



Comment	Description	Designator	Footprint	LibRef	Quantity
100nF	Capacitor (Semiconductor SIM Model)	C1, C13	SMD-0603	Cap Semi	2
100nF	Capacitor (Semiconductor SIM Model)	C2, C4, C5, C17, C22, C23, C25, C27, C29	SMD-C0603	Cap Semi	9
10uF	Capacitor (Semiconductor SIM Model)	C3, C7, C8, C31, C32	SMD-C0603	Cap Semi	5
10uF/25V	Capacitor	C6	SMD-C3528	Cap2	1
10uF/50V	Capacitor, Capacitor (Semiconductor SIM Model), Capacitor (Semiconductor SIM Model), Capacitor	C9, C11, C12, C33	SMD-C1206	Cap, Cap Semi, Cap Semi, Cap	4
10nF	Capacitor (Semiconductor SIM Model)	C10	SMD-0603	Cap Semi	1
22uF/25V	Capacitor (Semiconductor SIM Model)	C14, C15	SMD-C0805	Cap Semi	2
3.3nF	Capacitor (Semiconductor SIM Model)	C16	SMD-C0603	Cap Semi	1
20pF	Capacitor	C18, C19, C20, C21	SMD-C0603	Cap	4
10nF	Capacitor (Semiconductor SIM Model)	C24, C26, C28, C30	SMD-C0603	Cap Semi	4
LED(Bule)	Typical INFRARED GaAs LED	D1	SMD-LED0805	LED0	1
LED(Red)	Typical INFRARED GaAs LED	D2	SMD-LED0805	LED0	1
IN5819	1 Amp General Purpose Rectifier	D3	SOD123	Diode 1N4002	1
BUTTON	6Pin Button	K1	BTN5.8X5.8	BUTTON	1
10uH/4A	Inductor	L1	SMD-CDRH74	Inductor	1
DC005	Header, 3-Pin	P1	DC005	Header 3	1
IMU	Header, 5-Pin	P2	DIP-5P254	Header 5	1
STLINK	Header, 4-Pin	P3	DIP-4P254	Header 4	1
Motor1	Header, 6-Pin	P4	DIP-XH6P254	Header 6	1
Motor2	Header, 6-Pin	P5	DIP-XH6P254	Header 6	1
DIP-12IO254	Header, 6-Pin, Dual row	P6	DIP-6X2P254	Header 6X2A	1
DIP-16IO254	Header, 8-Pin, Dual row	P7	DIP-8X2P254	Header 8X2A	1
SERVO2	Header, 3-Pin	P8	DIP-3P254	Header 3	1
H3X2-2.54	Header, 3-Pin, Dual row	P9	DIP-3X2P254	Header 3X2	1
Serail3	Header, 4-Pin	P10	DIP-4P254	Header 4	1
SERVO1	Header, 3-Pin	P14	DIP-3P254	Header 3	1
Ultrasonic	Header, 4-Pin	P15	DIP-4P254	Header 4	1
4.7K	Semiconductor Resistor	R1, R5, R11, R12, R13, R14, R15, R16	SMD-0603	Res Semi	8
10K	Semiconductor Resistor	R2, R3, R6, R8, R17, R18	SMD-0603	Res Semi	6
1K	Semiconductor Resistor	R4, R21, R22	SMD-0603	Res Semi	3
43K	Semiconductor Resistor	R7	SMD-0603	Res Semi	1
6.8K	Semiconductor Resistor	R9	SMD-0603	Res Semi	1
100K	Semiconductor Resistor	R10	SMD-0603	Res Semi	1
1.2K	Semiconductor Resistor	R19	SMD-0603	Res Semi	1
3K	Semiconductor Resistor	R20	SMD-0603	Res Semi	1
RESET	Single-Pole, Single-Throw Switch	S1	BTN3x4	SW-SPST	1
TB6612FNG	Driver IC for Dual DC motor	U1	SSOP24	TB6612FNG	1
MP2307DN	3A, 23V, 340KHz Synchronous Step-Down Converter	U2	SOP-8-GND	MP2307DN	1
AMS1117-3.3		U3	SOT223	ASM1117	1
STM32F103RCT6	STM32 ARM-based 32-bit MCU with 128 Kbytes Flash, 64-pin LQFP, Industrial Temperature	U4	TQFP64	STM32F103RBT6	1
CH340G		U5	LC-SOP-16_150mil	CH340G	1
AMS1117-5.0		U6	SOT223	ASM1117	1
Micro USB	USBA	USB1	USB_AB	USB	1
USB	USBA	USB2	USB-A	USB	1
12M		Y1	LC-SMD-3225_4P	XTAL-4P	1
8M	Crystal Oscillator	Y2	SMD-5032	XTAL	1