Altia Offers Code Generation Support for Telechips TCC803x (Dolphin+) and TCC897x System-on-Chip

Telechips SoCs and Altia HMI Development Software Chosen for Production Automotive Clusters

September 5, 2018 – Altia announces code generation support for the Telechips TCC803x (Dolphin+) and TCC897x using Altia HMI development tools and the Linux operating system. Due to the incredible code efficiency of the Altia DeepScreen target for the Telechips chip, this combined solution has been selected for instrument cluster production. The inaugural cluster program will include support for multiple themes, advanced plotting, 3D and multiple languages.

Telechips and Altia are to provide TCC803x (Dolphin+) in a dedicated package for low-power cluster customers using Altia software. TCC803x (Dolphin+) provides automotive cockpit systems with a variety of dedicated packages, based on Arm® Cortex®-A53 quad or dual core 64-bit and Arm’s advanced Mali™ graphics processing units (GPU). The Mali™ GPU is designed specifically to bring the highest levels of performance to premium devices with energy efficiency. It enables good performance of 2D/3D graphic engine for rich GUIs on three independent displays. TCC803x (Dolphin+) also provides ASIL-B (ISO26262) which OEMs demand for safety requirements and an advanced technology like automotive HSM (Hardware Security Module) and control of CAN bus with MICOM subsystem.

The Telechips TCC897X SoC is well-suited for automotive clusters due to its low power consumption, optimized performance and cost-effective price point. The TCC897x multimedia application processor is based on an Arm® Cortex®-A7 Quad or dual core running at 1 GHz. It includes an Arm® Mali™ 400 MP2 graphics accelerator and OpenGL® ES 2.0 driver for running 3D graphics – plus it comes equipped with 512 MB of external RAM and 512 MB of external NAND flash.

“It is critical for our customers to deliver visually appealing graphics for instrument cluster applications and to leverage SoCs with powerful GPUs like TCC803x(Dolphin+) and TCC897x,” states Stanley Kim, VP of Automotive Business Unit of Telechips. “The highly efficient graphics code generated by Altia DeepScreen for the TCC803x (Dolphin+) and TCC897x promises to deliver an intuitive user experience that the automotive market demands. As optimized SoCs for Digital Instrument Cluster applications, TCC803x (Dolphin+) and TCC897x are actively being evaluated by Tier1s with Altia DeepScreen. This combination of technologies has already been awarded one project and is currently in development.”

To create an HMI for TCC803x (Dolphin+) and TCC897x, Altia’s WYSIWYG user interface editor, Altia Design, integrates a variety of graphic assets into a single model. The Altia tool chain allows development teams to create powerful, custom displays with combined 2D and 3D content. Altia’s advanced 3D capabilities give developers incredible control of the 3D content in their HMI, as well as customizable shaders, an extensive materials library and a time-saving workflow. Additionally, Altia 3D also offers outstanding performance on chip and a small memory footprint. Altia DeepScreen is then used to generate production-ready C code that leverages the full strength of the resources available on the TCC803x (Dolphin+) and TCC897x to deliver an embedded user experience for production displays.
"Automotive clusters must allow drivers to view and react to critical information quickly and efficiently. Automakers continue to stress the need for rich graphics and real time performance that will enhance the customer experience. We are proud to have achieved such solutions with our Altia DeepScreen targets for Telechips TCC803x (Dolphin+) and TCC897x," states Altia Vice President of Engineering, Michael Hill.

For more information about the Altia DeepScreen target for Telechips TCC803x (Dolphin+) and TCC897x, email info@altia.com.

About Altia

Altia is a software company that provides graphical user interface design and development tools that can be used from concept to final product code. Our GUI editor, Altia Design, offers development teams the capability to implement a model-based development process for clear communication and accelerated user interface development. Our code generator, Altia DeepScreen, supports a vast range of low- to high-powered processors from a variety of industry-leading silicon providers. Altia generates pure C source code that is optimized to take full advantage of hardware resources. Graphics code generated by Altia is driving millions of displays worldwide – from automotive instrument clusters, HUDs and radios to thermostats, washing machines and healthcare monitors. Our mission is to get the best automotive, medical and consumer interfaces into production in the shortest time on the lowest cost hardware.

Altia was founded in 1991 and its customers include Aston Martin, Behr-Hella, COBO, Continental Automotive, DAF Trucks, Denso, Fiat Chrysler Automobiles, Ford Motor Company, GM, Honda, Renault, Magneti Marelli, MTA, Nippon Seiki, Rolls-Royce, Valeo, Visteon and many other leading manufacturers.

For more information about Altia, visit www.altia.com or email info@altia.com.

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About Telechips, Inc.

Telechips Inc. is a fabless company headquartered in Seoul with global sites in the US, China, Japan, Singapore and EU(Munich). The company has been successful in Automotive and STB industry with its application processors (AP) and communication ICs.

Its automotive AP is expanding applications from In-Vehicle Infotainment(IVI) to the whole cockpit system (IVI, Digital cluster, Head-Up Display, Surround View Monitor) with its secure and power-efficiency. Telechips provides chipsets with development environment including reference H/W design, and platforms working with its partners that help Tier1s and OEMs develop efficiently. Telechips has constantly invested and researched for advanced technologies like ADAS and AI in the auto industry to outperform the solutions available in the market.

For more information about Telechips, visit www.telechips.com or email auto_sales@telechips.com.

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