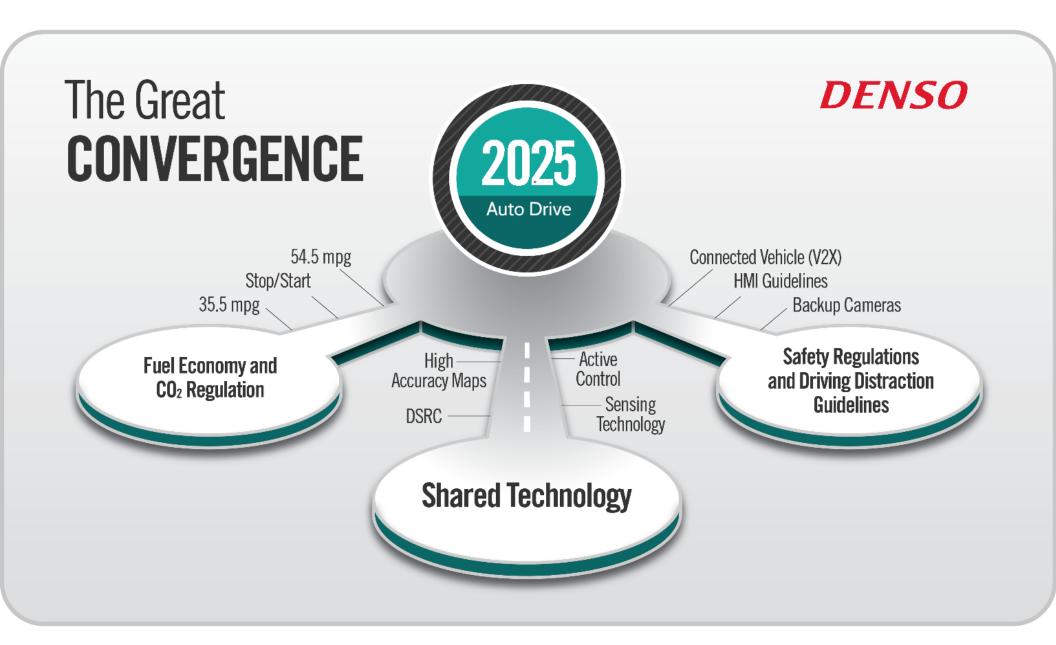
DENSO

Leveraging the Great Convergence

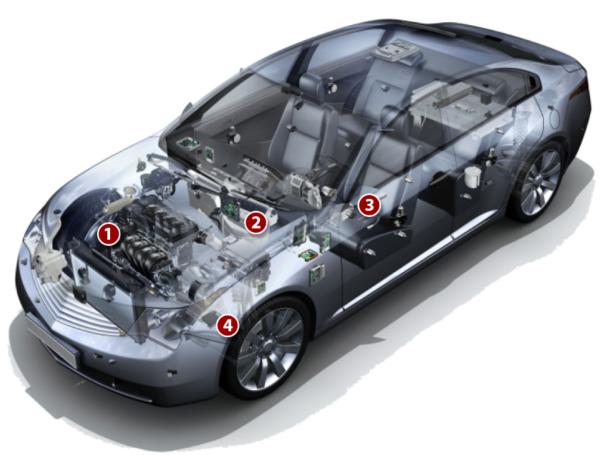
Doug Patton

Senior Vice President Engineering Division DENSO International America, Inc. April 8, 2014



DENSO Global Supplier of Advanced Automotive Technology, Systems and Components with \$38.4 Billion in Sales

For fiscal year ending March 31, 2012



- 1 Powertrain Control System
 Engine management system, Gasoline
 direct injection, Hybrid components,
 Starter, Alternator, etc.
- Thermal Systems
 Heating Ventilation Air Conditioning (HVAC),
 Compressor, Heat exchangers, Battery
 thermal management, etc.
- Information & Communication Systems
 Instrument Cluster, Head-up Display, Human
 Machine Interface technology, Horn, Keyless
 entry, Wireless phone charger, etc.
- Oriving Control & Safety Systems
 Passive safety technologies, Airbag sensing system, Active safety technologies, Traction control system, Antilock braking system, etc.

DENSO's Long-term Plan 2025



Preserve the Planet

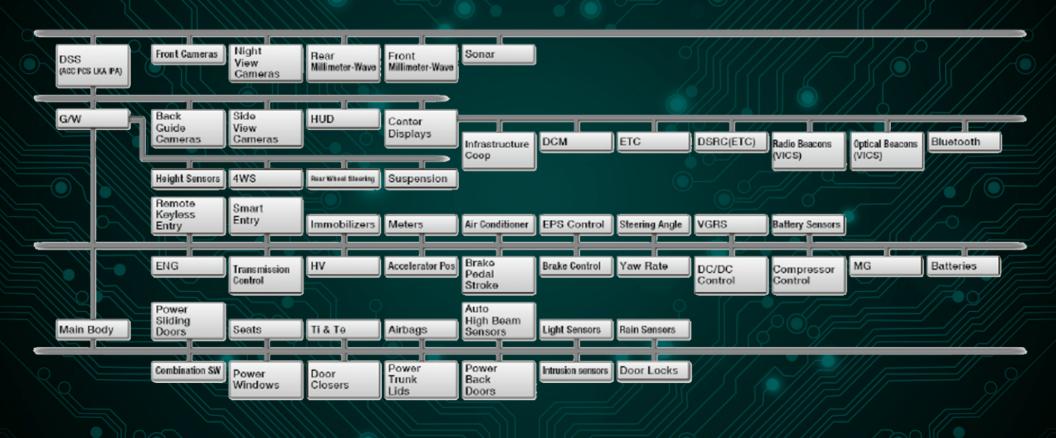
Significantly Improve fuel economy, reduce CO2 emission and reduce overall energy consumption

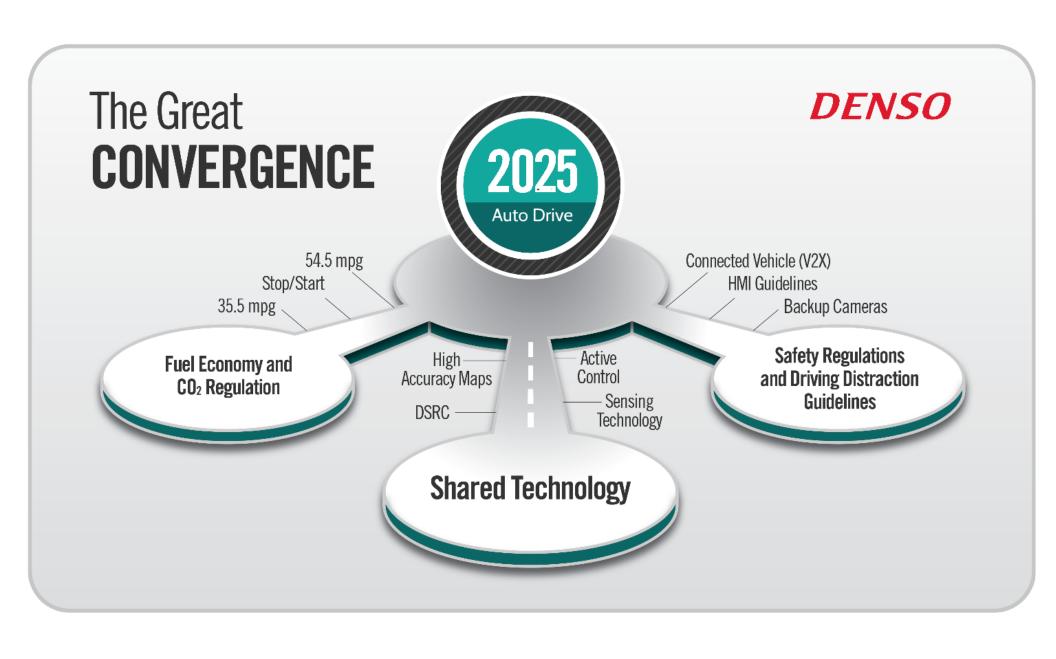


Protecting Lives

Greatly increase safety and security on and off the road Strive for zero accidents

Functional Electrical Architecture





Domain Electrical Architecture

Coordination Strategy

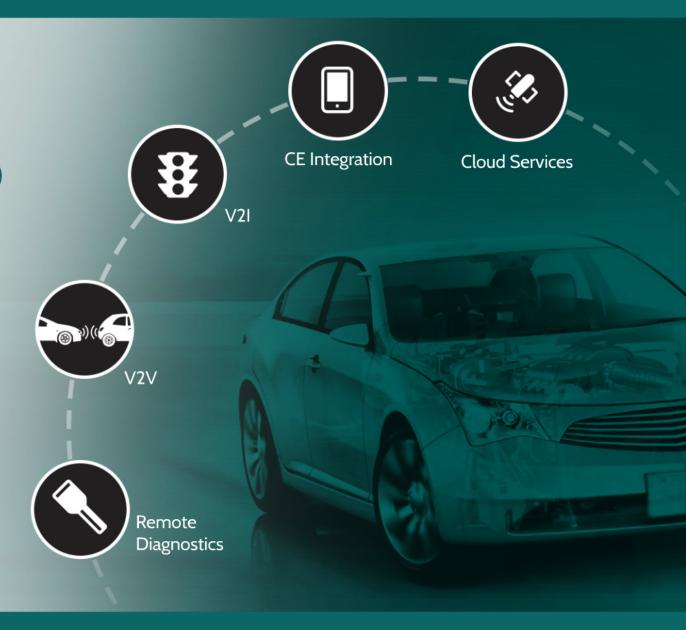
Vehicle Motion Control Body Electronics Control Vehicle Environment Interface Human Machine Interface Management

Energy Management

Network Management

Network Management

Information coming into the vehicle



Domain Electrical Architecture

Coordination Strategy

Vehicle Motion Control Body Electronics Control Vehicle Environment Interface Human Machine Interface Management

Energy Management

Network Management

Human Machine Interface Management



360° situational awareness using technology to understand environment inside and outside of vehicle

DENSO



Establish a common methodology to measure driver workload.





