TI Unveils System for Connected Automotive Infotainment

Building on more than a decade of delivering automotive infotainment solutions, Texas Instruments announced a full system solution for connected automotive infotainment. TIs unparalleled solution combines leading automotive infotainment processors, wireless connectivity solutions, analog solutions and an optimized software ecosystem to enable feature-rich automotive applications such as automotive infotainment head units, rear-seat entertainment devices, radio, and navigation tools. TI will demonstrate its latest automotive infotainment solutions January 10-13 at the 2012 Consumer Electronics Show (CES) at the Las Vegas Hotel and Casino. For more information, visit http://www.ti.com/dsp-c6-ces12-pr-ee1 [1].

"The road ahead is paved by the demands of on-the-go consumers who are already accustomed to always-connected, multimedia-rich lifestyles fueled by smartphones, tablets and other mobile products," said Matthew Watson, product line manager, audio and infotainment, TI. "As similar features move to the automotive market, TI is uniquely positioned to be a single source for technologies that will pioneer the next generation of consumer-demanded automotive infotainment capabilities. Our full solution – complete with feature-rich processing, wireless connectivity and optimized software – helps automotive customers stay ahead of the curve with compelling, trusted products."

Automotive infotainment processors: Bring stunning visuals and innovative multimedia to the car
TIs C6000 "Jacinto" [2] automotive infotainment processors and automotive-grade OMAP [3] mobile processors fuel top-notch visual computing and entertainment capabilities for drivers and passengers alike. The processors include dedicated 3D graphics accelerators and video co-processors that support full 1080p HD video playback and streaming, graphics and user interfaces, taking driving in-dash or rear-seat multimedia and multitasking experiences to the next level. TIs C6000 Jacinto automotive infotainment processors integrate a digital signal processor (DSP), enabling automotive original equipment manufacturers to add real-time radio, audio, speech and other innovative capabilities to applications.

TIs OMAP processors smart multicore architecture unleashes the high-performance and low-power capabilities necessary for collecting and displaying information and multimedia in real time. The processors have a unique ability to handle the highest level of applications running in parallel, all within an extremely low power envelope. This allows car manufacturers to support various in-dash and passenger features through a single processor, without sacrificing performance.

The C6000 Jacinto and OMAP processors support the industrys largest number of standards and codecs, including HTML5, which gives automakers the flexibility to

upgrade vehicle features and services during an automobiles lifecycle, based on consumer demands. Customers can chose to use a C6000 Jacinto or OMAP processor based on the end application and the processing power required, and benefit from software reuse between platforms if they develop on one TI processor and move to the other.

Wireless connectivity: Make the car a mobile hotspot
With generations of proven success in mobile devices, TIs new, automotive-qualified WiLink 7.0 [4] (WL128x-Q) and BlueLink [5]7.0 (BL6450-Q) combo connectivity solutions are the optimal choice for automotive designs. The WiLink 7.0 solution is the industrys first and only to integrate Wi-Fi, *Bluetooth*, GPS and FM technologies in a true single chip for a variety of automotive connectivity options. The WiLink 7.0 solutions unmatched Wi-Fi and *Bluetooth* coexistence allows true multitasking for automobiles. For example, the chip can turn a car into a Wi-Fi hotspot, while managing *Bluetooth* technology phone streaming in parallel, with no connection breaks.

The WiLink 7.0 and BlueLink 7.0 solutions speed the design process through connectivity pre-integration and certification and provide scalability to address multiple product lines and generations, which protects manufacturers investments and spurs further innovation. The parts automotive qualification allows manufacturers to benefit from the commercial feature set while maintaining the highest level of reliability. To enable maximum software reuse and flexibility, TI provides customer with the choice to either use all radios on the combo connectivity chips or a subset of features. With the ability to meet these requirements, the WiLink 7.0 and BlueLink 7.0 solutions are well differentiated from competitive automotive offerings.

Software ecosystem: Accelerate innovation
TIs automotive infotainment solution is supported by a rich, infotainment-specific software ecosystem, including multiple high-level operating systems and a diverse developer network aimed at accelerating time to market and easing design cycles. This software ecosystem includes TI Developer Network member QNX Software Systems Limited.

"For almost a decade, QNX and TI have collaborated to provide drivers and passengers with world-class automotive infotainment experiences," said Linda Campbell, director of strategic alliances, QNX Software Systems. "The new QNX CAR 2 application platform, running on TIs C6000 Jacinto and OMAP processors, will enable high-performance multimedia, robust interfaces with accelerated HTML5 Web browsing, and a high level of automotive integration, including innovative applications, connectivity, and software-defined radio (SDR). Together with TI, we are proud to offer technology that can ease development and customization and speed manufacturers time to market."

In addition, TIs Linux In-Vehicle Infotainment (IVI) solutions provide an open source starting point for development on TIs C6000 Jacinto automotive infotainment processors. With Linux IVI, developers can quickly and easily integrate World Radio with a Linux-based SDR and enable A/V playback (1080p HD video) and advanced

graphics.

Pricing and availability
For further information on the C6000 Jacinto [2] automotive infotainment processors, including pricing and download procedures, contact your local TI representative. TIs automotive-grade OMAP [3] processors and WiLink [4] and BlueLink [5] connectivity solutions are intended for high-volume customers and are not available through distributors.

Analog automotive solutions
Visit TI at CES in the Las Vegas Hilton Hotel, Suite 473, to see demonstrations of TIs analog automotive solutions, including high-efficiency Class D audio amplifiers, best-in-class digital video link solutions with content protection and new touch screen technology enabled by TI semiconductor solutions.

For more information

- TIs automotive infotainment solutions [1]
- TIs complete automotive portfolio [6]
- TI E2E™ Communitys automotive forum [7]
- TIs CES activities [8]
- Follow TI on Twitter [9]
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