# CASE STUDY CarPlay Connectivity



Tier-1 automotive brand ensures CarPlay connectivity on its platform by leveraging Ittiam's proven expertise in in-vehicle infotainment and connectivity

## ENGAGEMENT BACKGROUND

The tier-1 automotive client was looking to integrate CarPlay support on their automotive platform. Banking on their confidence in our expertise across multiple SoC automotive platforms, OS, and connectivity technology including Miracast, they chose Ittiam as their partner to drive the integration. We worked with the client's OS, Board Support Package (BSP), SoC and middleware development partners, spanning multiple geographies, to enable successful CarPlay certification by Apple.

## SUMMARY

CUSTOMER Tier-1 Automotive Brand

REGION Asia

#### INDUSTRY Automotive

SOLUTION CarPlay Connectivity Solution

## CHALLENGES

Fulfill Apple's stringent compliance requirements to enable CarPlay certification

Engage with multiple client partners for seamless integration of software and hardware solutions

Address a wide range of media and system related issues

Adhere to tight timelines

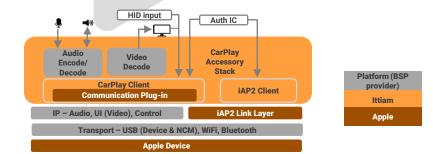
## **KEY CHALLENGES**

Ittiam was tasked with the challenge of enabling CarPlay certification in adherence to Apple's stringent compliance requirements. This entailed bringing together the client's multiple solution partners spread across geographies and time zones. We had to identify all the software and hardware issues, and recommend solutions to address them. The client also had to fulfill their OEM customer's tough timeline demands.

### **SOLUTION OVERVIEW**

Backed by our in-depth know-how of multiple platforms and OS, as well as media and systems, we effectively orchestrated the certification process.

- Provided Ittiam CarPlay SDK comprising intuitive APIs for porting Apple's communication plugin with the middleware.
- Ensured availability of key dependencies including the hardware, Apple authentication co-processor, USB and WiFi drivers, and system decoders and renderers.
- Helped fix issues related to iPod Accessory Protocol (iAP2), and video rendering and decoding by working with the OS and SoC vendors respectively.
- Enabled touch screen support.
- **Ran mandatory pre-certification tests for over 200 use cases.**



#### IMPACT

Ittiam proactively engaged with multiple integrators to help the client achieve CarPlay certification within the defined timelines. We fulfilled the A/V sync and latency requirements to enable effective final rendering of Apple's iPhone device on the customer's platform. By partnering with Ittiam and leveraging our excellent grasp of connectivity standards and automotive hardware platforms, the client was ultimately able to deliver an outstanding user experience.

For more information explore our Infotainment & Connectivity Solutions or contact us at mkt@ittiam.com

#### **ABOUT ITTIAM**

Ittiam Systems is a trusted solutions provider to world leaders in multimedia, enabling next generation video experiences through its complete suite of intelligent video technologies, systems and solutions. Backed by its proven video expertise and insights, Ittiam's products deliver real intelligence to solve its customers' most complex technology challenges, empowering them to deliver high performance, efficient and reliable video products in rapid time. Ittiam's solutions are at the heart of millions of lifestyle products that drive mobility, content access, networking and sharing.