Milestone 0

Introduction

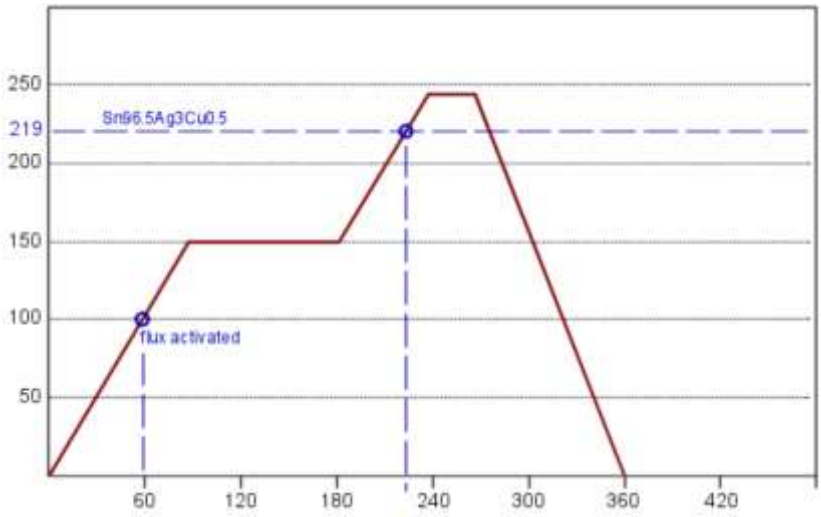
The aim of our project is to develop a hot plate for reflow soldering printed circuits boards with Surface mount Technology (SMT).

Objectives

The main objective of this project is to build a functional reflow hot plate which can provide temperature above 200 Celsius degrees for soldering integrated circuits plates.

The dimensions of the hot plate will be around 100 cm^2, and the case itself won't be bigger than 20x20 cm, as maybe we design it ourselves and print it in the 3D Printer.

The reflow hot plate will be designed to meet the needs of our teacher and mentor Moises Garrin, however we want to do something that distinguish our project from the regular hot plates found in the market. We have thought about implementing different modes of soldering, moreover, if we have time we will make an extra mode which will be created by the user, so they can create their special mode for specific soldering. This will be entered to the controller via Wi-Fi or SD card.



There will be some extra components.

- Fan
- LCD screen
- Buttons to choose each mode.
- Microcontroller (Arduino)
- Insulating material

- Relay
- Thermistor
- Head sink
- Converter (AC/DC)
- Interrupters
- Buzzer

Team Organization

In order to achieve this project, we have assigned roles to each member of the group. Those are mechanical, electrical and software engineer. And an extra role which is the leader. A leader is the person who takes on additional responsibility and control within an organization.

We have assigned these roles based on our main abilities;

Mechanical engineer: Jordi Birosta

Electrical engineer: Ana Carolina

Software and Leader: Juníper Sans

Tasks