

	A	B	C	D	E	F	G
1	Reference	Quantity	Value	KiCad Footprint	Standard Footprint	Datasheet	Purpose
2	C1 C4 C8 C7	4	10µF	Capacitor_SMD:C_Elec_4x5.4	4x5.4 SMD Cap	https://datasheets.pdf/datasheet/C109C11C18C17.pdf	Voltage Regulation
3	C10 C9 C11 C18 C17	5	22pF	Capacitor_SMD:C_0805_2012Metric_P0805	0805	https://datasheets.pdf/datasheet/C5C3C2C6C12C13C14.pdf	Crystal
4	C5 C3 C2 C6 C12 C13 C14	9	100nF	Capacitor_SMD:C_0805_2012Metric_P0805	0805	https://datasheets.pdf/datasheet/D12D22D10.pdf	Voltage Regulation
5	D12 D22 D10	3	L4	LED_SMD:LED_0805_2012Metric_P0805	0805	https://datasheets.pdf/datasheet/D13.pdf	Locker Status
6	D13	1	D13	LED_SMD:LED_0805_2012Metric_P0805	0805	https://datasheets.pdf/datasheet/D15D23D11.pdf	System Status
7	D15 D23 D11	3	L5	LED_SMD:LED_0805_2012Metric_P0805	0805	https://datasheets.pdf/datasheet/D16D24D14.pdf	Locker Status
8	D16 D24 D14	3	L6	LED_SMD:LED_0805_2012Metric_P0805	0805	https://datasheets.pdf/datasheet/D19D18D30.pdf	Locker Status
9	D19 D18 D30	3	1N4004	Diode_SMD:D_SOD-123F	SOD-123F	https://datasheets.pdf/datasheet/D2D1D26D25D28D27.pdf	Flyback Diode
10	D2 D1 D26 D25 D28 D27	8	D	Diode_SMD:D_SOD-123F	SOD-123F	https://datasheets.pdf/datasheet/D6D17D4.pdf	Reverse Voltage Protection
11	D6 D17 D4	3	L1	LED_SMD:LED_0805_2012Metric_P0805	0805	https://datasheets.pdf/datasheet/D8D20D5.pdf	Locker Status
12	D8 D20 D5	3	L2	LED_SMD:LED_0805_2012Metric_P0805	0805	https://datasheets.pdf/datasheet/D9D21D7.pdf	Locker Status
13	D9 D21 D7	3	L3	LED_SMD:LED_0805_2012Metric_P0805	0805	https://datasheets.pdf/datasheet/F2F1F4F3.pdf	Locker Status
14	F2 F1 F4 F3	4	Fuse	Fuse:Fuse_1812_4532Metric_Pad1812	1812	https://datasheets.pdf/datasheet/H1H2H3H4.pdf	Over Voltage Protection
15	H1 H2 H3 H4	4	MountingHole	MountingHole:MountingHole_3.2mm	M3	https://datasheets.pdf/datasheet/HS2HS1HS3.pdf	N/A
16	HS2 HS1 HS3	3	Heatsink	Heatsink:TO-220 Vertical XSD C1166	TO-220 HS	https://datasheets.pdf/datasheet/J10.pdf	Mounting
17	J10	1	USB-TTL	Connector_PinSocket_2.54mm:PinS	1x6 2.54mm	https://datasheets.pdf/datasheet/J11.pdf	Thermal Protection
18	J11	1	Occupied LED	Connector_PinHeader_2.54mm:Pin	2x6 2.54mm	https://datasheets.pdf/datasheet/J12.pdf	Programming
19	J12	1	PWR I/O	Connector_PinHeader_2.54mm:Pin	2x10 2.54mm	https://datasheets.pdf/datasheet/J13.pdf	Locker Status
20	J13	1	16x2 LCD Dis	Connector_PinSocket_2.54mm:PinS	2x12 2.54mm	https://datasheets.pdf/datasheet/J14.pdf	Power
21	J14	1	3x4 Keypad	Connector_PinHeader_2.54mm:Pin	2x7 2.54mm	https://datasheets.pdf/datasheet/J15.pdf	LCD
22	J15	1	Reed Switch	Connector_PinHeader_2.54mm:Pin	2x6 2.54mm	https://datasheets.pdf/datasheet/J16.pdf	Keypad
23	J16	1	ICSP	Connector_PinHeader_2.54mm:Pin	2x3 2.54mm	https://datasheets.pdf/datasheet/J4.pdf	Reed Switch
24	J4	1	5V in	Connector_PinHeader_2.54mm:Pin	1x2 2.54mm	https://datasheets.pdf/datasheet/J6J7.pdf	Programming
25	J6 J7	2	12V in	Connector_PinHeader_2.54mm:Pin	1x2 2.54mm	https://datasheets.pdf/datasheet/J8.pdf	Power
26	J8	1	Solenoid Cor	Connector_PinHeader_2.54mm:Pin	2x6 2.54mm	https://datasheets.pdf/datasheet/J9.pdf	Solenoid
27	J9	1	Vacant LED B	Connector_PinHeader_2.54mm:Pin	2x6 2.54mm	https://datasheets.pdf/datasheet/L1.pdf	Locker Status
28	L1	1	Solenoid 1	Connector_JST:JST_EH_B2B-EH-A_1	2.5mm JST	https://datasheets.pdf/datasheet/L2.pdf	Solenoid
29	L2	1	Solenoid 2	Connector_JST:JST_EH_B2B-EH-A_1	2.5mm JST	https://datasheets.pdf/datasheet/L3.pdf	Solenoid
30	L3	1	Solenoid 3	Connector_JST:JST_EH_B2B-EH-A_1	2.5mm JST	https://datasheets.pdf/datasheet/P1.pdf	Solenoid
31	P1	1	USB_C_Plug	Connector_USB:USB C C167321	USB C C167321	https://datasheets.pdf/datasheet/P1.pdf	Programming

	A	B	C	D	E	F	G
32	PWR1	1	PWR	LED_SMD:LED_0805_2012Metric_P	0805	https://data	System Status
33	Q2 Q1 Q3	3	TIP102	Package_TO_SOT_THT:TO-220-3_V	TO-220	www.irf.com	Solenoid Control
34	R2 R37	2	1MΩ	Resistor_SMD:R_0805_2012Metric	0805	https://data	Crystal Isolator
35	R3 R6	2	5.1KΩ	Resistor_SMD:R_0805_2012Metric	0805	https://data	USB CC
36	R31 R32 R33 R34 R35 R36	6	10KΩ	Resistor_SMD:R_0805_2012Metric	0805	https://data	Current Limiting
37	R4 R5 R9 R10 R13 R15 R16	22	330Ω	Resistor_SMD:R_0805_2012Metric	0805	https://data	Current Limiting
38	R8 R7 R1 R28 R27 R38	6	1KΩ	Resistor_SMD:R_0805_2012Metric	0805	https://data	Current Limiting
39	RV1	1	10KΩ	Potentiometer_THT:Potentiometer	RM65	https://www	Contrast
40	RX1	1	RX	LED_SMD:LED_0805_2012Metric_P	0805	https://data	System Status
41	SW1	1	RST	Button_Switch_SMD:SW_SPST_TL3	TL3342	https://data	System Reset
42	SW2	1	L1	Button_Switch_SMD:PTS810_4.2x3	PTS810	https://data	Door Simulation
43	SW3	1	L2	Button_Switch_SMD:PTS810_4.2x3	PTS810	https://data	Door Simulation
44	SW4	1	L3	Button_Switch_SMD:PTS810_4.2x3	PTS810	https://data	Door Simulation
45	SW5	1	L4	Button_Switch_SMD:PTS810_4.2x3	PTS810	https://data	Door Simulation
46	SW6	1	L5	Button_Switch_SMD:PTS810_4.2x3	PTS810	https://data	Door Simulation
47	SW7	1	L6	Button_Switch_SMD:PTS810_4.2x3	PTS810	https://data	Door Simulation
48	TX1	1	TX	LED_SMD:LED_0805_2012Metric_P	0805	https://data	System Status
49	U1	1	ams1117-5.0	Package_TO_SOT_SMD:SOT-223-3	SOT-223	https://data	Voltage Regulation
50	U2	1	ams1117-3.3	Package_TO_SOT_SMD:SOT-223-3	SOT-223	https://data	Voltage Regulation
51	U3	1	CH340G	Package_SO:SOIC-16_3.9x9.9mm_P	SOIC-16	https://data	UART
52	U4	1	ATmega2560	Package_QFP:TQFP-100_14x14mm	TQFP-100	www.microc	μcontroller
53	Y1	1	16MHz	Crystal:Crystal_SMD_3225-4Pin_3.2	3225-4pin	https://data	Clock
54	Y2	1	12MHz	Crystal:Crystal_SMD_3225-4Pin_3.2	3225-4pin	https://data	Clock