

### OPPORTUNITIES ADDRESSED

Level 4 Autonomous Taxi Concept

#### Ground-up development of L4 autonomous driving

- End-to-end expertise in L4 autonomous system development from system specification, system design, sensor configuration, AD stack development, simulation testing, vehicle integration, & vehicle validation
- In-house developed tools for sensor selection and point cloud data generation
- Defined design approach aligned with NHTSA standards

#### Design and development of re-usable modules

- The availability of reusable algorithms & modules, virtual validation-based on the simulated and real vehicles scenarios reduce the time-to-road



#### Scenario generation and validation of AD algorithms

- Validation of the algorithm on a test vehicle in a controlled traffic environment
- Generation of synthetic scenes and validated algorithm through in-house developed tool - VDRIVE

## APPLICATION SCENARIO

- Passenger request for a taxi through a mobile app
- Car autonomously approaches the passenger
- Passenger gets into the car and enters the destination in the screen provided
- Car drops the passenger at the desired destination

## SCOPE

- End-to-end expertise in L4 autonomous system development from system specification, system design, sensor configuration, AD stack development, simulation testing, vehicle integration, & vehicle validation
- In-house developed tools for sensor selection and point cloud data generation
- Safety architecture | Design and development of re-usable modules



## BENEFITS

- Reusable software modules and algorithms
- Reduced lead time
- Algorithms are vehicle-tested in restricted traffic conditions
- End-to-end system development, validation, and integration capability
- Synthetic data generator tool for training the algorithm
- Simulation framework for system and module testing