Background

The Solar Boat Team is an extension of the Mechanical Engineering Department that is made up of 15 students that all contribute to improving different areas of the already existing Solar Boat vessel. The team asked that a group of Electrical Engineering students design a telemetry system that records and communicates the boats parameters to improve the boat performance and efficiency. All of the team members work throughout for the endurance and speed competition that will take place versus other competing schools at the upcoming Solar Splash competition this June 2016 in Dayton, OH.

Objectives

- Microcontroller
- Current to Frequency Converter (x3)
- Voltage to Frequency Converter
- Temperature
- GPS
- IMU

Test Results

The test results shown are the preliminary test results that could be done in the lab with the provided equipment. In order to get the necessary test results to show that all of our components work together they will be physically connected to the Solar Boat. Once connected, trial runs around the lake will be performed to see if the parameters are being measured and recorded properly. When the system is performing successfully, the Mechanical Engineering division of the team will use the measurements to make alterations and improvements to the boats performance for the upcoming Solar Splash Competition.

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