

Ref	Qty	Value	Notes				
C1	1	47uF/25v, 5mm	pre-regulator; electrolytic or tantalum				
C2 C5	2	100n	power filter for MCU and board power; film or ceramic				
C3	1	10nF	hardware debounce; film or ceramic; higher values probably ok				
C4	1	10uF/6.3v, 5mm	post-regulator; electric or tantalum				
CLR1	1	10-15k	only populate if using PCB LED connections; suggest 10-15k for high efficiency LED				
R1 R2 R3 R4 R5	5	1k					
D1	1	1N5817	input polarity protection				
D2 D3	2	SB160 or 1n5817	coil flyback voltage protection for transistors; 1n4148 probably OK, but Shottky best				
LED1	1	LOW CURRENT/ULTRA BRIGHT	to taste, low current/ultra bright recommended for lowest power consumption				
Q1 Q2 Q3	3	2N7000	N-Channel MOSFET, bs170 OK; NPN BJT likely ok too (but untested); mind pinout				
K1	1	TQ2-2L-3V or EC2-3TNU	3.3v two-coil latching relay				
U1	1	LP2950-3.3_TO92	3.3v regulator; cheaper 78L33 OK, be careful of pinout				
U2	1	PIC10F320-IP or PIC10F322-IP					

