Designator	Quantity	Value	Detailed_nominal	Footprint
BQ1	1	8.0 MHz		Quartz_SMD_2pin
C1, C6, C12, C13, C17, C18, C19, C22, C23, C24, C25, C26, C34, C35, C36, C50	16	100nF	0603-100nF-X7R-16V±10%	0603_CAP_0.9_CL10A
C2, C9, C32	3	4.7nF	0603-4.7nF-X7R-50V±10%	0603_CAP_0.9_CL10A
C3, C4, C52	3	1000uF	SMD-D-1000uF-10V±20%	CAP-D
C5	1	33nF	0603-33nF-X7R-50V±10%	0603_CAP_0.9_CL10A
C7	1	22pF	0603-22pF-NP0-50V±5%	0603_CAP_0.9_CL10A
C8	1	4.7uF	0603-X5R-4.7uF-6.3V±10%	0603_CAP_0.9_CL10A
C10, C11	2	15pF	0402-NP0-15pF-10V±10%	0402_C_0.55_CL05B
C14, C33	2	470uF	SMD-D-470uF-16V±20%	CAP-D
C15, C20, C30, C31	4	1uF	0603-X7R-1uF-6.3V±10%	0603_CAP_0.9_CL10A
C16, C21, C27, C28, C29, C37, C51	7	10uF	1206-10uF-X7R-25V±10%	1206_C_1.8_CL31B
C53, C54	2	0.68uF	0603-X7R-0.68uF-10V±10%	0603
D10, D11	2	BZX384-C5V1		0402
DD1	1	PCF8574		SOIC127P1030X265-16N
HL8	1	GNL-0603GC		0603
HL9	1	KT-SMD0603-R		1206
P1	1	BOOT		3pin(2.54mm)
Q1	1	IRF7105		SO-8_N
Q2, Q3, Q4, Q5	4	BC846B		SOT-416
Q6	1	BC817-40		SOT-416
Q201	1	2N7002		SOT23
R1, R4, R13	3	2k	0603-2k±1%-1/16W	0603_R
R2	1	10R*	9x3.2x12.7-10R±5%-2W	R_THT_2W_9x3.2x12.7
R3, R15, R33, R34, R36, R37, R41, R53, R54, R55, R58, R59	12	100R	0603-100R±1%-1/10W	0603_R
R5, R9, R12	3	100k	0603-100k±1%-1/16W	0603_R
R6, R44	2	1.2k	0603-1.2k±1%-1/16W	0603_R
R7, R42	2	1R	1206-1R±1%-1/4W	1206_R
R8, R14, R16, R18, R19, R28, R29, R46, R47	9	10k	0603-10k±1%-1/16W	0603_R
R10, R11, R17, R24, R25, R30, R35, R45, R50, R51, R52	11	1k	0603-1k±1%-1/8W	0603_R
R20	1	18k	0603-18k±1%-1/8W	0603_R
R21	1	3.3k	0603-3.3k±1%-1/8W	0603_R
R22, R23	2	4.7k	0603-4.7k±1%-1/8W	0603_R
R26	1	0R*	1206-0R-1/4W	1206_R
R27	1	10k-contrast	0603-10k±1%-1/16W	0603_R
R31, R43	2	100R	1206-100R±1%-1/4W	1206_R
R32	1	33k	0603-33k±1%-1/8W	0603_R

Designator	Quantity	Value	Detailed_nominal	Footprint
R38, R39	2	2R	1206-2R±1%-1/4W	1206_R
R40	1	1k*	0603-1k±1%-1/8W	0603_R
R48	1	240k	0603-240k±1%-1/8W	0603_R
R49	1	470k	0603-470k±1%-1/8W	0603_R
R56, R57	2	200R	0603-200R±5%-1/10W	0603_R
R60	1	0R	0603-0R-1/10W	0603_R
R61	1	0R*	0603-0R-1/10W	0603_R
U1	1	MCP6022-I/SN		SOIC-SN8_N
U2	1	STM32F100C8T6B		LQFP48_N
U3, U5	2	LD1117S33TR		SOT-223_N
U4	1	AT24C08BN		8S1_N
U7	1	MC34119D		751-03_N
U8, U9	2	LD1117S50CTR		SOT-223_N
VD1, VD4, VD5, VD6, VD16	5	LL4148		SOD-123FL
VD2, VD3	2	ES2J		SOD-123FL
VD7	1	PMEG4010BEA		SOD-123FL
VD8, VD10	2	GNL-5013UWC/60		LED_DIP_5mm
VD9, VD11	2	GNL-5013UBW-D		LED_DIP_5mm
VD12, VD15	2	GNL-5013PGW-D		0603
VD13, VD14	2	GNL-5013UEW-D		1206
X1	1	SWD		4pin(2.54mm)
X2	1	UART		4pin(2.54mm)
X3	1	BUTTONS		7pin(2.54mm)
X4, X5, X6, X7, X10	5			2pin(2.54mm)
X8	1	LCD		16pin(2.54mm)
XP1	1	Motor		2pin(2.54mm)