Tizen IVI – a breakthrough in on-board units?

Last year, after some years of development, Intel and Samsung announced Tizen OS - an open platform designed to work with a broad spectrum of devices ranging from smartphones to PCs to tablets to in-car systems and TVs. Here, we focus on Tizen IVI, (for In-vehicle infotainment) as it relates to the development work in carmesh.

The Tizen IVI architecture design is driven by requirements coming from automotive industry and via the GENIVI Alliance. Some of the biggest auto makers including BMW, GM, Jaguar Land Rover, PSA Peugeot Citroen, Renault, SAIC Motor have already expressed interest in the platform as open solutions offer much potential in the automotive space.

The main purpose of Tizen IVI is to provide a standardized open IVI platform for automakers which would both lower the cost of deployment and support a single application store for a large set of automakers. There is already a Tizen IVI prototype available from the Linux Foundation community which is fully open source and provides excellent HTML5 support.
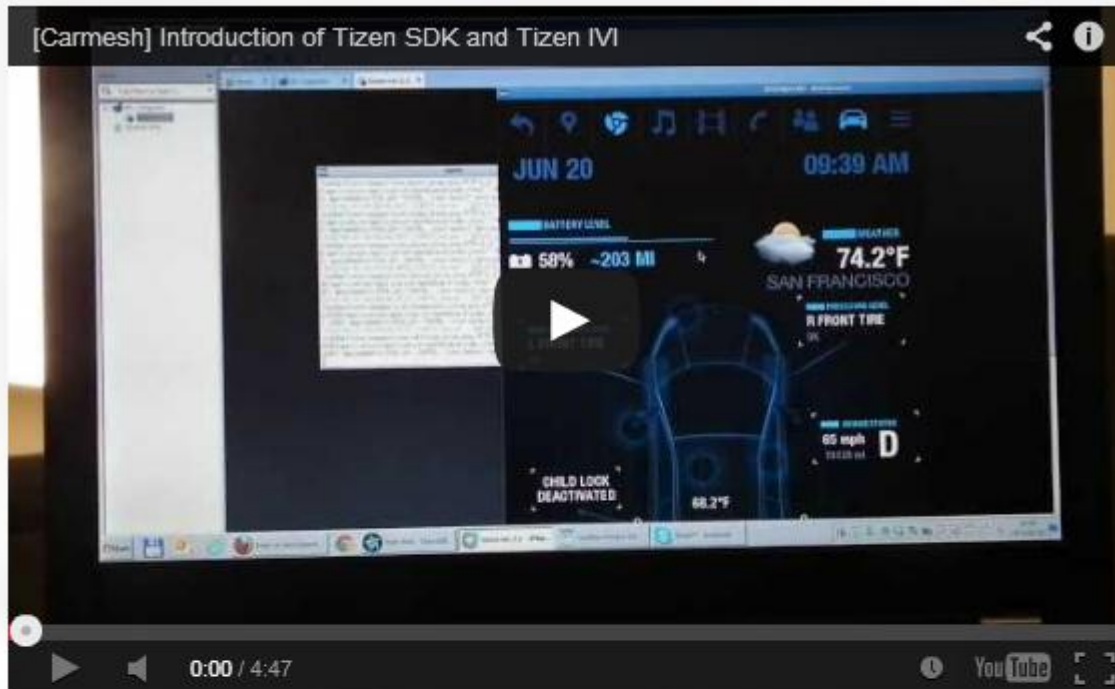
Land Rover has demonstrated an early version of the platform working within a vehicle. This proof of concept of Tizen IVI is not an actual product, but gives an insight on how the future of in-vehicle infotainment system might look.

Tizen IVI Proof of Concept on the Land Rover

MAY 23   03:12 AM

65   68.2°F   74.2°F

0:00 / 7:39   You Tube

This prototype was created through a user experience contest from Linux foundation's AGL (Automotive Grade Linux) – the bootable image can be downloaded and tested from this site.

Our initial impressions with Tizen SDK and Tizen IVI are largely positive. The SDK provides an emulator, toolchain and Eclipse based IDE for developers. Tizen engineers already provide easy-to-use project templates and sample applications that help speed up the learning process.

We recorded some of our experience with the platform: the following video shows how we set up the environment and worked with the development tools as well as how we ran the Tizen IVI in a virtualized environment. The development environment requires us to perform two initial steps – create a secure profile for application signing and install chrome browser for testing.

[Carmesh] Introduction of Tizen SDK and Tizen IVI

JUN 20   09:39 AM

BATTERY LEVEL
58% ~203 MI

WEATHER
74.2°F
SAN FRANCISCO

R FRONT TIRE

65 mph D

CHILD LOCK
DEACTIVATED   68.2°F

0:00 / 4:47

It's worth noting that there is a big community of engineers from Intel and Samsung and other organizations which actively supports developers via blogs and forums; the community is quite active.

Although Tizen a reasonable set of tools to get up and running, particularly for mobile focused applications, it's still significantly behind other well known competitors such as Android, iOS or Windows mobile. There are still some issues with the SDK on certain hardware configurations and the IDE often requires some manual tweaks to work properly; however, these problems are getting ironed out bit by bit.

As of this writing, Tizen SDK 2.2 Beta has just been released – another significant step forward on the path to maturity for this exciting technology.

http://blog.carmesh.eu/2013/07/16/tizen-ivi-a-breakthrough-in-on-board-units/