Technical Article

Jacinto™ DRA Automotive Processors Drive Digital Cockpit Solutions

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Other Parts Discussed in Post: DRA726 DRA718 DRA76P DRA746 TIDA-01425

More consumers are considering in-vehicle technologies as a must-have feature when purchasing a car. These technologies not only provide information while driving, like navigation, but they enable both drivers and passengers to seamlessly connect their personal lives to the car through their smart phones, supporting music, hands-free calling, and other features.

Recognizing this trend, original equipment manufacturers have started increasing the number of high-resolution displays to integrate these features and multiple domains in the vehicle, including cluster, infotainment and driver monitoring, to provide a seamless, connected user experience.

CES 2018 has featured many of these technologies this week, and our TI team is highlighting the capabilities of our latest Jacinto™ automotive processors, including our newest Jacinto DRA76P processor family. Here are a few of this year's "what's next" highlights from the show floor:

Scalable Digital Cockpit Solutions

The DRA76P, DRA746, DRA726 and DRA718 enable you to innovate and scale using a common platform and rich software ecosystem for infotainment, cluster and integrated cockpit solutions.

(Watch the video)

Integrated Digital Cockpit with 3-D Surround View

A reconfigurable digital cluster and head unit leverages the performance and integration of a single Jacinto DRA76P processor to provide a cost-optimized, feature-rich, multi-operating system integrated cockpit. 3-D surround view based on the integrated image signal processor (ISP) enables differentiation with system-level cost savings.

(Watch the video)

Premium Reconfigurable Digital Cluster

A fully reconfigurable digital cluster with next-generation 2.5K display resolution supports rendering at 60fps. The Jacinto DRA76P enables an Automotive Safety Integrity Level (ASIL)-certifiable architecture based on the Arm® Cortex®-M4 running a safety real-time operating system (RTOS), as well as a digital signal processor (DSP)-based driver monitoring and identification system.

(Watch the video)

Low-cost Automotive Reference Design

Build cost-effective infotainment and cluster solutions with a six-layer, DRA718-based automotive-quality design, with features such as radio and audio post-processing.

Automotive Gateway Reference Design

The Jacinto-based Gateway Reference Design TIDA-01425 offers a high throughput that allows for a scalable number of communication interfaces. An optimized hardware design helps reduce time to market.

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Whether your team is developing a digital cockpit solution or an advanced driver assistance systems (ADAS) solution, the TI Jacinto processor family offers a tailored-fit option to provide optimal performance within a best-in-class power budget with cost-saving integration.

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