

RefDes	Value	Type
buzzer	buzzer / speaker	5V buzzer
C1	1uF 350v	electrolythic capacitor
C2	470uF 25v	electrolythic capacitor
C3	2n2	ceramic capacitor
C4	47pF	ceramic capacitor
C5	22pF	ceramic capacitor
C6	22pF	ceramic capacitor
C7	10uF 16V	electrolythic capacitor
C8	100uF 50V	electrolythic capacitor
C9	100uF 50V	electrolythic capacitor
C10	10uF 25V	electrolythic capacitor
D1	BAV21/UF4004/MUR140	ultrafast 400V diode (<50 ns)
D2	1N914	fast diode
D3	1N4001 / 1N4004	general purpose diode
D4	1N4001 / 1N4004	general purpose diode
DC-IN	9V/12-35V-DC-IN	power plug
GND	connection to GROUND	1X1 FEMALE ROW
IC1	NE555	IC + 8 PINS SOCKET
IC2	ATMEGA8 / ATMEGA168	IC + 28 PINS SOCKET
IC3	74141N / K155ID1	IC + 16 PINS SOCKET
J1	RTC module connections	1X4 FEMALE ROW
J2	ANODE	1X6 FEMALE ROW
J3	CATHODE	1X10 FEMALE ROW
L1	100uH 1A	fixed inductor
neon	neon dots connections	1X2 FEMALE ROW
pb1	minutes button	vertical push-button
pb2	hours button	vertical push-button
pb3	reset button	push-button
powerLED	LED	common LED
Q1	MPSA42	NPN high voltage transistor
Q2	MPSA42	NPN high voltage transistor
Q3	MPSA42	NPN high voltage transistor
Q4	MPSA42	NPN high voltage transistor
Q5	MPSA92	PNP high voltage transistor
Q6	MPSA92	PNP high voltage transistor
Q7	MPSA92	PNP high voltage transistor
Q8	MPSA92	PNP high voltage transistor
Q9	MPSA92	PNP high voltage transistor
Q10	IRF730 / IRF740	power MOSFET
Q11	BC547	NPN amplifier transistor
Q12	MPSA92	PNP high voltage transistor
Q13	MPSA42	NPN high voltage transistor
Q14	MPSA42	NPN high voltage transistor
Q15	MPSA55	PNP general purp transistor
quartz	M16000	quartz
R1	33k	1/4W 5% resistor
R2	33k	1/4W 5% resistor
R3	33k	1/4W 5% resistor
R4	33k	1/4W 5% resistor
R5	33k	1/4W 5% resistor
R6	100k	1/4W 5% resistor
R7	100k	1/4W 5% resistor
R8	100k	1/4W 5% resistor
R9	100k	1/4W 5% resistor
R10	470k	1/4W 5% resistor
R11	470k	1/4W 5% resistor
R12	470k	1/4W 5% resistor
R13	470k	1/4W 5% resistor
R14	1k	1/4W 5% resistor
R15	1k	1/4W 5% resistor
R16	10k	1/4W 5% resistor
R17	220k	1/4W 1% resistor
R18	470 ohm	1/4W 1% resistor
R19	1K	trimmer / potentiometer
R20	15k	1/4W 5% resistor
R21	15k	1/4W 5% resistor
R22	15k	1/4W 5% resistor
R23	15k	1/4W 5% resistor
R24	15k	1/4W 5% resistor
R25	1k	1/4W 5% resistor
R26	15k	1/4W 5% resistor
R27	220 ohm	1/4W 5% resistor
R28	100k	1/4W 5% resistor
R29	470k	1/4W 5% resistor
R30	100k	1/4W 5% resistor
R31	470k	1/4W 5% resistor
R32	33k	1/4W 5% resistor
R33	33k	1/4W 5% resistor
R34	100 ohm	1/4W 5% resistor
R35	1K	1/4W 5% resistor
R36	220k	1/4W 5% resistor
R37	220k	1/4W 5% resistor
sw1	off/on/off switch	horizontal 4pins switch
sw2	12-35V/9V switch	vertical 3pins switch
VR1	L7809	9V voltage regulator
VR2	L7805CV	5V voltage regulator