Continuation for the future.

There is definitely a good opportunity to continue on this project. We have made a lot of progress in laying the groundwork for what could turn out to be a great final product.

Hardware

Our initial box is mostly complete with the exception of a faulty encoder and rotary switch that will have to be replaced and rewired. Also the LCD cable must be connected to the board. Recommendations to change the LCD due to cable accessibility are going to change the particular method of doing this. Finding an LCD with 31 or 41 connections would be preferable because then standard VESA connections can be used and the availability of these standard cables makes it a good choice. A 31 or 41 pin LCD can connect to a DF-9 VESA connection and then discrete wires can be soldered onto the VESA connector and then be terminated onto the LCD header on the Digi board.

Beyond simple rewiring the entire enclosure can be redesigned to allow for proper structural support when the devise is placed in a vehicle or other more extreme situations.

PCB design is mostly completed. There are still a few things to modify and add but it's close to completion. So the next group can finish those up and then start looking into actually getting the PCB board produced so that the next enclosure can be much smaller and efficient.

Software

The main program is coded and working for demo applications. There is considerable work to be done with the code to get the devise up and running with the ECU. Chris has made a great foundation for the code so everything is ready to be put in and it should all work together so the work that is already done is a launching pad for the next group. Currently the devise is working with a Labview engine simulator so the next group can see a working model and build from there instead of starting from scratch. The Labview engine simulation will also have to be added to to create a more realistic engine and ECU communication.

Other possibilities for bettering the project are adding wireless capability, adding graphing functions such as parameter histograms, fuel maps, and spark timing table; and adding an on-board battery supply.