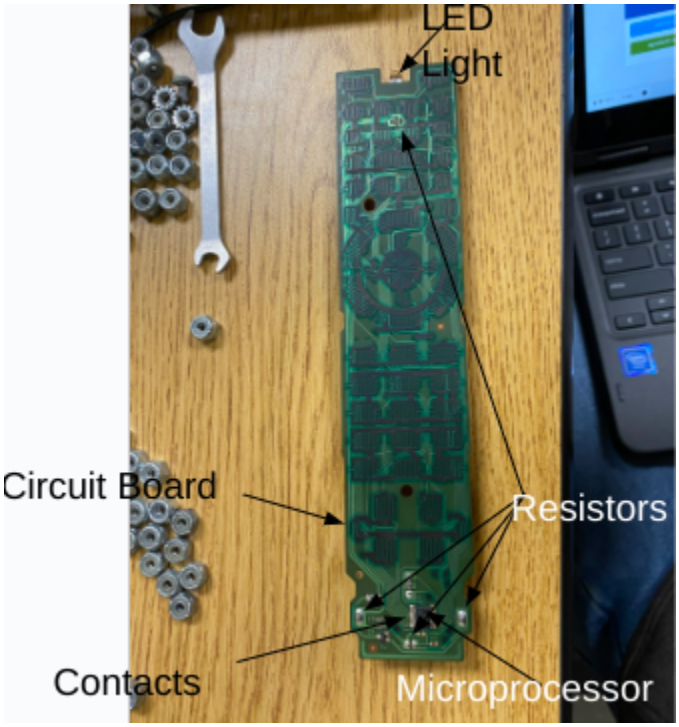
RECF Reverse Engineering Challenge

For this challenge we chose a Sony RM-YD087 remote for a Sony Bravia TV. We started deconstructing the remote by removing the case outside which also contains the slots for the batteries. Inside was the rubber layout for the button which is to prevent any risk of electrocution and the circuit board which contained various parts. These parts included an InfraRed (IR) LED light at the top of the circuit board to serve as an indicator for power, contacts which connect the parts to the circuit board electrically, a microprocessor which performs binary operations and is a complete computation machine on a chip, and resistors, which regulate the amount of electricity flowing the circuit board. We also found a rubber divider on the other side of the circuit board to separate the batteries to prevent electrocution, and another device which collects the charge from the batteries to be transmitted to the other side of the remote.



There were also springs to hold the batteries in place and collect the charge from them. We later found out that the microprocessor is an embedded **Microcontroller Integrated Circuit (ics)** which generates around 1.8-3.6 volts of electricity.