The Incredible HUD

Purdue University

TCSP #1 – PSSC PRESENTATIONS

Team #3 – Aditya Balasubramanian, Brandon Blaine Gardner, Marcelo Leone, Nikhil Naciketas Sureshkumar

PROJECT ABSTRACT

* Device will display a spread of data onto the visor of a motor-vehicle helmet.

* Includes speed, direction (GPS), temperature, rear view camera, and G-force.

* Display system will be completely helmet based; all functioning sensors and parts will be packaged on the outside surface.

* User will have the ability to control the information displayed. Additionally the telemetry information will be logged in memory enabling the user to view it at a later time on another computer.

https://engineering.purdue.edu/477grp3/

PROJECT SPECIFIC SUCCESS CRITERIA (PSSC)

PSSC #1 - An ability to display critical system information via heads-up-display.
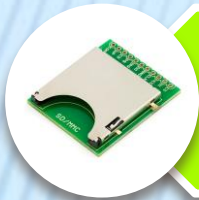
PSSC #2 - An ability to contain and manage and independent power supply (rechargeable battery pack with power management).

PSSC #3 - An ability to receive and store telemetry information (speed, acceleration, temperature, humidity and GPS).

PSSC #4 - An ability to enable/disable important features within the display (rear view, on/off).

PSSC #5 - An ability to display GPS data on a computer, with corresponding telemetry data overlaid on an interactive map.

BLOCK DIAGRAM