

Digital Flight Data Recorder

Rokas Cesiunas

BEng Software and Electronic Engineering



Example of data recorder

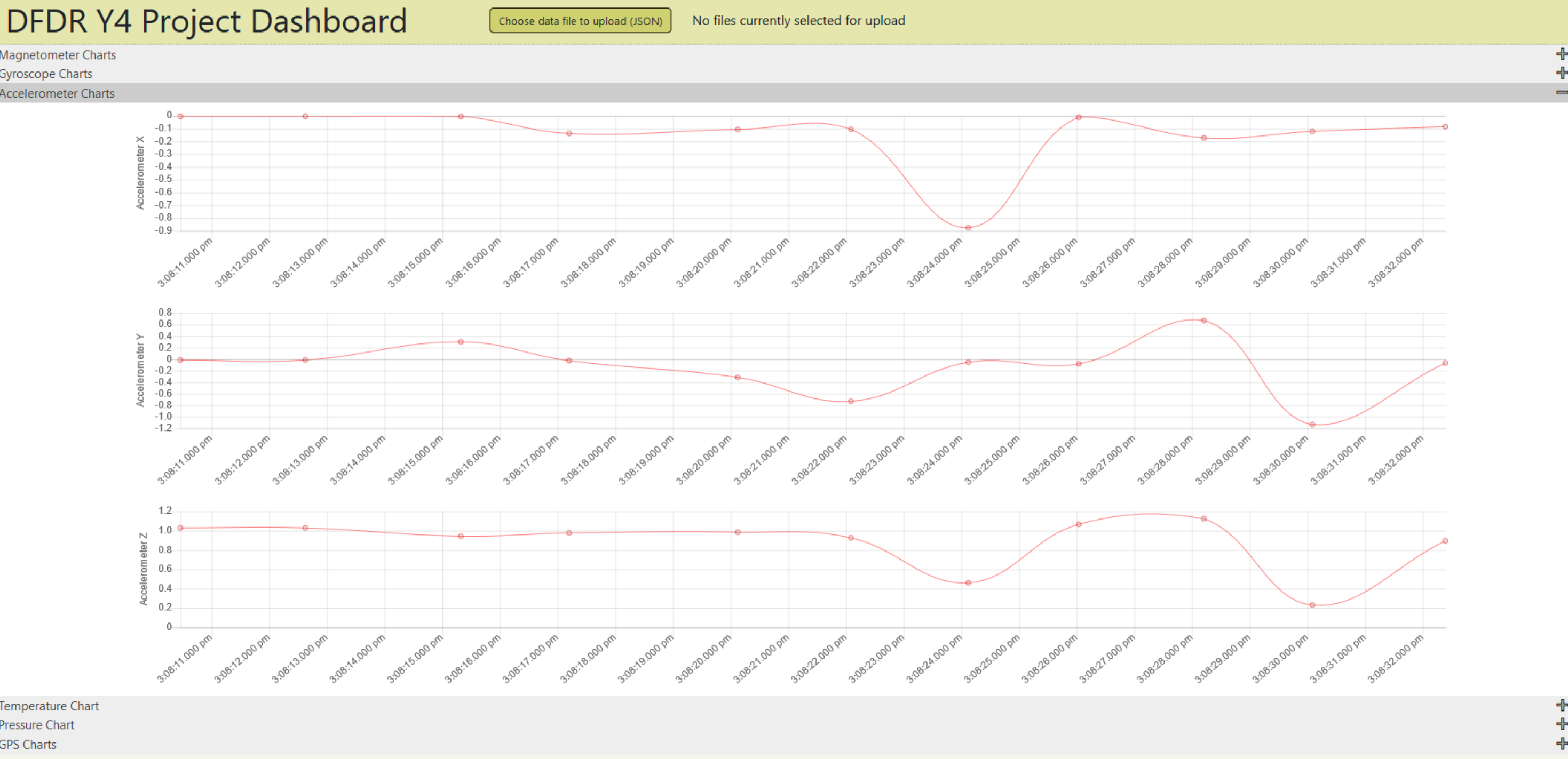


Summary

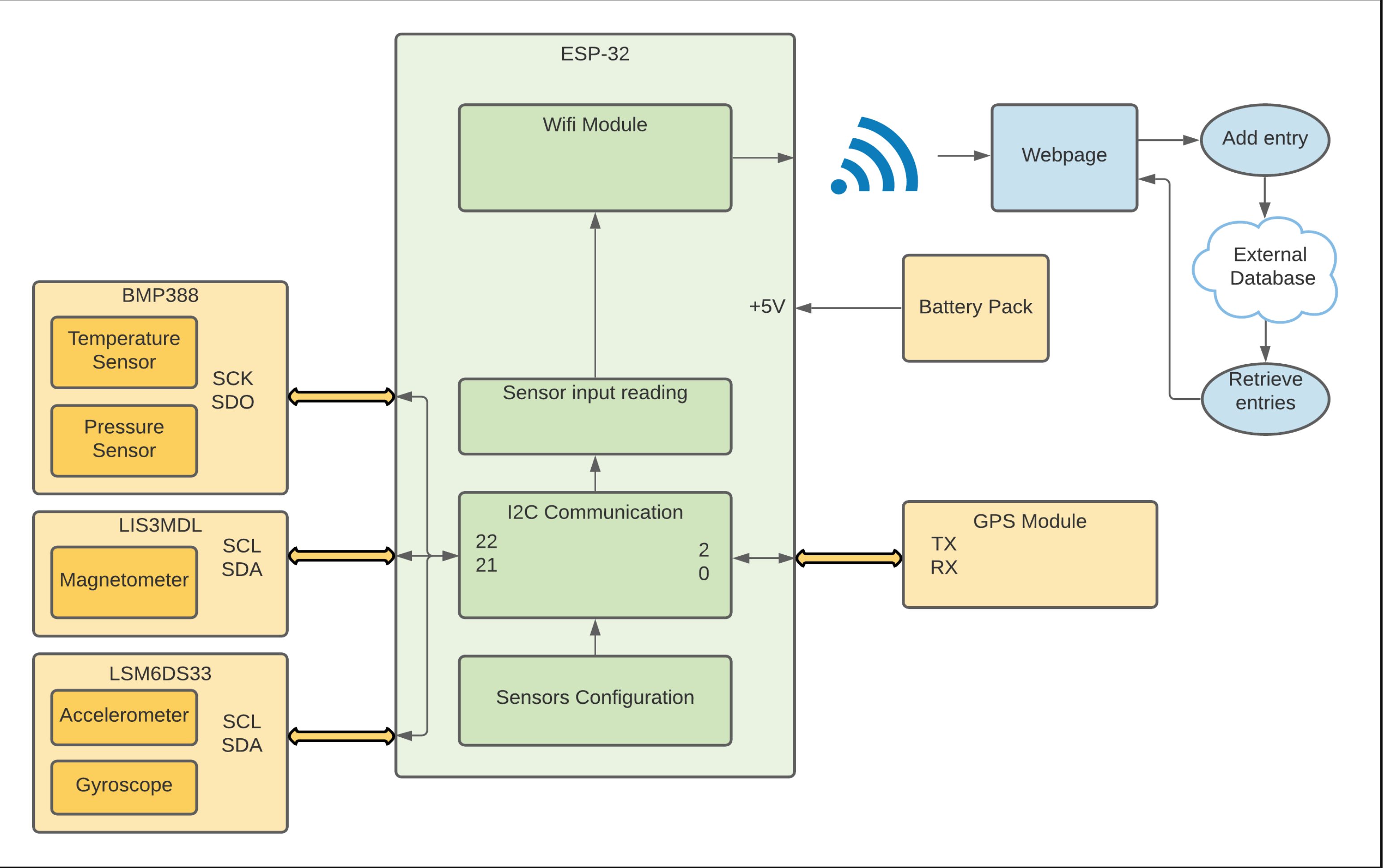
This project takes inspiration from the black boxes that are legally required on all commercial flights and are also present on most private airplanes. The purpose of this black box is to record various sensors onboard the airplane and to store this data for investigation in the event of an accident or crash.

The goal of this project was to take this idea of a data recorder and reduce its size so that it may be used on remote control aircraft or drones. By having flight data and logs you will be able to look back on past flights to measure performance or to see what went wrong in the case of a malfunction or crash.

Results Webpage



Architecture Diagram



Technologies

- Arduino IDE—C/C++ programming
- Sensor Configuration / communication—Wire Library I2C
- Serial Communication
- HTML / JavaScript

