Memory Requirements

The memory requirement for DoIP stack will vary on the number of configurations required. However, the standard memory requirement is:

ROM - 30 Kb

RAM - 10 Kb

Applications of DoIP in Automotive Product Development

Our DoIP software stack has been successfully deployed by our customers as diagnostics and communication stack in passenger cars. Following are some applications and use cases:

• **Remote vehicle diagnostic:** DoIP stack enables access to vehicle data over internet

• **Gateway Functionality:** Acts a gateway for other stacks such as J1939 to send data to the cloud

• **Bootloader Application over DoIP:** Enables faster and larger packet segmentation

• **ADAS and multimedia applications:** Higher bandwidth and better response time for real-time application

• **Integration with Powertrain and body control module** for high speed data communication

Features

• Low-footprint DoIP Stack
• Compatible with RTOS and non-RTOS embedded system
• High-Speed communication (100 Mbps)
• Best Suited for ADAS applications
• MISRA C compliant

Engagement Model and Overview

Our **pre-tested** and **ready-to-integrate** DoIP software stack has ensured reduced product development time and cost for our global automotive customers.

We partner with our customer to offer this DoIP software solution under a **one-time licensing fee model.**
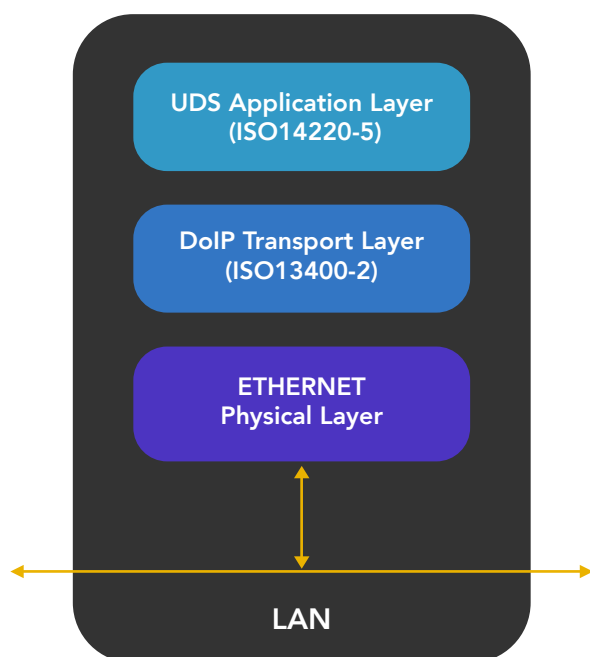
As a customer, you can leverage the following advantages under this business model:

• You own the IP rights as well as the source code of the DoIP software stack

• **Re-usability:** This enables you to deploy this stack across multiple product lines and projects

DoIP Stack Solution Package

Our DoIP solution package comprises all the APIs that enable the remote access for the vehicle diagnostics.

We provide the **application, presentation** and **session** layer for the DoIP stack and support for the **transport** and **data link layer.**

UDS Application Layer
(ISO14220-5)

DoIP Transport Layer
(ISO13400-2)

ETHERNET
Physical Layer

LAN

DoIP Stack Integration, Testing and Support Services

• DoIP server (ECU) and client (tester device) stacks provided

• Design and development of tooling solution for remote diagnostics, fault code memory configuration

• High-level and low-level documentation services including module test plan and MISRA report creation

• Functional, Unit and Integration testing services

• Integration services- DoIP stack with Ethernet MAC, MAC IC

• Driver development for MAC IC

• Bootloader Customization as per the customers' requirement

Get in touch with Our Team

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