





Comment	Description	Designator	Footprint	LibRef	Quantity
10uF16V	Cap Tant Solid SMD 3216-18 3 0hm 125A°C T/R	C1, C3, C5, C7, C17	CAP10uF16VDC	CapacitorP	5
0.1uF	CAP SMD	C2, C4, C6, C8, C9, C13, C14, C15, C16, C18, C19, C20, C23, C24, C25, C26, C27, C28, C29, C30, C31	CAP1206	Capacitor	21
0.1nF	CAP SMD	C10	CAP1206	Capacitor	1
22pF	CAP SMD	C11, C12, C21, C22	CAP1206	Capacitor	4
SS34	Schottky Diode (SMA)	D1, D3, D7, D8, D9, D10, D12	SS36	Schottky Diode	7
SMAJS_0A	Schottky Diode (SMA)	D2	SS36	Schottky Diode	1
Red	LED	D4, D6	LED1206	LED	2
Green	LED	D5	LED1206	LED	1
IR	SMMIR TRANSMITTER	D11	IR-5mm	IR	1
TB6612FNG	Motor Driver Power MOSFET Parallel 24-SSOP	DM1	TB6612FNG	TB6612FNG	1
Fuses	Polymetric PTC Resettable Fuse	F1, F2	FUSE1206	Fuse	2
2Cnrs-S	2Cnrs-S	J1	2CnTS-PH-2mm	2Cnrs-S	1
PJ-002A	2.0 x 6.5 mm, 2.5 A Horizontal Through Hole, Dc Power Jack Connector	J2	DC Power Jack	DC Power Jack	1
USB_Type_B	USB-B (USB TYPE- B) USB 2.0 Receptacle Connector 4 Position Through Hole, Right Angle	J3	USB_Type_B	USB_Type_B	1
RJ11	Jack Modular Right Angle-Through Hole RJ12 6 Pos 6 Cnrs Gold Molex Incorporated 95501- 2951	J4, J5, J6, J7	RJ11-6P6C	RJ11-6P6C	4
2Cnrs-S	2Cnrs-S	J8, J9	2Cnrs-S-Right	2Cnrs-S	2
6Cnrs-S	6Cnrs-S	J10, J11	6Cnrs-S	6Cnrs-S	4
6Cnrs-S	6Cnrs-S	J12	6Cnrs-S	6Cnrs-S	1
TSOP34856	Remote Receiver Sensor 38.0kHz 4pin Through Hole	J13	TSOP34856	TSOP34856	1
1Cnrs-S	1Cnrs-S	J14, J15, J16, J17	H46x3	1Cnrs-S	4
4Cnrs-S	4Cnrs-S	J18	4Cnrs-S	4Cnrs-S	1
6Cnrs	6Cnrs SMT	J19	6Cnrs-D-SMD	6Cnrs SMT	1
4.7uH	Inductor with Inductance 6.8uH Tol +/-20%	L1, L2	Inductor1515	Inductor	2
Photocell	Photocell Analog Output 2-Pin 12 mm, 5 V, 85 dB Through Hole, Sealed, Magnetic Auto Transducer Buzzer	LS1	Photocell	Photocell	1
Buzzer	12 mm, 5 V, 85 dB Through Hole, Sealed, Magnetic Auto Transducer Buzzer	LS2	TMB12A05	TMB12A05	1
P-Ch	P-Channel 20 V 5.7A (Ta) 1.3W SOT-23	Q1, Q2	RLML6402TRPBF	RLML6402TRPBF	2
NPN	Bipolar (BJT) Transistor NPN 40V 600mA 300MHz 250mW Surface Mount SOT23, TO- 236AB	Q3, Q4, Q6, Q7	PMBT2222A	PMBT2222A	4
SS8550	Bipolar (BJT) Transistor PNP 25 V 1.5 A 100MHz 300 mW Surface Mount SOT-23	Q5	SS8550	SS8550	1
0.4R	RES 0.27 OHM 1% 1/10W	R1	RES1206	Resistor	1
2.2K	RES 0.27 OHM 1% 1/10W	R2, R3	RES1206	Resistor	2
1.2K	RES 0.27 OHM 1% 1/10W	R4	RES1206	Resistor	1
220K	RES 0.27 OHM 1% 1/10W	R5	RES1206	Resistor	1
100K	RES 0.27 OHM 1% 1/10W	R6, R20	RES1206	Resistor	2
30K	RES 0.27 OHM 1% 1/10W	R7	RES1206	Resistor	1
10K	RES 0.27 OHM 1% 1/10W	R8, R9, R10, R11, R12, R16, R17, R22, R23, R26	RES1206	Resistor	10
1K	RES 0.27 OHM 1% 1/10W	R13, R14, R18, R25, R28	RES1206	Resistor	5
0R	RES 0.27 OHM 1% 1/10W	R15	RES1206	Resistor	1
20K	RES 0.27 OHM 1% 1/10W	R19	RES1206	Resistor	1
100R	RES 0.27 OHM 1% 1/10W	R21	RES1206	Resistor	1
51R	RES 0.27 OHM 1% 1/10W	R24	RES1206	Resistor	1
47K	RES 0.27 OHM 1% 1/10W	R27	RES1206	Resistor	1
SPDT	Switch,Slide,Sealed, SPDT.ON-NONE- ON	S1	SPDT	SS12D10G3	1
SW1	Switch,Pushbutton, Tactile,SPST	S2	Pushbutton_Tactile	Pushbutton	1
SW2	Switch,Pushbutton, Tactile,SPST	S3	Pushbutton_Tactile	Pushbutton	1
MT3608	High Efficiency 1.2MHz2A Step Up Converter	U1	MT3608	MT3608	1
TP4056	Complete single cell Li-Ion battery with a constant current / constant voltage linear charger	U2	TP4056	TP4056	1
CH340G	USB Interface Integrated Circuit	U3	Ch340G	CH340G	1
ATMEGA328P-AU	AVR ATmega Microcontroller IC 8- Bit 20MHz 32KB (16K x 16) FLASH 32-TQFP (7x7)	U4	ATMEGA328P-AU	ATMEGA328P-AU	1
WS2812B	Intelligent control LED integrated light source	U5, U6	WS2812B-5050	WS2812B	2
12M	40MHz 10pF ±10ppm SMD-4P Crystals	Y1	crystal-2520	crystal-4P	1
16M	40MHz 10pF ±10ppm SMD-4P Crystals	Y2	crystal-2520	crystal-4P	1