



Sample parts BOM.

Line #	Part Label	Qty.	Description	Digi-Key P/N	Manufacturer P/N
1	U1	1	IC REG LDO 5V 0.1A SOT89-3	497-1181-1-ND	L78L05ABUTR
2	U2	1	IC MCU 8BIT 3.5KB FLASH 8SOIC	PIC12F1572-I/SN-ND	PIC12F1572-I/SN
3	Q1, Q2, Q3	3	MOSFET N-CH 60V 2.4A SOT-89	ZXMN6A11ZCT-ND	ZXMN6A11ZTA
4	D1	1	DIODE GEN PURP 100V 150MA SOD123	1N4148WTPMSCT-ND	1N4148W-TP
5	R1, R2, R3, R8	4	RES SMD 1K OHM 5% 1/8W 0805	311-1.0KARCT-ND	RC0805JR-071KL
6	R4	1	RES SMD 100K OHM 5% 1/8W 0805	311-100KARCT-ND	RC0805JR-07100KL
7	R5, R6	2	RES SMD 1K OHM 5% 1/4W 1206	311-1.0KERCT-ND	RC1206JR-071KL
8	R7	1	RES SMD 10 OHM 5% 1/4W 1206	311-10ERCT-ND	RC1206JR-0710RL
9	C3, C4, C5	3	CAP CER 0.1UF 50V X7R 0805	311-1140-1-ND	CC0805KRX7R9BB104
10	C1, C2, C7	3	CAP CER 4.7UF 50V X5R 1206	587-2988-1-ND	UMK316ABJ475KD-T
11	VR1, VR2	2	POT 100K OHM 1/5W PLASTIC LINEAR	987-1300-ND	P160KN-0QC15B100K

Parts usage description.

Part Label	Package	Description of usage
U1	SOT89-3	Provide regulated 5V to microcontroller. 3V regulators can be used for 3V microcontroller if the regulator is pin compatible.
U2	SOIC-8	8-pin PIC12 microcontroller. The PCB is compatible with other Microchip PIC12 series microcontrollers. Check pin compatibility before using.
Q1,Q2, Q3	SOT89-3	General purpose output MOSFETS. NPN transistors can be used as an alternative.
D1	SOD123	General purpose diode.
R1, R2, R3	0805	Voltage/current limiting resistors.
R4	0805	MCLR pull up resistor.
R5, R6	1206	Voltage/current limiting resistors. Isolation resistors for programming pins.
R7	1206	Limits regulator output voltage/current to VR1 & VR2.
R8	0805	Voltage/current limiting resistors. Isolation resistors for programming (MCLR) pin.
C1, C2, C7	1206	Power filter capacitors.
C3, C4, C5	0805	Input signal filter capacitors. Optional parts.
C6	0.1" spacing	0.1" spacing radial filter capacitor. Optional part.
VR1, VR2	0.1" spacing	0.1" spacing variable resistors. Optional parts for analog input.
CN1	0.1" spacing	0.1" spacing 6 pin header. PIC programming pins.
CN2	0.1" spacing	0.1" spacing 2 pin header. Power input connector, optional part.