Designator	Quan tity	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	0402-X7R-100nF-10V±10%	0402
C2, C9, C32	3	4.7nF	0402-X7R(NP0)-4.7nF-10V±10%	0402
C3, C4, C52	3	1000uF	SMD-D-1000uF-10V±20%	CAP-D
C5	1	33nF	0402-X7R(NP0)-33nF-10V±10%	0402
C7	1	22pF	0402-NP0-22pF-10V±10%	0402
C8	1	4.7uF	0603-X5R-4.7uF-6.3V±10%	0603
C10, C11	2	15pF	0402-NP0-15pF-10V±10%	0402
C14, C33	2	470uF	SMD-D-470uF-16V±20%	CAP-D
C15, C20, C30, C31	4	1uF	0603-X7R-1uF-6.3V±10%	0603
C16, C21, C27, C28, C29, C37, C51	7	10uF	0603-X5R-10uF-6.3V±10%	0603
C53, C54	2	0.68uF	0603-X7R-0.68uF-10V±10%	0603
D10, D11	2	BZX384-C5V1		SOD-323
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-23
Q6	1	BC817-40		
Q201	1	2N7002		SOT23
R1, R4, R13	3	2k	0402-2k±5%-1/16W	0402
R2	1	10 ohmx2watt		Resistor MLT-2
R3, R33, R34, R36, R37	5	100R	0402-100R±5%-1/16W	0402
R5, R9, R12	3	100k	0402-100k±5%-1/16W	0402
R6, R44	2	1.2k	0402-1.2k±5%-1/16W	0402
R7, R42	2	1R	1206-1R±1%-1/4W	1206
R8, R14, R16, R18, R19, R28, R29, R46, R47	9	10k	0402-10k±5%-1/16W	0402
R10, R11, R17, R24, R25, R30, R35, R45, R50, R51, R52	11	1k	0402-1k±5%-1/16W	0402
R15	1	(0-390)R	0402-(0-390)R±5%-1/16W	0402
R20	1	18k	0402-18k±1%-1/16W	0402
R21	1	3.3k	0402-3.3k±1%-1/16W	0402
R22, R23	2	4.7k	0402-4.7k±5%-1/16W	0402
R26	1	0R*	1206-0R-1/4W	1206
R27	1	10k-contrast	***0402-10k±5%-1/16W	0402
R31, R43	2	100R	1206-100R±5%-1/4W	1206
R32	1	33k	0402-33k±5%-1/16W	0402
R38, R39	2	2R	1206-2R±1%-1/4W	1206
R40	1	1k*	0402-1k±5%-1/16W	0402
R41, R53, R54, R55, R58, R59	6	100R	0603-100R±5%-1/10W	0603
R48	1	240k	0402-240k±5%-1/16W	0402
R49	1	470k	0402-470k±5%-1/16W	0402
R56, R57	2	200R	0603-200R±5%-1/10W	0603
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		MiniMELF
				DO-

U8, U9	2	LD1117S50CTR	SOT-223_N
VD1, VD4, VD5, VD6, VD16	5	LL4148	MiniMELF
VD2, VD3	2	ES2J	DO-214AA(SMB)
VD7	1	PMEG4010BEA	SOD-323
VD8, VD10	2	GNL-5013UWC/60	LED_DIP_5mm
VD9, VD11	2	GNL-5013UBW-D	LED_DIP_5mm
VD12, VD15	2	GNL-5013PGW-D	LED_DIP_5mm
VD13, VD14	2	GNL-5013UEW-D	LED_DIP_5mm
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)