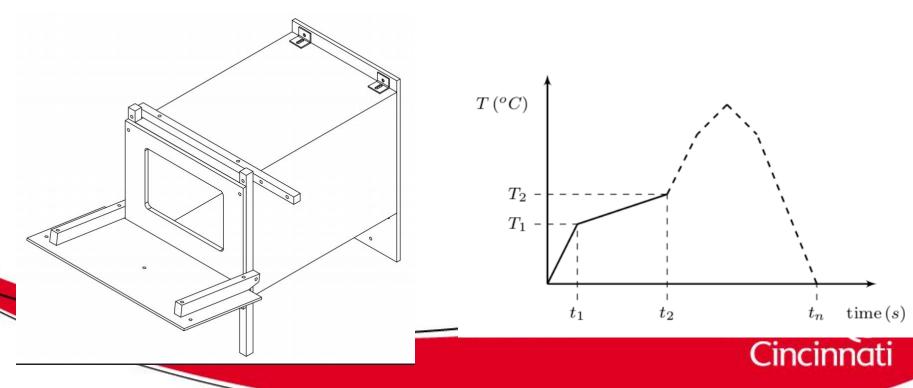
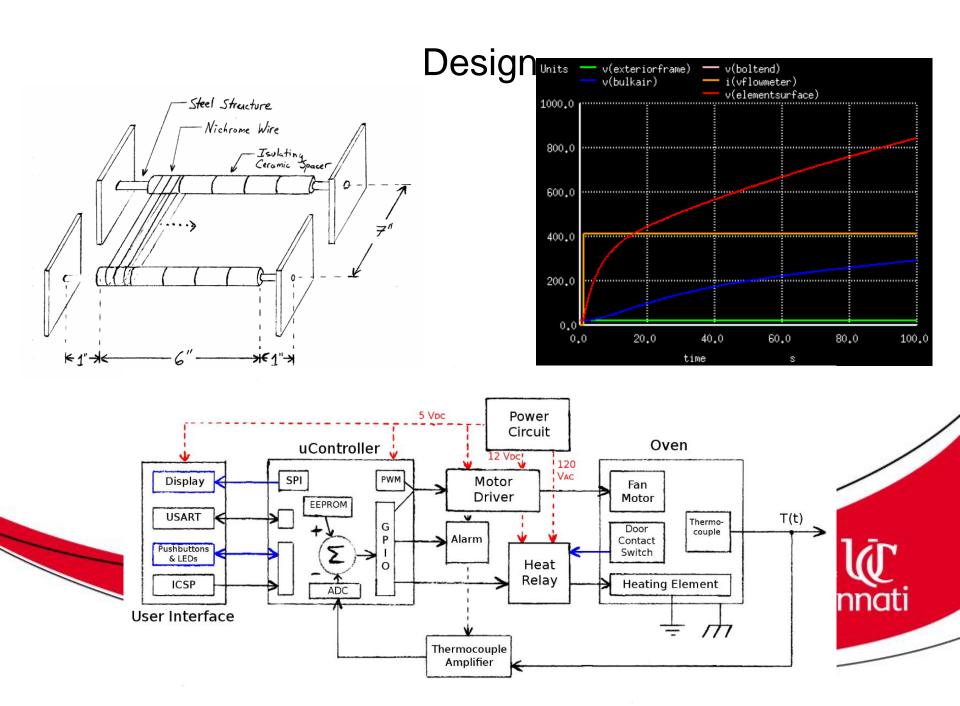
# Easy-PCB Oven

By: Ben Lorenzetti & Adam Meece

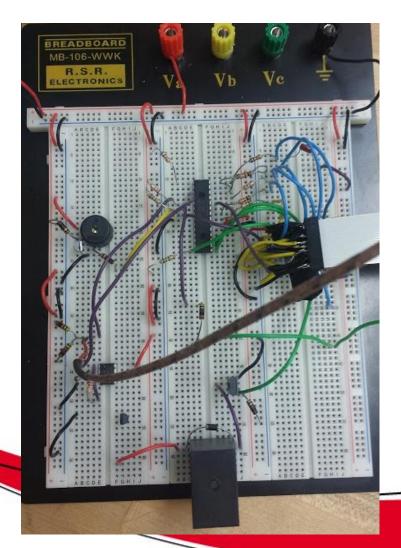
Objective: To build a small, desktop convection oven for DIY reflow soldering at home.

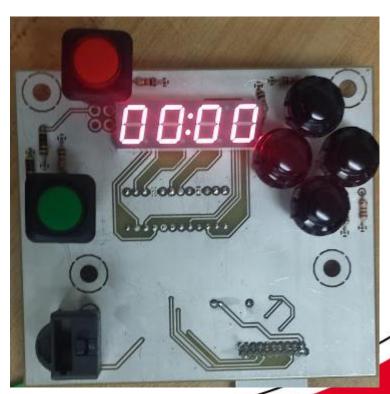


#### Design POWER ON t\_1+255s 275° $\rightarrow$ 0s $\leftarrow$ >20° $\leftarrow$ + t\_1 $\leftarrow$ + T\_1 $\leftarrow$ + t\_2 $\leftarrow$ + T\_2 $\leftarrow$ ... $\leftarrow$ + t\_n $\leftarrow$ >20° $\leftarrow$ Input Time, Temp Point 20° Final Input? DIGIT 1 DIGIT 2 DIGIT 3 DIGIT 4 NO YES Temp = 20°C? NO YES DIGIT 1 DIGIT 2 DIGIT 3 DIGIT 4 Read Points Electromagnetic Relay Control UNIVERSITY OF Cincinnati Thermocoupler Feedback



## Implementation





User Interface



**Control Circuit** 

### **Implementation**

#### Thermocouple Test

GE Oven at my Apartment Set to 246 Celsius

