Hardware bitácora

In this document I will put any important research, information, decisions, about the hardware, component selection.

# MCU selection

This project will need a cortex-M4, because will use an LCD TFT 7” screen for control and mode selection, will use basic graphics, a telecommunication module, multiple sensors, an actuator, battery management, will have an internet connectivity, buttons, indicators leds.

One of the main characteristics I need to focus in the memory, and the communication protocol to use the LCD screen, so, I will need chose also a development board to make the POC, and write over the HAL, because, first I need to prove all the functions and the firmware to improve it.

The development boar to choose is [STM32F429I-DISC](https://www.mouser.mx/ProductDetail/STMicroelectronics/STM32F429I-DISC1?qs=79dOc3%2F91%2Fed3%252BRc5JUCEw%3D%3D&mgh=1&vip=1&gad_source=4) the board have a lcd integrate to prove the firmware and will be good for POC.