Homologation Requirements For Electric And Hybrid Electric Vehicles

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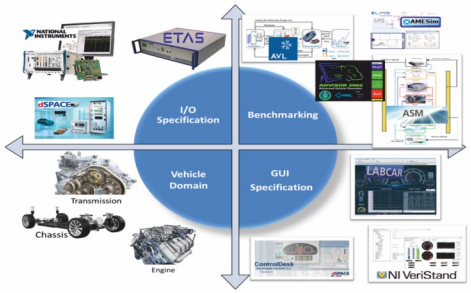
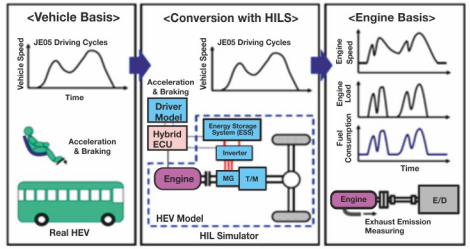
E-MOBILITY : CENTER OF EXCELLENCE

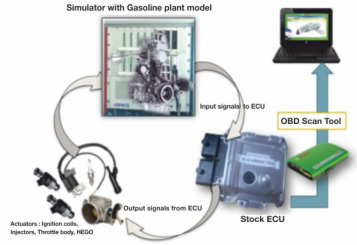
360 degree Consultation



Electric Motor and Safety

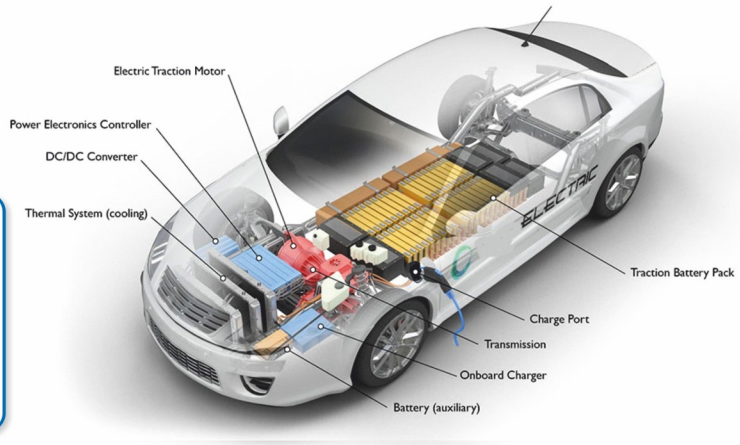
- E-motor Test Bed (150 kW, 220 kW)
- 2W/3W/4W Chassis Dyno Testing
- HCV Chassis Dyno for Electric Bus Testing
- Construction and Functional Safety





Simulation

- EV /HEV Technology
- xEV Real Time Simulator
- Vehicle Configuration & Component Sizing
- Comp Simulation & Parameterization
- Plant Modeling & HIL

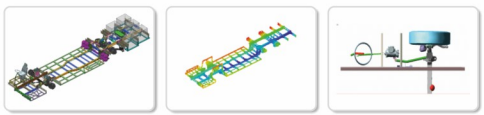


Structural Dynamics

- Road Simulation
- Environmental Simulation
- Suspension Evaluation
- MAST

CAE

- Chassis Design and Development for Electric City Bus
- Rear Module Packaging
- Steering Kinematic Simulation
- Structural Strength Prediction
- Bump Steer Prediction
- Rechargeable Energy Storage System (REESS)
- Evaluation using CAE



Lithium Ion Battery

- Cell level , Pack Level Characterization
- Abuse Testing (Thermal, Mechanical, Electrical)
- Combined Temp/Vibration , HALT/HASS
- Battery Emulation (100 kW, 250 kW)
- Li-ion Space to Automotive

Material Characterization for Li-Ion Battery

- X-ray Diffraction technique
- Energy Dispersive Spectroscopy (EDS)
- Thermogravimetric Analyser
- Scanning Electron microscopy (SEM)

Charger, EMC, Environmental Test

- Charger Testing AC001 & DC001
- EMC-Component level, 2/3 W, BMS