





Comment	Description	Designator	Footprint	LibRef	Quantity
100nF	Ceramic Chip Capacitor - Standard	C1, C14, C18, C19, C22, C26, C28, C29	0603	C0603	8
1nF	Ceramic Chip Capacitor - Standard	C2	0603	C0603	1
1uF	Ceramic Chip Capacitor - Standard	C3, C30	0603	C0603	2
22pF	Ceramic Chip Capacitor - Standard	C4, C11	0603	C0603	2
220pF	Ceramic Chip Capacitor - Standard	C5, C8	0603	C0603	2
NF	Ceramic Chip Capacitor - Standard	C6, C9	0603	C0603	2
100pF	Ceramic Chip Capacitor - Standard	C7, C10	0603	C0603	2
15pF	Ceramic Chip Capacitor - Standard	C12, C13	0603	C0603	2
10uF	Ceramic Chip Capacitor - Standard	C21, C23, C24, C25, C27	0805	C0805	9
10nF	Ceramic Chip Capacitor - Standard	C31	0603	C0603	1
1N4148	Schottky Barrier Diode	D1	SOD323	1PS76SB10	1
LED_1		D2	LED 3mm	LED 3mm	1
LED_2		D3	LED 3mm	LED 3mm	1
ZD6V8	Zener Voltage Regulator, 500 mW, Pin SOD-123, Pb-Free, Tape and Reel	D4	ONSC-SOD-123-2-425-04_V	SZMMSZ6V8T1G	1
560nH	SMD EMI Suppressor Ferrite Bead WE-CBB Z = 100 Ohm	L1, L2	SMD-0805	74279207	2
74279207	SMD EMI Suppressor Ferrite Bead WE-CBB Z = 100 Ohm	L3	SMD-0805	74279207	1
uC	Header, 4-Pin	P1	HDR1X4	Header 4	1
MFRC	Header, 4-Pin	P2	HDR1X4	Header 4	1
ICSP	ICSP connection pad	P3	ICSP	ICSP	1
CON1	Header, 5-Pin	P4	HDR1X5	Header 5	1
MMBT2222	NPN General-purpose Transistor	Q1, Q2	SOT23_N	BC817	2
1K8	Low Ohmic Value Thick Film Chip Resistor, 0.1 Ohm to 0.2 Ohm Range, 1%, 2% and 5% Tolerance 0603 Size, 0.1 W	R1, R3	ERA-0603	ERJ3RS	2
10K	Low Ohmic Value Thick Film Chip Resistor, 0.1 Ohm to 0.2 Ohm Range, 1%, 2% and 5% Tolerance 0603 Size, 0.1 W	R2	ERA-0603	ERJ3RS	1
1R8	Low Ohmic Value Thick Film Chip Resistor, 0.1 Ohm to 0.2 Ohm Range, 1%, 2% and 5% Tolerance 0603 Size, 0.1 W	R4, R5	ERA-0603	ERJ3RS	2
120R	Low Ohmic Value Thick Film Chip Resistor, 0.1 Ohm to 0.2 Ohm Range, 1%, 2% and 5% Tolerance 0603 Size, 0.1 W	R6, R7, R8	ERA-0603	ERJ3RS	3
1K	Low Ohmic Value Thick Film Chip Resistor, 0.1 Ohm to 0.2 Ohm Range, 1%, 2% and 5% Tolerance 0603 Size, 0.1 W	R9	ERA-0603	ERJ3RS	1
MFRC522	MIFARE reader/writer	U1	QFN32	MFRC522	1
PC817	4-Pin Phototransistor Optocoupler	U2	SOP4	PC817 optocoupler	1
STM32F030F4P6	ARM Cortex-M0 32-bit MCU, 16 KB Flash, 4 KB Internal RAM, 1 I/Os, 20-pin TSSOP, 40 to 85 degC, Tube	U3	STM-TSSOP20_N	STM32F030F4P6	1
AMS1117-3.3	1A, Low Drop Positive Voltage Regulator, 3.3V, 4-Pin SOT-223, Tape and Reel	U4	SOT-223_N	LD1117AS33TR	1
27.12 MHz	Surface Mount Quartz	Y1	HC49/4H_SMX	HC49/4H_SMX	1