SDM-22 Data Acquisition Package User Manual

Sun Devil Motorsports DAQ Team

Revised June 4, 2022

Contents

1	System Overview	1
2	Usage	2
3	Wiring and Pinouts 3.1 Main Board	2 2 2
4	Software	2
5	Packing List	2
6	Meme	2

1 System Overview

Sun Devil Motorsports' Data Acquisition team is responsible for collecting and analyzing data from the car.

This year we have developed a very poggers DAQ package.

2 Usage

To begin logging data, plug in the battery cable of the main board into the ECU's 5V output. If powered on, the onboard LED on the main board's Teensy will be lit up. Data will be logged to the Teensy's micro SD card on the main board. The most recent run will have the largest run number on the micro SD card.

Do not have USB power and 5V from the ECU plugged in at the same time! Doing so may risk power flowing back into the USB port. This is because VUSB and VCC on the Teensy boards are connected to each other.

- 3 Wiring and Pinouts
- 3.1 Main Board
- 3.2 Wheel Boards
- 4 Software
- 5 Packing List
- 6 Meme