

智慧節能iPHEV動力系統暨XIL平台發展與驗證

執行單位

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計畫主持人

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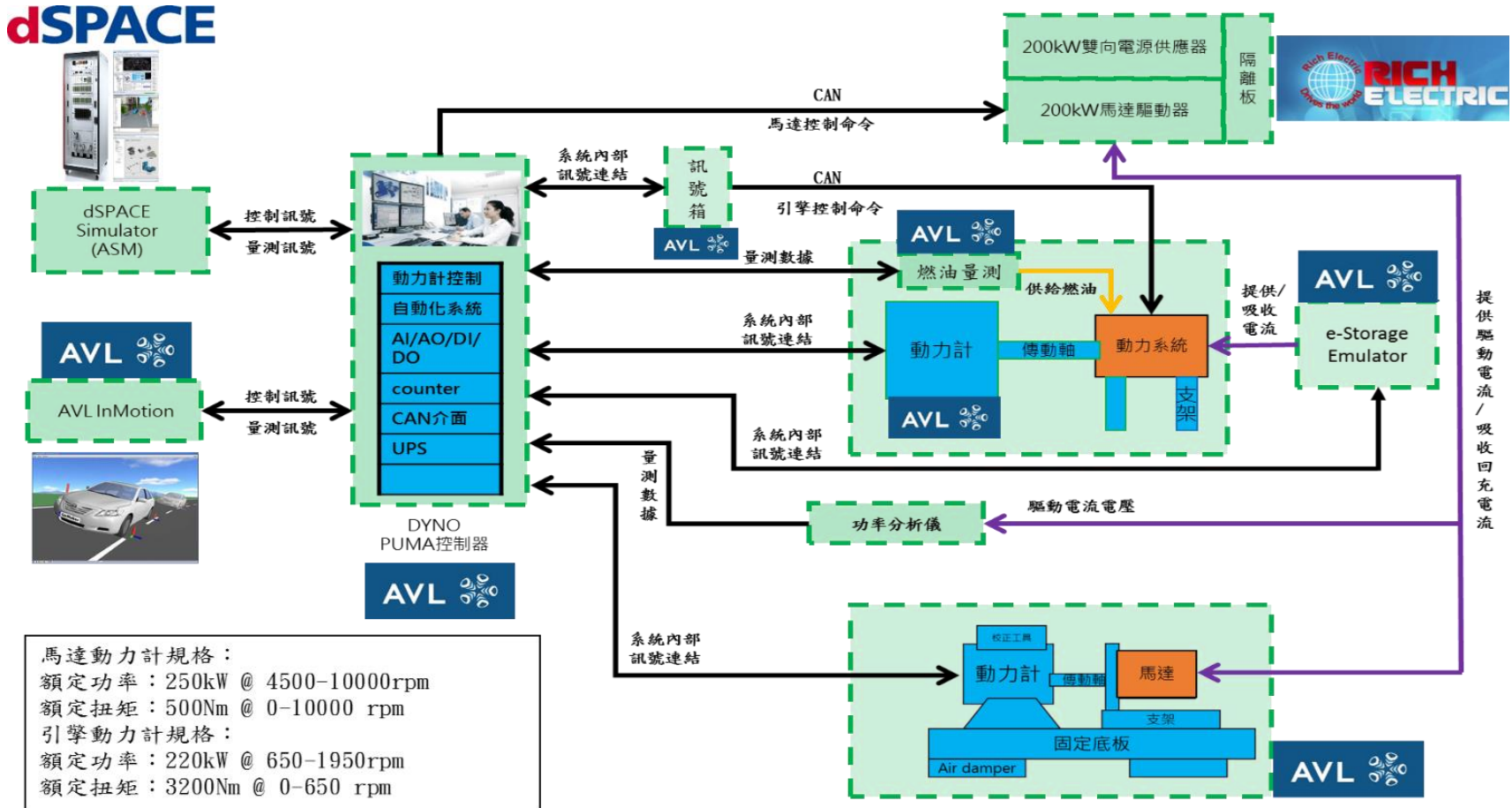
建置國內唯一以真實道路交通資料庫為基礎之複合動力系統與智慧車輛控制系統之HiL測試驗證平台，本測試平台可針對複合動力系統(引擎+馬達)進行性能測試與整車模擬驗證，縮短國內車廠未來智慧節能新車款之開發時程。

已申請專利:

- 1.馬達散熱結構及散熱方法
- 2.Tele-operated vehicle and vehicle control device and control method thereof
- 3.複合動力車輛的變速型傳動裝置
- 4.車輛警示裝置
- 5.Warning device for vehicles
- 6.車輛之行車節能系統
- 7.多輪驅動電動車之底盤系統整合架構及其控制方法



本計畫針對插電式混合動力系統技術以及智慧電動車(iPHEV)進行基礎學理、關鍵技術與軟硬體開發之研究，同時配合國內車廠未來智慧節能新車款之開發，進行相關之應用研究，並提供測試與驗證之平台。



Development and verification of intelligent energy saving PHEV power system on XiL platform

Execution Unit

National Taiwan University

Project Director

Jia-Yush Yen

This project is to build the first HiL testing platform based on real traffic data in Taiwan. The proposed platform is designed for both hybrid power system and intellectual mobile control. In addition, by using the utilities for validating simulation results and testing system performance, this platform allows the automobile industries to speed up the process of vehicle development.

Patents:

- 1.馬達散熱結構及散熱方法
- 2.Tele-operated vehicle and vehicle control device and control method thereof
3. A Hybrid Transmission with Variable Speed Ratio
- 4.Vehicle warning device
- 5.Warning device for vehicles
- 6.Energy-Conservation Vehicle driving Control System
- 7.多輪驅動電動車之底盤系統整合架構及其控制方法



This project focuses on research for “plug-in hybrid power system technologies and intelligent electric vehicles.” The research collaborate with Hua-Chuang Automobile Information Technical Center (Haitec) Co., Ltd., key technologies and software/hardware for future intelligent and energy saving new automobiles. The unique XiL platform for simulating, testing and verifying iPHEV- related technologies and its hybrid power systems. The achievements provide the key technologies for automotive industries to develop future intelligent PHEV’s.

