

RefDes	Qty	Description	Package / Footprint	Manufacturer	Manufacturer Part #	Vendor	Vendor Part #	JLPCB Part #
C1	1	Capacitor, MLCC, 10uF, 25V, 10%, X5R, 1206	1206	Samsung Electro-Mechanics	CL31A106KAHNFNE	DigiKey	<a href="#">1276-3038-2-ND</a>	C13585
C2, C3, C7, C10	4	Capacitor, MLCC, 0.1uF, 50V, 5%, X7R, 0603	0603	Yageo	CC0603JRX7R9BB104	DigiKey	<a href="#">311-1779-2-ND</a>	C14663
C4, C5, C6, C8, C9	5	Capacitor, MLCC, 1uF, 10V, 10%, X7R, 0603	0603	Samsung Electro-Mechanics	CL10B105KP8NNNC	DigiKey	<a href="#">1276-1946-2-ND</a>	C15849
D1	1	Diode, LED, Green, 570nm, 2V, 20mA, 1206	1206	Visual Communications	CMD15-21VGD/TR8	DigiKey	<a href="#">L62305TR-ND</a>	C3000895
D2, D3, D4, D5, D7, D8, D9	7	Diode, Schottky, 100V, 1A, SOD323	SOD-323	Comchip Technology	CDBV1100-HF	DigiKey	<a href="#">641-1786-1-ND</a>	C146260
D6	1	Diode, LED, RGB, Clear, Individual, 5 x 5.5mm	5060	Yetda Industry	5060BRG4	SparkFun	<a href="#">COM-10866</a>	
J1, J2, J3, J4, J5, J6, J7	7	Connector, Terminal Block, 2 Pos, 5mm	Through Hole	Würth	691137710002	DigiKey	<a href="#">732-10955-ND</a>	
J8, J9	2	Connector, JST, 4 Pin, SH Series, 1mm Pitch, Right Angle, SMD	SMD	JST	SM04B-SRSS-TB	SparkFun	<a href="#">PRT-14417</a>	C160404
K1	1	Relay, 5VDC, 30mA Coil, 1 NO/NC 1A Contact Rating	Through Hole	Omron	G5V-1-T90 DC5	DigiKey	<a href="#">Z6370-ND</a>	
LS1	1	Buzzer, Magnetic, 2073Hz, 2.5-4.5V, 9mm	SMD	CUI Devices	CBT-09427-SMT-TR	DigiKey	<a href="#">102-3392-1-ND</a>	C3812119
Q1	1	Transistor, NPN General Purpose, 30V, 500mA, SOT23	SOT23	On Semiconductor	MMBTA42LT1G	DigiKey	<a href="#">MMBTA42LT1GOSDKR-ND</a>	C8515
Q2	1	Transistor, N-Channel MOSFET, 60V, 310 mA, 1.6Ω RDSon, SOT323	SOT-323	Nexperia	2N7002PW,115	DigiKey	<a href="#">1727-4793-1-ND</a>	C255579
R1, R2, R3, R4, R11, R13	6	Resistor, Thick Film, 10K, 1%, 1/10W, 0603	0603	Yageo	RT0603FRE0710KL	DigiKey	<a href="#">YAG2321TR-ND</a>	C216802
R5	1	Resistor, Thick Film, 300, 1%, 1/10W, 0603	0603	Vishay	MCT06030C3000FP500	DigiKey	<a href="#">749-1759-1-ND</a>	C114617
R6	1	Resistor, Thick Film, 150, 1%, 1/10W, 0603	0603	Stackpole Electronics	RMCF0603FT150R	DigiKey	<a href="#">RMCF0603FT150RCT-ND</a>	C114608
R7, R8	2	Resistor, Thick Film, 330, 0.5%, 1/10W, 0603	0603	Yageo	RT0603DRD07330RL	DigiKey	<a href="#">311-330DCT-ND</a>	C105881
R9	1	Resistor, Thick Film, 100K, 1%, 1/10W, 0603	0603	Stackpole Electronics	RMCF0603FT100K	DigiKey	<a href="#">RMCF0603FT100KCT-ND</a>	C237792
R10, R12	2	Resistor, Thick Film, 1K, 1%, 1/10W, 0603	0603	Yageo	RT0603FRE071KL	DigiKey	<a href="#">YAG2323TR-ND</a>	C216905
R14	1	Resistor, Thick Film, 180, 5%, 1/10W, 0603	0603	Yageo	RC0603JR-07180RL	DigiKey	<a href="#">311-180GRCT-ND</a>	C137786
S1	1	Switch, Tactile Pushbutton, Normally Open, 50mA, 12VDC	SMD	On Shine Enterprise	KPT-1187B	SparkFun	<a href="#">COM-08720</a>	C4365040
U1	1	IC, Digital Isolator, 3.75kV, Bidirectional, 2 Channel, I2C	SOIC-8	Skyworks Solutions	SI8600AC-B-I	Mouser	<a href="#">634-SI8600AC-B-IS</a>	C461867
U2	1	IC, Voltage Regulator, LDO, 3.3V, 600mA	SOT25	Diodes Inc	AP2112K-3.3TRG1	DigiKey	<a href="#">AP2112K-3.3TRG1DICT-ND</a>	C51118
U3	1	IC, Comparator, Single Channel, General Purpose, Push-Pull Output, SOT23-5	SOT23-5	Analog Devices	ADCMP371AKSZ-REEL7	DigiKey	<a href="#">505-ADCMP371AKSZ-REEL7CT-ND</a>	C578963
U4	1	Sensor, RFID, 125kHz	Through Hole	ID Innovations	ID-12LA	SparkFun	<a href="#">SEN-11827</a>	
U4	1	Connector, Female Header, 5 Pos, Single Row, Gold, 2mm Spacing, 0.181" Height	SMD	Sullins Connector	NPPN051BFLD-RC	DigiKey	<a href="#">S5902-05-ND</a>	
U4	1	Connector, Female Header, 7 Pos, Single Row, Gold, 2mm Spacing, 0.181" Height	SMD	Sullins Connector	NPPN071BFLC-RC	DigiKey	<a href="#">S5901-07-ND</a>	
RPI1	1	Connector, Female Header, 40 Pos, Dual Row, Gold, 0.100" Spacing, 0.532" Height	Through Hole	4UCON Technology		SparkFun	<a href="#">PRT-14017</a>	