PEAK Telemetry PRD

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1 Introduction

Stakeholders

#	Name	Department	Project Role
1	name1	department1	role1
2	name2	department2	role2
3	name3	department3	role3

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2 Project Description

Design a Telemetry display / GUI using the PEAK Python API and PEAK CAN USB. The intended purpose is for technical inspection specifically for viewing all 96 battery (parallel sets) voltages. Should also be reusable for any sort of display for CAN and CAN FD (potentially XCP).

3 Timeline

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4 Block Diagram

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This is a ref using the `\ref{}` function: Look at the logo / figure 1.

Figure 1: Block diagram

Non sequi molestiae similique nesciunt fugiat veniam ipsam voluptatem.

5 IO Requirements

Input:

1. CAN and CAN FD messages over the PEAK CAN USB.
2. CAN IDs to sniff.
3. A way to provide a DBC/DBF that allows for proper data size and unit of measure.
4. A way for a user to manually set display type (data type and graph style).

Output:

1. Message in a terminal style print out. (Datetime + message + any meta data).
2. Message data graphed as need (separate windows might be better).

6 Mechanical Requirements

Using PEAK CAN USB to connect directly to a CAN line in F23.

7 Integration Requirements

Working with new and changing DBC/DBFs will be key to integrating to the car's working CAN network.

8 Budget

N/A

New PEAK CAN USBs may be purchased.

9 Selected Components

PEAK CAN USB.

10 Component Risk

N/A at this time.