Library name	Package	Device parameters	Quantity	Remarks
C1, C2, C4, C6, C7, C8, C9, C10	Capacitor	C0603	0.1uF	10	
C3	Electrolyte	CASE-B(3528-21)	100uF/6.3V	1	
C5, C11, C16, C18, C19, C20	Capacitor	C0603	1000pF	6	
C13	Capacitor	C0603	10uF	1	
C14, C15	Cap Semi	C0603	1uF	2	
CIN	SIP-5	PH-5B		1	
COUT	SIP-7	PH-7B		1	
D1	LED	LED-0603-GRE		1	
D2	Diode	SOD323	IN4148	1	
D3	Diode	SMA	FR107	1	
D6	LED	LED-0603-RED		1	
D7	Diode Zener	SMB	10V	1	
FAN	SIP-2	XH-2B		1	
K1, K2	Rotary encoder	EC11	EC11	2	Rotary Encoder EC11, code pulse 20 bits, with switch
OLED, OLED2	HTDS-96-II	HTDS-96-II		2	0.96" 128X64 OLED (SSD1306 I2C basic can be used) 1.3" 128X64 OLED (SH1106 I2C basic can be used)
OUT	SIP-6	XH-6B		1	
POWER	SIP-4	XH-4B		1	
PWR	SIP-2	PH-2B		1	
Q1	TPC8107	SOP8		1	
Q2	BAV99	SOT23		1	
Q3, Q4	SI2308	SOT23	SI2308	2	

R1, R10, R11	Res Pack4	RCA0603-S	4.7K	3	
R2, R3, R17, R18, R21	Resistor	RES0603	4.7K/1%	5	
R4, R12	Resistor	RES0603	10	2	
R5	Resistor	RES0603	249K/1%	1	
R6	Resistor	RES0603	4.7K	1	
R7, R9, R20	Resistor	RES0603	1K/1%	3	
R8	Resistor	RES0603	10K/1%	1	
R13, R14, R15	Res Pack4	RCA0603-S	4.7K/1%	3	
R16	Resistor	RES0603	402/1%	1	
R19	Resistor	RES0603	110K/1%	1	
SWD, UART	SIP-4	PH-4B		2	
U1	STM32F103CBT6	LQFP48	STM32F103CBT6	1	
U2	SPX2954	SOT223	SPX2954AM3-3.3	1	
U3, U6	SGM8551XN	SOT-23-5	SGM8551XN	2	
U4	AT24C32	SOP8	AT24C32C	1	Code activation
U5	Bell	BELL-9X5.5		1	Active buzzer 3.3V package 9 * 5.5mm. The operating current should be less than 30mA.
Y2	Crystal	XTAL-2X6	32.768	1	Because STM32 RTC module on the crystal requirements, requiring a load capacitance of 6pF 32.768kHz crystal, the general crystal are 12pF load capacitance, with the use may be unstable, or simply can not start vibration.