

#EngineeringScale



**ELECTRIC AUTONOMOUS
CONNECTED VEHICLES (EACV)**

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SOFTWARE DRIVEN CAR: FUTURE OF MOBILITY

Focus on component development & integration
OEM as the integrator working with Tier-1s



Interior



BIW



Powertrain



Exterior



Chassis

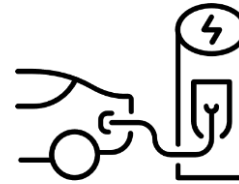


Electronics

OEMs focusing at owning SW/ Stacks & influencing Semicons SoC designs



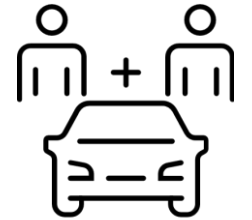
Autonomous



Electrification



Connected



Shared

OUR STRATEGY & CREDENTIALS



01 Electrification

Market Size ➔ **\$ 129 B** 2025

- End-end component capability
- Systems engineering
- Light weighting & Thermal management
- Energy management



02 Connected

Market Size ➔ **\$ 32 B** 2025

- Integrated next-gen digital cockpit
- 5G & C-V2X
- Consumer device integration
- Connected car big data services



03 Autonomous

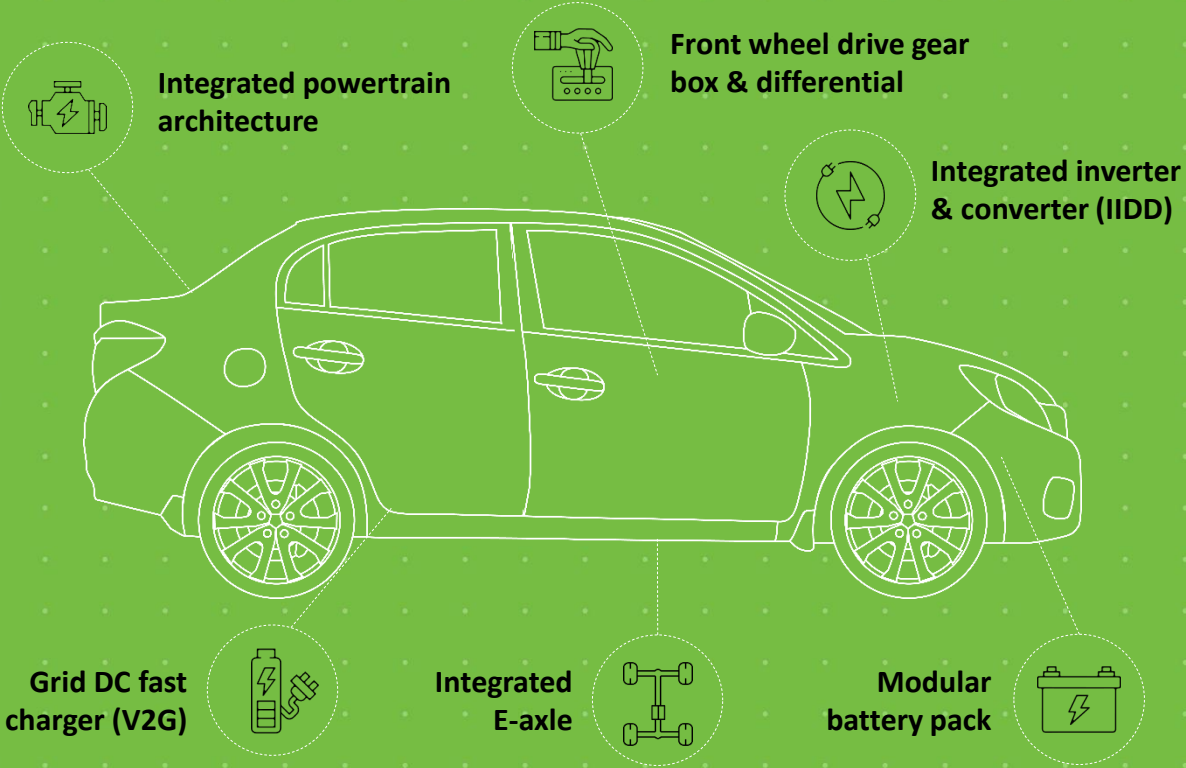
Market Size ➔ **\$ 7 B** 2025

- AI/ ML driven perception & vehicle control
- Data management & annotation
- Sensor fusion and Data analytics

OUR ELECTRIC VEHICLE PLATFORM JOURNEY

EV 1.0

eVOLTTS



40KM Range

BLDC Motor
(60 Nm, 20 kW)

Industrial Grade EV
Components

Reusable
components

Rapid prototyping
simulation suite
design

DAB technology –
Integrated power
conversion

Integrated converter and motor
control platform

Battery
management controller

INVESTING IN INNOVATION: STATE-OF-ART ELECTRIC VEHICLE TESTING LAB

Components we test



e-Motors



E-Chargers



Inverters



Battery



DC-DC Converters

Testing solutions we provide



Performance Testing



Functional Testing



Endurance Testing

OFF-BOARD CHARGING INFRASTRUCTURE

PV + Battery + EV Charging 50 kWh Setup in Vadodara



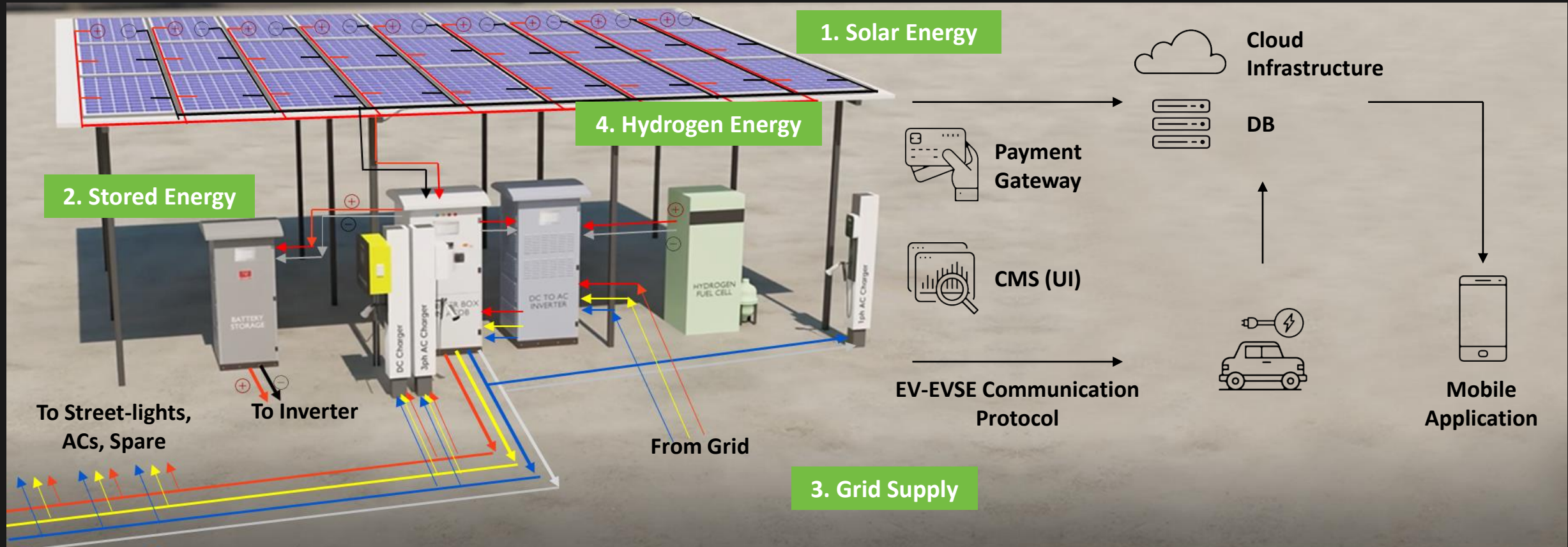
Multi-source energy input
(Solar/Grid/Fuel cell)



Optimized hybrid
energy controller



Fast
charging



CONNECTED & DIGITAL COCKPIT PLATFORM

Key Drivers



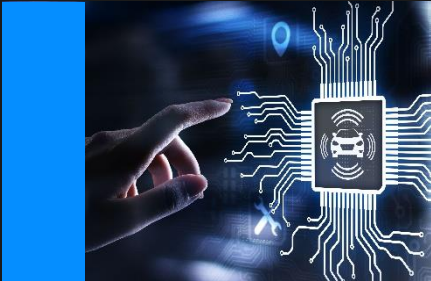
Advanced UI/ UX



Over the air



ADAS/AD



Integrated EV

5G enabled next gen digital cockpits with multiple displays

Voicification for driver and passenger interactions

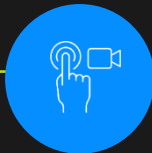
Key features



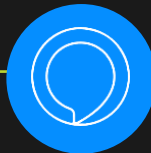
Connected car



Patented Bluetooth multi- casting



Camera based gesture control



Alexa integration



5G/4G telematics

Car applications to manage and monitor all functions

Cloud based data analytics and monetization



Connected car mobile apps

AUTONOMOUS DRIVE PLATFORM



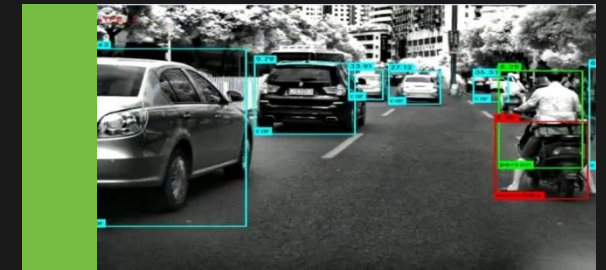
Traffic sign recognition



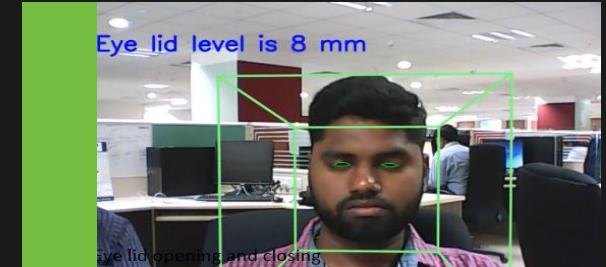
Unified framework for multiple ADAS applications



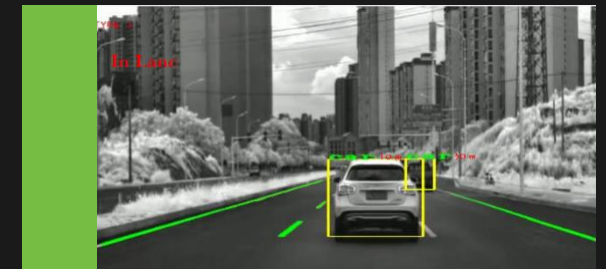
Mechatronics – Precise controls for mechanical components



Object detection & classification using monocular camera

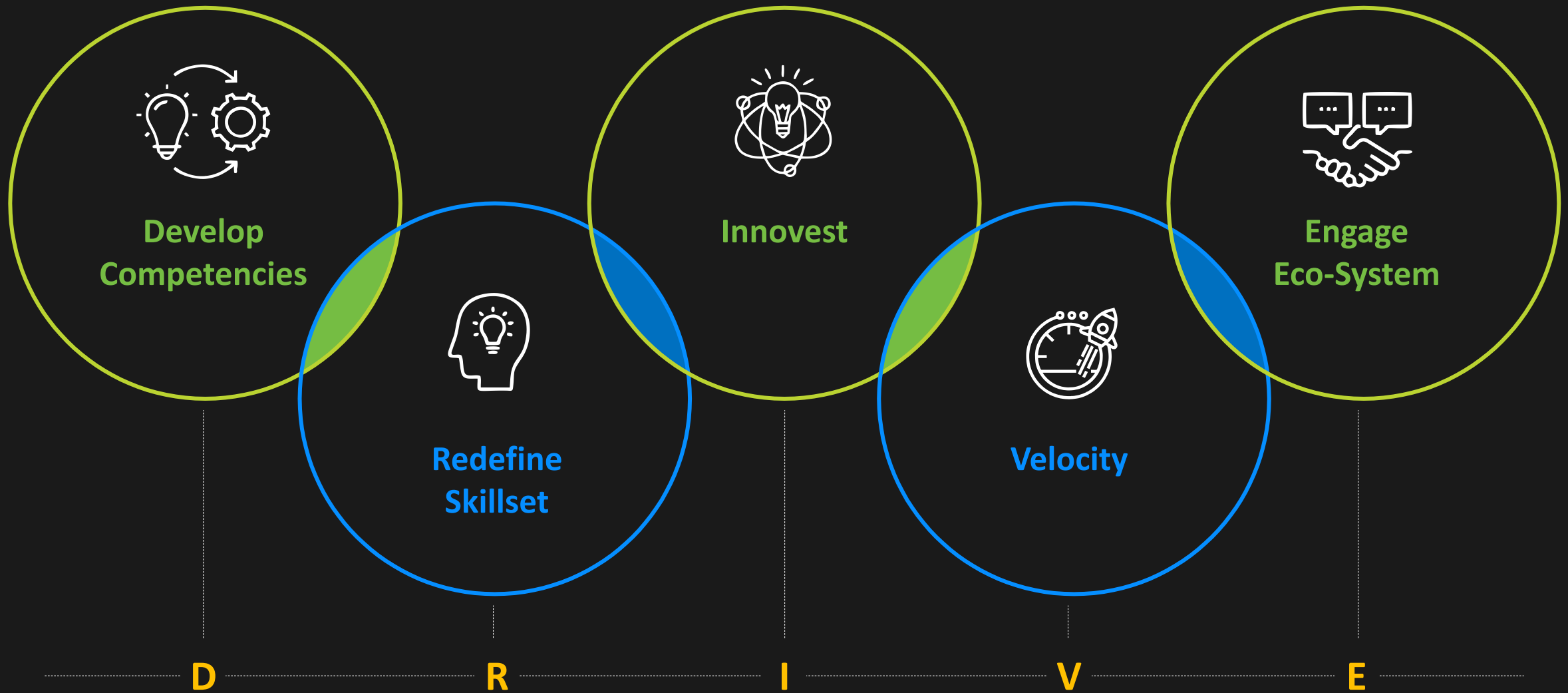


Driver monitoring systems



Automatic emergency braking

THE DRIVE AHEAD



THANK YOU