

Id	Designator	Package	Quantity	Designation
30	C12,C13	C_0805_HandSoldering	2	22pF
33	C9,C10	C_0805_HandSoldering	2	100nF
42	C19	C_Disc_D3_P2.5	1	22nF
10	C3,C5,C23,C16,C17,C21,C22,C20	C_Disc_D3_P2.5	8	100nF
8	C1	C_Radial_D5_L6_P2.5	1	220uF-50V
9	C2,C15	C_Radial_D5_L6_P2.5	2	220F-25V
11	C4	C_Radial_D5_L6_P2.5	1	470uF-25V
12	C6,C7	C_Radial_D5_L6_P2.5	2	10uF-25V
48	C18	C_Rect_L7_W2_P5	1	100nF
45	C11	C_Rect_L7_W2.5_P5	1	100nF
7	Y1	Crystal_HC52-U_Vertical	1	16MHz
13	D1	Diode_Bridge_18.5x5.5	1	Diode_Bridge
14	D5	Diode_DO-201AD_Horizontal_RM15	1	1N5402
35	D7	Diode_DO-35_SOD27_Horizontal_RM10	1	1N4001
38	D8,D9,D10,D11	Diode_DO-35_SOD27_Horizontal_RM10	4	5.1V
3	U6,U5	DIP-14_W7.62mm_LongPads	2	LM324N
6	IC1	DIP-28_W7.62mm_LongPads	1	ATMEGA328-P
2	HS1,HS2	Heatsink_Stonecold_HS-132_32x14mm_2xFixation1.5mm	2	HEATSINK
31	D2,D3,D4,D6	LED-3MM	4	Led_Small
22	U3	PDIP-8	1	ICL7660
15	P1	PhoenixContact_MCV-G_02x5.08mm_Vertical	1	12VAC
4	P2	PhoenixContact_MCV-G_02x5.08mm_Vertical	1	NGUON
16	P3	PhoenixContact_MCV-G_02x5.08mm_Vertical	1	SAC
17	P4	PhoenixContact_MCV-G_05x5.08mm_Vertical	1	12N60C
18	P5	Pin_Header_Straight_1x02	1	CONN_01X02
29	P7	Pin_Header_Straight_1x04	1	UART
20	RV1	Potentiometer_Bourns_3296W_3-8Zoll_Inline_ScrewUp	1	10k
21	RV2	Potentiometer_Bourns_3296W_3-8Zoll_Inline_ScrewUp	1	20k
43	R2,R3	R_0805_HandSoldering	2	10k
19	R9,R10,R11,R12,R13,R14,R15,R16,R17,R18	R_2512_HandSoldering	10	0.5R
47	R29	Resistor_Horizontal_RM15mm	1	10k
46	R30	Resistor_Horizontal_RM15mm	1	180k
41	R33	Resistor_Horizontal_RM7mm	1	180k
40	R36,R24,R28,R31	Resistor_Horizontal_RM7mm	4	330R

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37 R37,R25	Resistor_Horizontal_RM7mm	2 8.2k
36 R38,R34,R35,R41,R45,R46,R20,R21,R26,R32,R8	Resistor_Horizontal_RM7mm	11 10k
5 R39,R27,R1,R23,R42,R43,R4	Resistor_Horizontal_RM7mm	7 1k
39 R40,R22,R44,R5,R6,R19	Resistor_Horizontal_RM7mm	6 470R
44 R7	Resistor_Horizontal_RM7mm	1 10uH
34 VR1,VR2	RV_Disc_D15.5_W3.9_P7.5	2 14D470K
32 SW1	SW_PUSH_6mm	1 reset
23 U1,U7	TO-220	2 LM7812CT
24 U2	TO-220	1 LM7805CT
49 Q1,Q2,Q3	TO-92_Molded_Narrow	3 Q_NPN_BCE
50 U4	TO-92_Molded_Narrow	1 TL431
1 R51,R49,R50,R47,R48,R52,R55,R53,R54,R56,R57	WireConnection_0.80mmDrill	11 0R
26 P8	XH2.54-2P	1 FAN
28 P10	XH2.54-4P	1 relay
27 P9	XH2.54-4P	1 7-seg
25 P6	XH2.54-8P	1 button

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