



CDR Materials

LFEV-Y5-2017

Lafayette Formula Electric Vehicle
Year 5
ECE 492 - Spring 2017

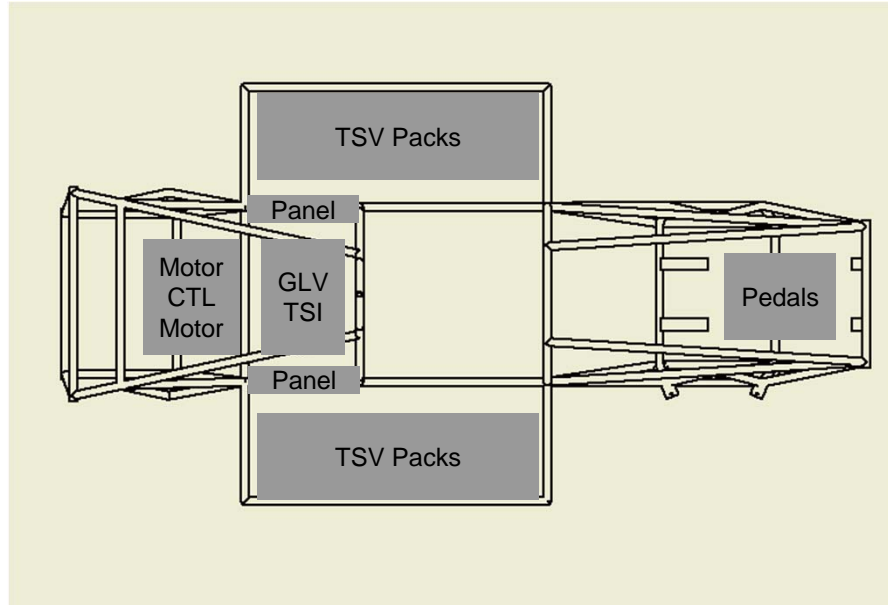


Roadmap

1. System Overview
2. Schedule
3. Cost Analysis
4. System States
5. Demo in Dynamometer Room
6. Vehicle Supervisory Control and Data Acquisition (VSCADA)
7. Cell App
8. Tractive System Interface (TSI)
9. Grounded Low Voltage (GLV)
10. Controller Cooling System
11. System Test Plan



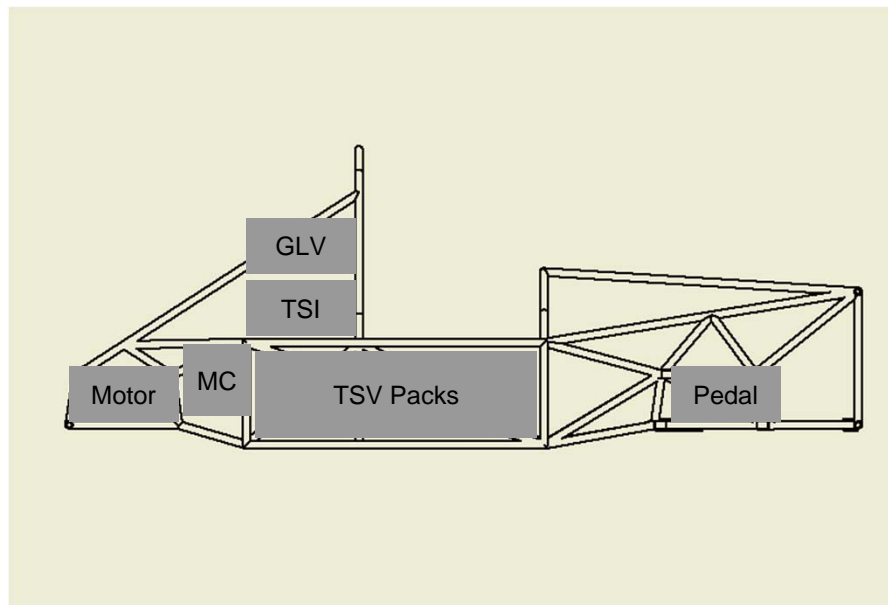
System Overview - Top



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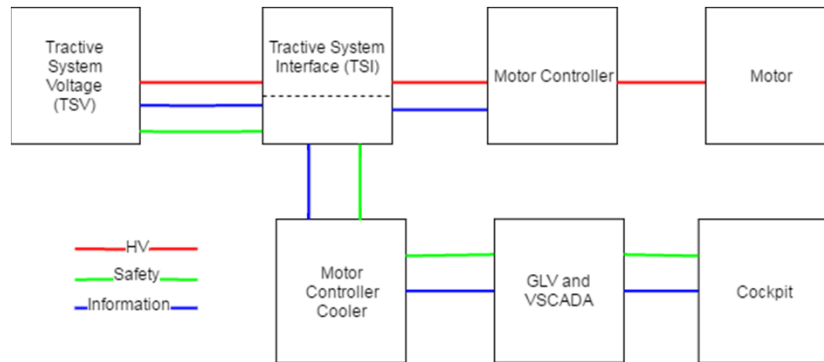


System Overview - Side



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High Level System Block Diagram



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Acronym List

AIR - Accumulator Isolation Relay
AMS - Accumulator Management System
APPS - Accelerator Pedal Position Sensor
ATP - Acceptance Test Plan
BMS - Battery Management System
BRB - Big Red Button
GLV - Grounded Low Voltage
GLVMS - Grounded Low Voltage Master Switch
HVD - High Voltage Disconnect
IMD - Insulation Monitoring Device
JGB - John Gehrig Board (CAN Bus DAQ Board)
LFEV - Lafayette Formula Electric Vehicle

MCS - Motor Controller System
PacMAN - Pack Manager
RTDS - Ready to Drive Sound
SCADA - Supervisory Control & Data Acquisition
SOC - State of Charge
TS - Tractive System
TSAL - Tractive System Active Light
TSI - Tractive System Interface
TSMP - Tractive System Measuring Point
TSMS - Tractive System Master Switch
TSV - Tractive System Voltage
VCI - Vehicle Computer Interface
VUI - Vehicle User Interface
VSCADA - Vehicle Supervisory Control & Data Acquisition



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