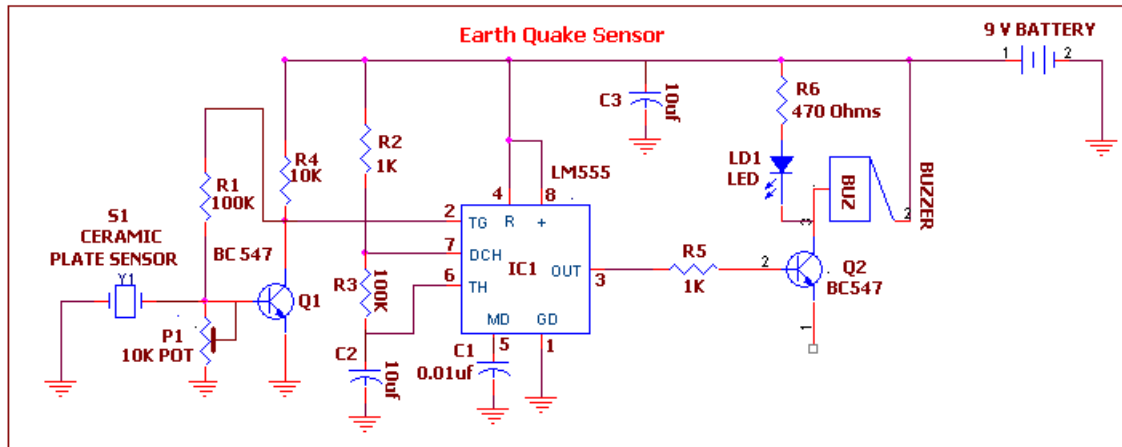


Earth quake Alarm:



We can use a ceramic Piezo electric buzzer plate to sense mechanical vibrations due to earthquake. This sensor, outputs an electrical voltage when exposed to a mechanical vibration. This voltage is amplified by a NPN transistor BC 547 (Q1) and amplified and a negative amplified voltage triggers the monstable input at pin no-2 of IC1. The output goes high for 2 seconds atleast, which is decided by R2, R3 & C2. The high going output switches ON a buzzer using an NPN transistor BC 547. The switch ON time can be increased by Increasing the value of R3 or C2 or both. This circuit can be operated with a 9volt battery.

Components: R1=100k resistor, R2=1k resistor, R3=100k resistor, R4=10k resistor, R5=1K resistor, R6=470E, resistor, Q1=BC 547 NPN Transistor, C1=0.01uf capacitor, C2=10uf capacitor, C3=10uf capacitor, IC1=LM 555, LD1= L.E.D, P1=10k pot, S1= ceramic plate sensor, Battery= 9volt, Battery snapper, Buzzer.

