Assembly

The assembly is done is 2 parts. The material needed is:

- Reflow oven or hot air gun for soldering to solder SMD parts
- Soldering iron to solder through hole parts
- Multimeter
- Precision tweezers
- Microscope (optionnal)

Firstly the SMD components must be soldered. The use of a stencil is highly recommended. The stencil can be ordered with the boards. Solder paste is then applied to all the board. Components are then placed according to their position (referred in the BOM file). At this point either a hot air gun or a appropriate oven can be use to reflow the solder paste. We use the AS-5010 oven from smtMAX with a specific reflow profile shown on the figure below.

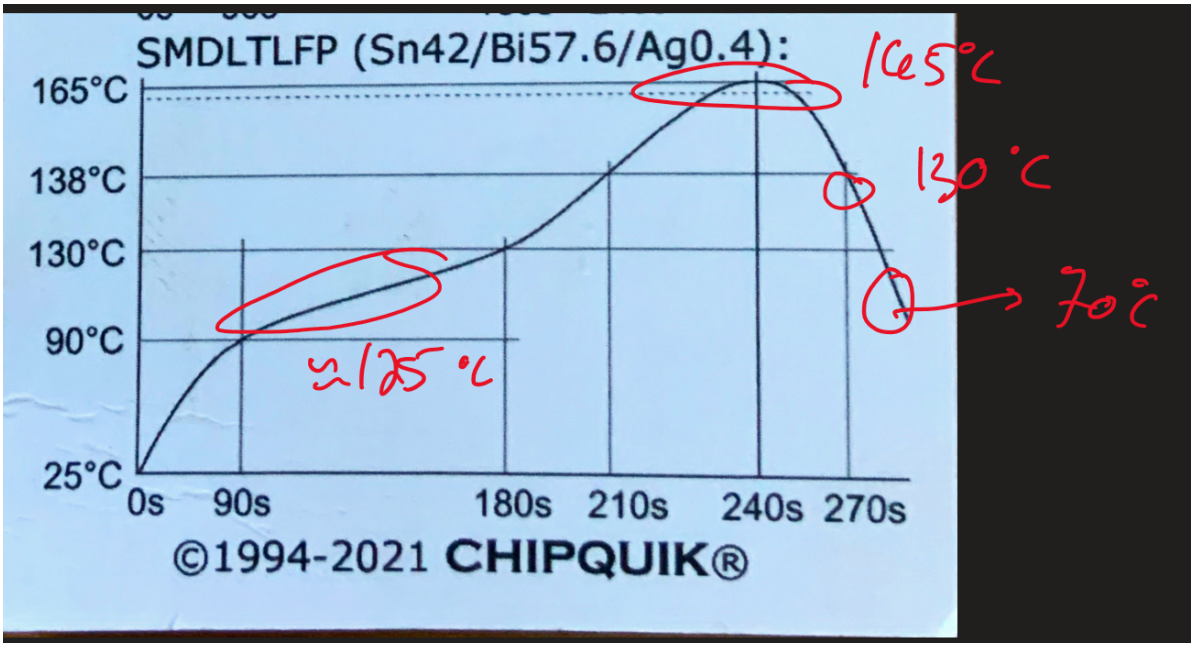
Secondly, the through holes parts can be soldered with a classic soldering iron. Care must be taken to not overheat SMD component.

A video of the assembly of the worker board is available in the media directory. The assembly process is the same for the sensor and power supply board.

it is recommended to check every connection with a multimeter to ensure no shorts remains after the SMD soldering process.

smtMAX oven used

Reflow profile used



Stencil used to apply the solder paste