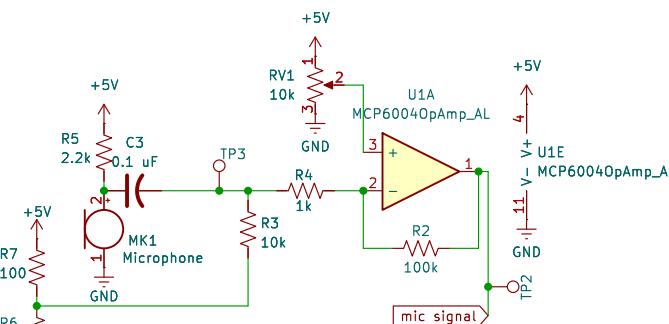
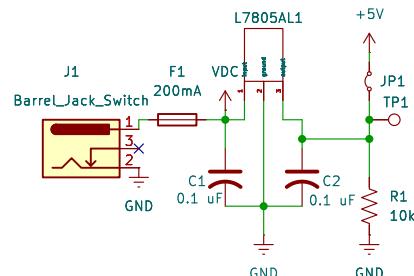


Microphone with amplifier



The microphone (MK1) converts sound into a small AC voltage, which is amplified by the op-amp (UA1) and biased via RV1. The amplified output (mic signal) is sent to the microcontroller, which detects when the sound level rises above a set threshold to send a signal to the input/output board.

Power



Power is supplied to the system via a barrel jack and an external power supply. While the system is designed to operate on only 5 volts, more than 5 volts may be supplied by the external power supply. The fuse (F1) and the voltage regulator (L7805AL) ensure that only 5 volts runs through the circuit.

Microcontroller

