

# MSA - MTB Suspension Analyzer

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## *Description*

This is a prototype of a suspension analyzing system.

The project will be initially developed for a hardtail mtb. A prototype for full suspended mtb will probably be developed in the future with the help of some friends who own a full.

The code is mainly written in C.

At the moment the prototype will be developed using a Raspberry Pi Pico as MCU with 16MB of RAM.

Probably one of the next step will be to add a (third) LSM6DSOX sensor in crankset zone to get better data about bike stability.

Dev stages

1. Develop code and circuit diagram for the first version of the project: an easy data collector
2. Understand how to elaborate collected data
3. Write UML and LaTeX documentation for a more advanced version of the project
4. Continue...

## *Used Hardware*

- 1 x Raspberry Pi Pico - 2 x LSM6DSOX - 1 x SSD1306 OLED display (0.91", 128x32 px) - 1 x micro sd storage expansion board - 2 x 18650 batteries in series