

Parts	Qty	Value	Package	Description	Notes	MPN
C15	1	DNP	0805	Capacitor	Do not put	
C6, C17	2	10n(DNP)	0805	Capacitor	Do not put if no filtering	
C2	1	10n	0805	Capacitor		
C1, C4, C5, C7, C11, C12, C14, C16, C24	9	0.1u	0805	Capacitor	Do not put C4 if no R8	
C8	1	1u	0805	Capacitor		
C3, C10, C13	3	4u7	0805	Capacitor		
C9	1	10u	0805	Capacitor		
D1	1	LED0805	0805	Smd led		
D2	1	1n914 type etc.	SOD-323	General Diode		
L1, L2, L3, L4	4	or 0ohms	0805	Ferrite bead	0ohms if no filtering	
R8	1	10k or 0ohms	0805	Resistor	0ohms if no filtering	
R12	1	1k5	0805	Resistor		
R11	1	2k	0805	Resistor		
R5	1	4k7	0805	Resistor		
R1, R2, R7, R9, R15	5	10k	0805	Resistor		
R10	1	47k	0805	Resistor		
R3, R4, R14	3	56k	0805	Resistor		
R6	1	100k	0805	Resistor		
X1	1	8 MHz	RESONATOR-SMD	Resonator		
IC1	1	ATMega-328	TQFP32-08	ATMEGA328TQFP32		
IC2	1	AT25DF512C-SSH-N-B	SO-08	Serial EEPROM 4K/ 8K , SPI bus		
IC3	1	MCP170x, or other same footprint	SOT23-3	250 mA, 16V, Low Quiescent Current LDO Regulator		
IC4	1	ACS712_5A	SOIC127P600X175-8N	Linear Current Sensor		
IC5	1	ATSHA204A	SOT23	Auth ic		
IC6	1	LM321	SOT95P285X120-5N	Low Power Single Op Amp		
IC7	1	MDC3105DMT1	MDC3105DMT1	Relay driver		
IC8	1	DS1820	TO92	One wire temperature sensor		
SW1	1	SPST_TACT-KMR2	KMR2	SMT 6mm switch, EVQQ2 series		
JP2	1	JST 1mm pitch 5pins	1X05-1MM	Header		
J1, J2, J3	3	SCREW-TERMINAL-2P-3470110P1	2P-5.0	Screwterminal		
JP5, JP6	2	JST 1mm pitch 6pins	1X06-1MM	Header		
RL1	1	G5Q-1A-5VDC		SPST relay		
RL2	1	G5Q-1-EU-5VDC		SPDT relay		
V1	1	VARISTOR_B72207S251K101		Varistor		
F1	1	FUSE_BEL_RST5_5A		Fuse		
F2	1	FUSE_MF2410	2410	Fuse		
HILINK	1	HILINK_HLK-PM01		AC/DC		
RFM69CW	1	RFM69CW		Radio		