



**Development of a new datalogger**

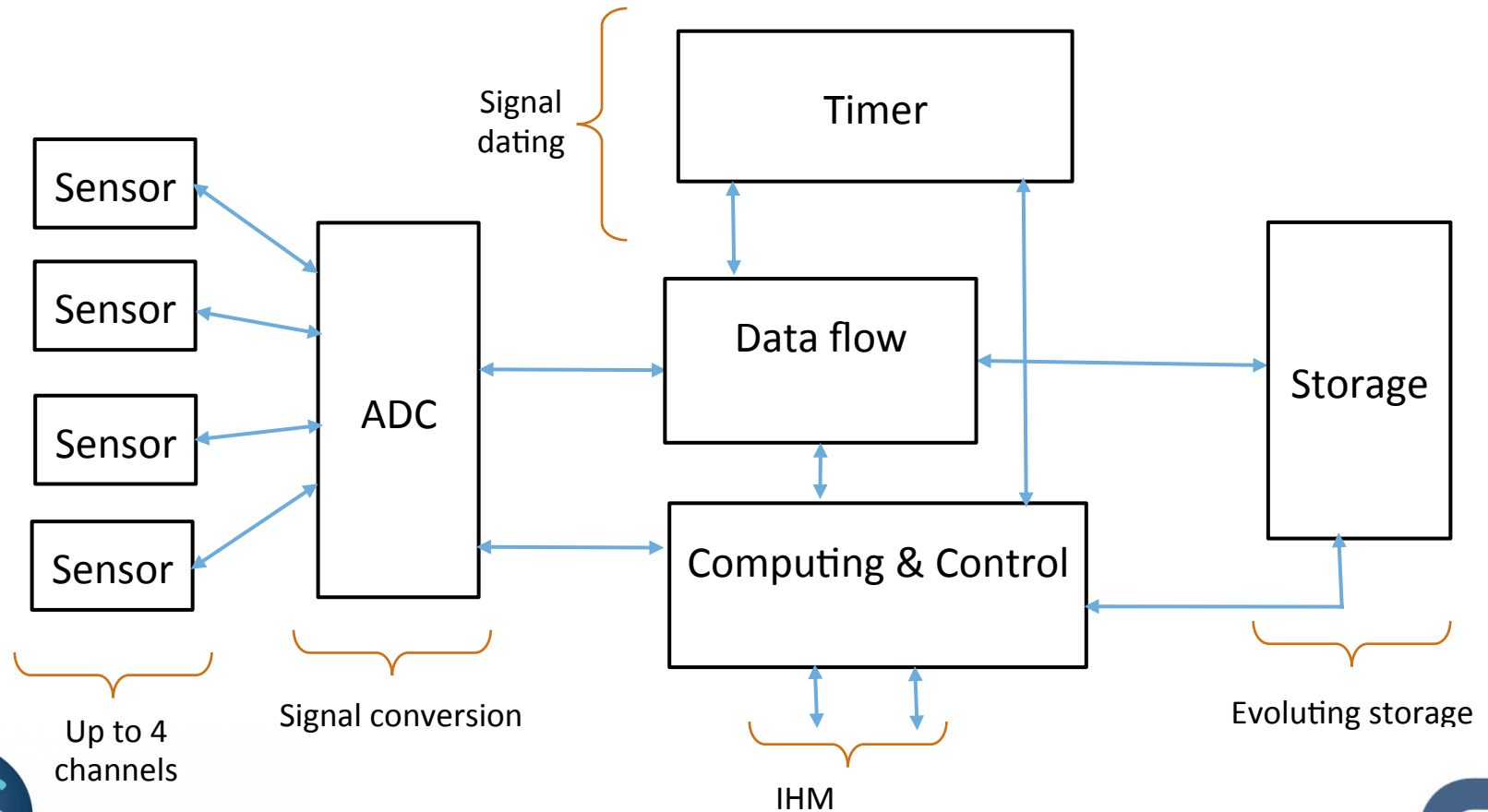
# **HYDROCTOPUS**

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## What's Datalogger ?





- At first, a new electronics to be able sampling up to 1000 samples/s
- We work on electronics based on a  $\mu$ C MSP430
- We are starting on this work and we want developed anything open source for community... => we are listening all ideas



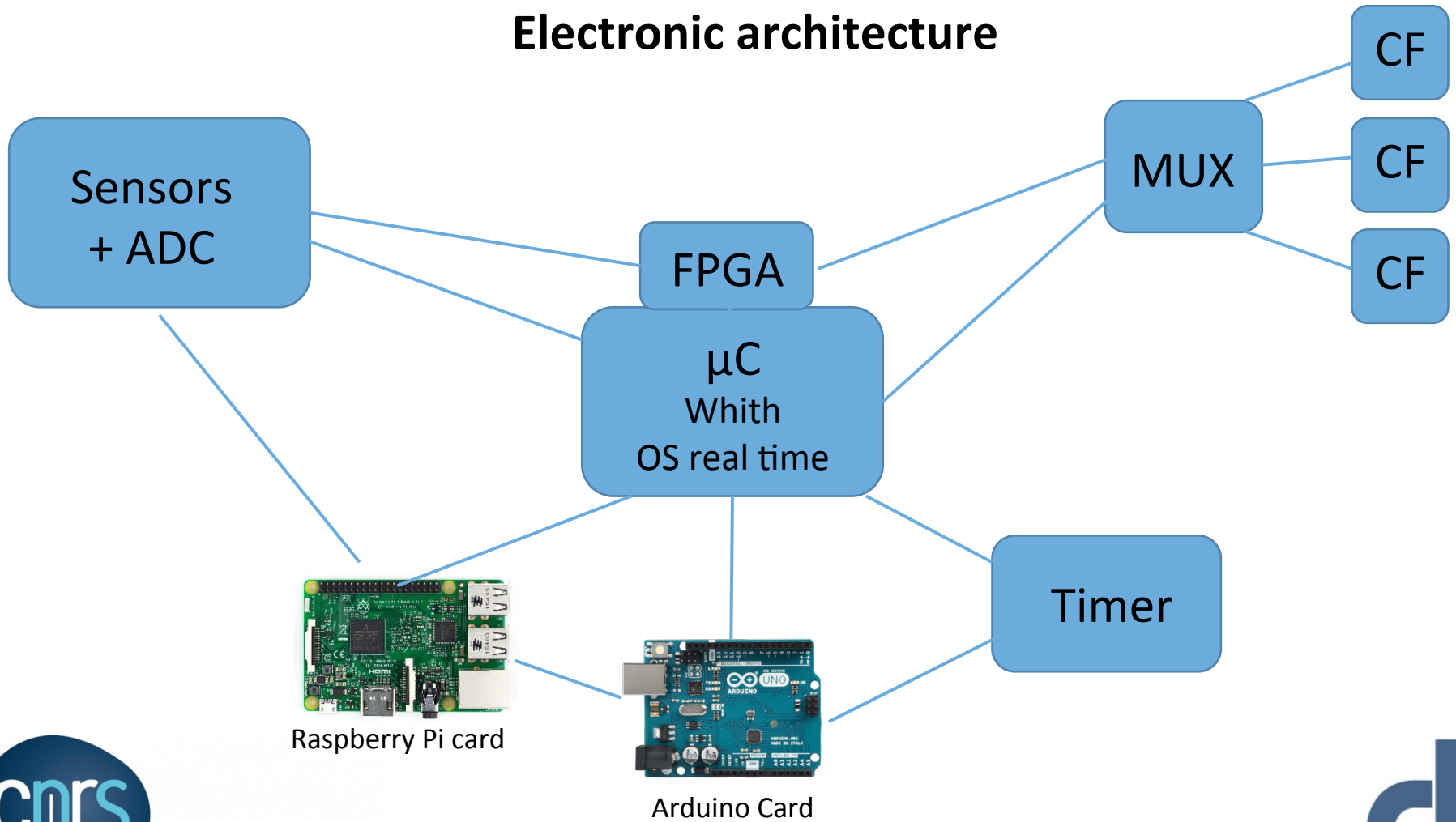


## Datalogger Specifications

- Data format 24 or 32 bits
- Programmable sampling frequency
- Ability to store 2 years of data
- Storage on SD or  $\mu$ SD card
- Auto test of the basic functions (ADC, HardDrive, RAM, TimeBase)
- Simple graphical interface for programming and verifying the device without opening it
- Simple graphical interface for downloading software
- Simple graphical interface for downloading data
- HardDrive, RAM, TimeBase)
- Average power consumption as low as possible (less than 300mW at 100 SPS)
- Possibility to use DD lithium cells for longer deployments
- USB and/or Ethernet interface for programming and data transfer
- Group of 3 cards (ADC, CPU + DataStorage, Clock + Synchronization)
- All electronics cards + battery must fit in a cylindrical container with an inner diameter of 100mm and length of 450mm



## Electronic architecture





**Thanks for your attention !**

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