Introduction to MicroPython

The quick version

Who, me ?

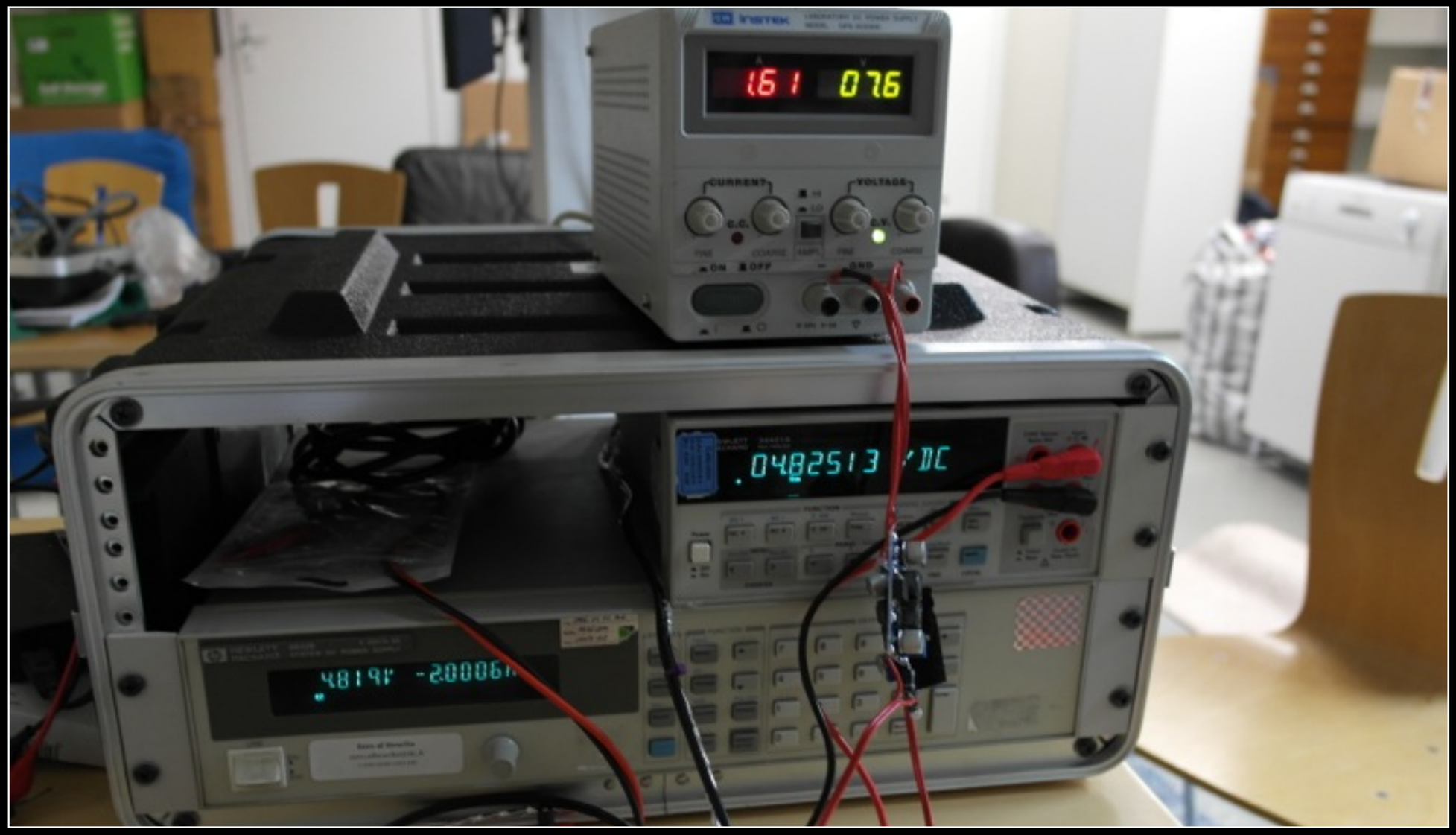
Electronics hobbyist since childhood

Active in Finlands hackerspace scene

Believer: Open Source & Open Hardware

https://github.com/rambo

http://fi.linkedin.com/in/eeroafheurlin/

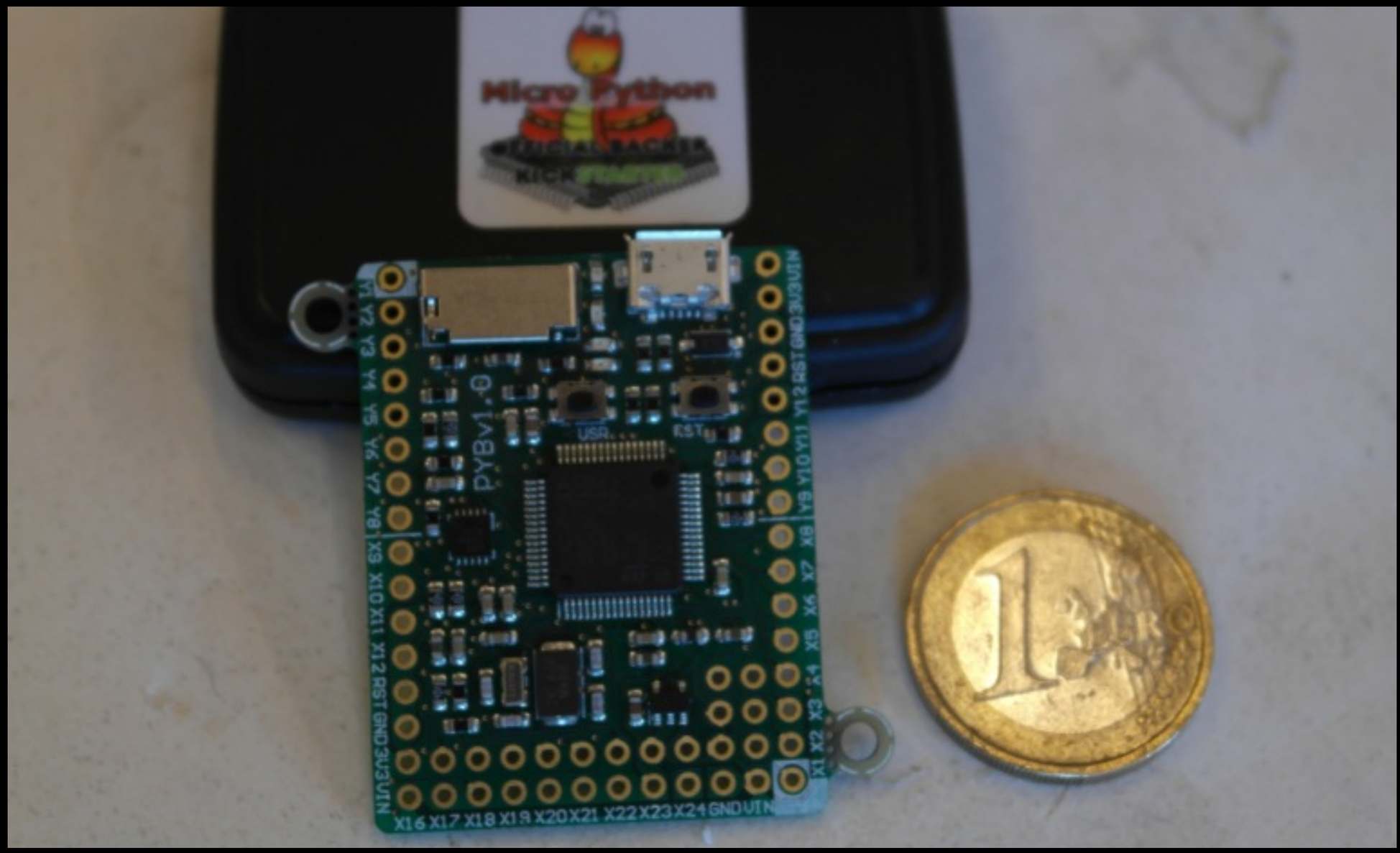


Lets see some hands

Electronics, microcontrollers, Arduino, Discovery, Teensy, Nucleo, STM32, AVR

Why u no C?

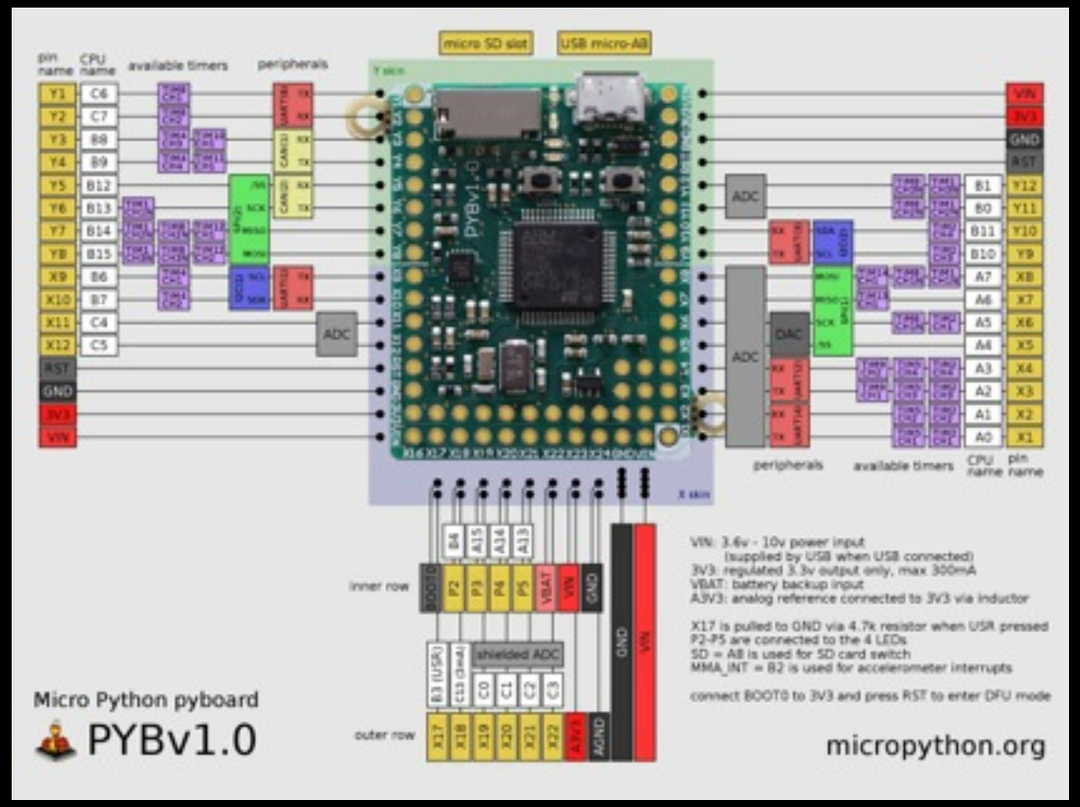
- Code, (re)compile, (re)flash, test, repeat
- Not exactly beginner friendly (even Arduino)
- For any debugging beyond print(“foo”) you’re going to need extra hardware (JTAG/SWD)
- Python <3



Behold! The PyBoard!

Original Kickstarter V1

Some details



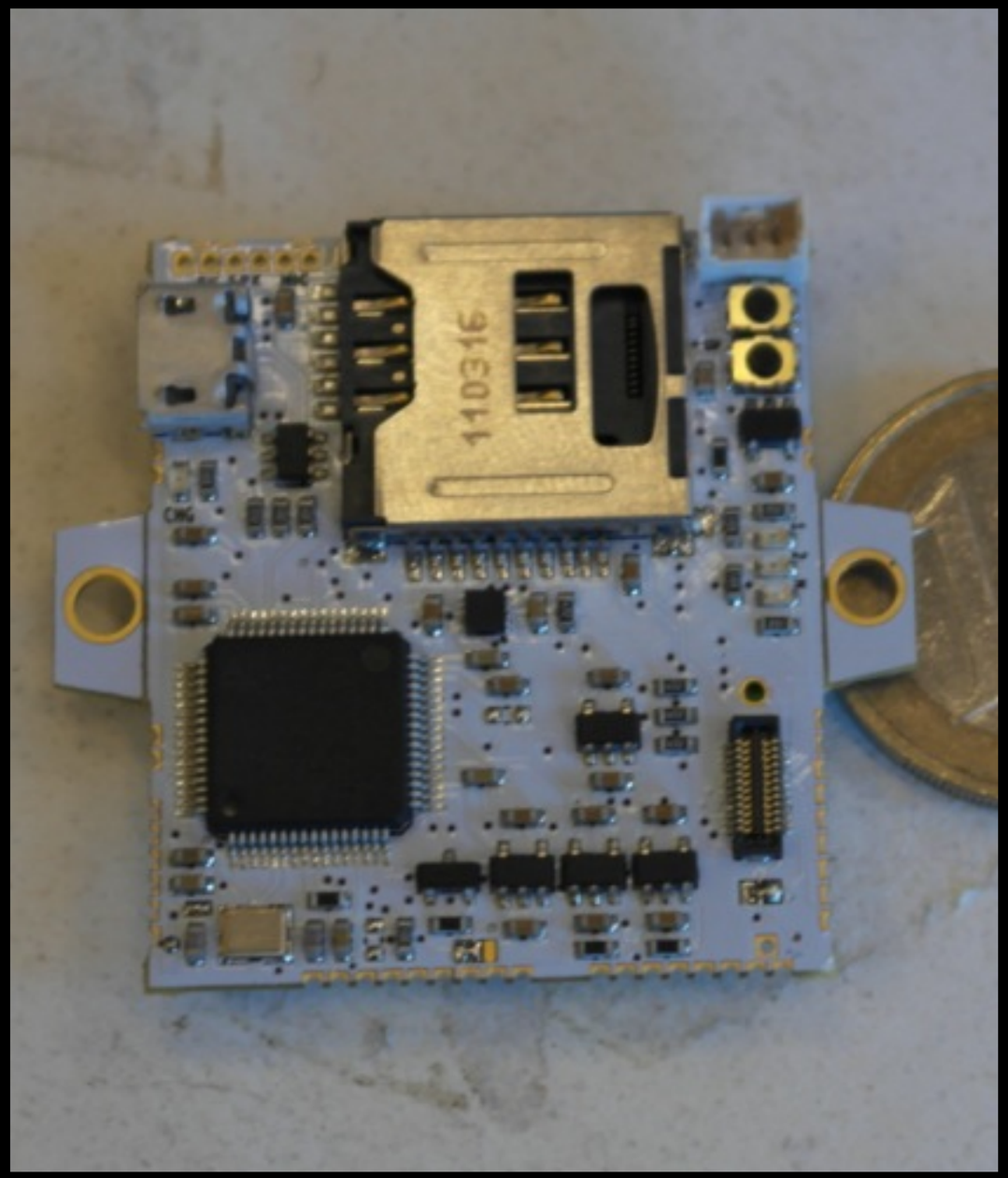
- STM32F405
- 168MHz max clock speed
- Python 3 <3
- USB serial for REPL, mass storage for code, can be HID too
- 4 Blinky LEDs onboard
- (micro)SD-Card slot (for even more code, or other resources)
- (can be) very power-efficient

Limitations

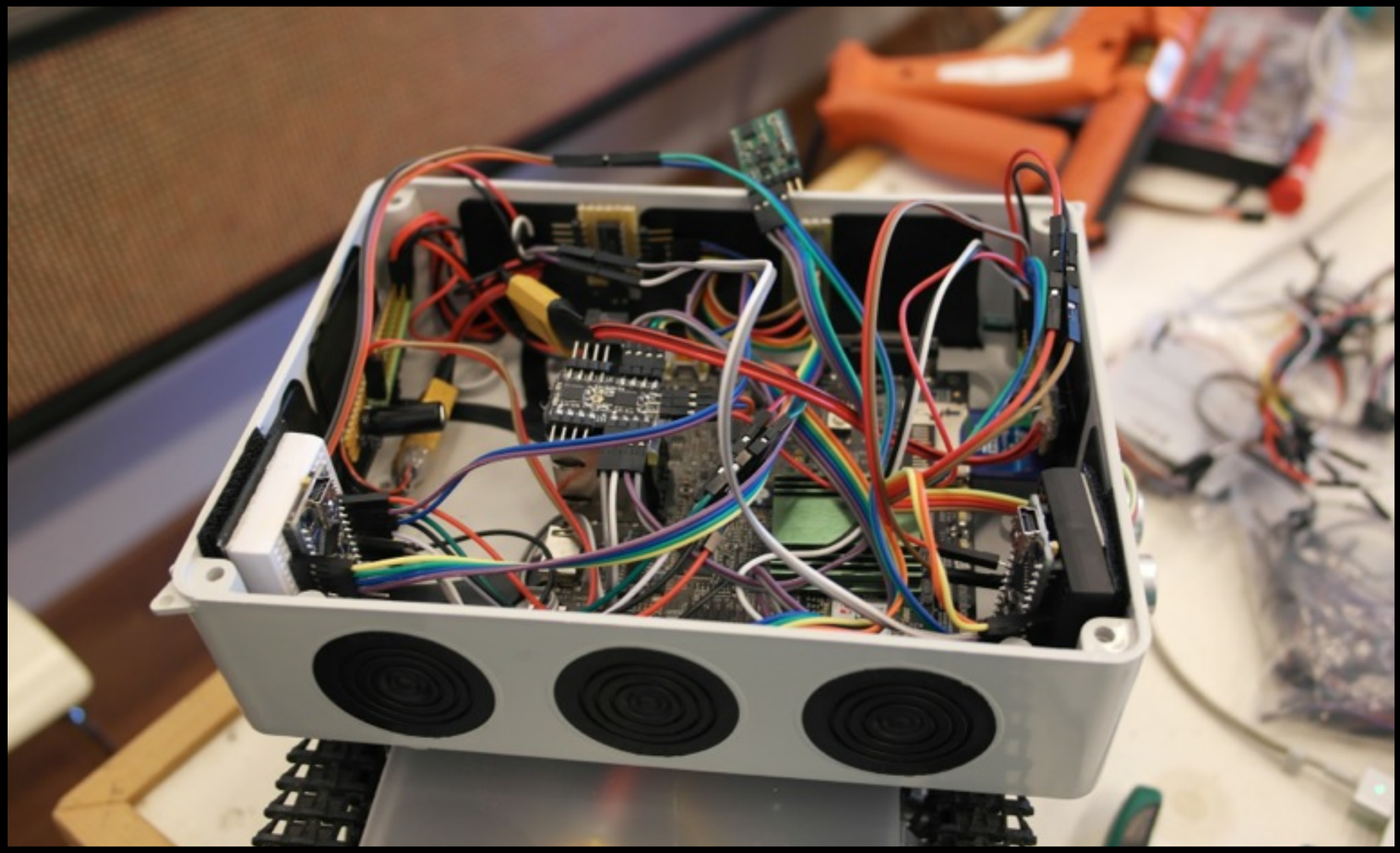
- Memory (obviously, the MCU as 192kB of RAM)
- Available libraries (pure Python ones will mostly work but might use too much RAM)
- No threading, time to brush up on those coroutine things

Other platforms

- Ruuvitracker (on the right)
- Teensy 3.1
- ESP8266 & CC3200
- Unix (especially handy on low memory devices like VoCore)
- Your favourite 32bit ARM MCU platform ?



Demo (effect) time !



Questions ?