Wireless Communications Systems Transmit Data 40 times faster than the 3G Wireless Networks

CHELMSFORD, Mass. -- (BUSINESS WIRE) -- Mercury Computer Systems Inc. recently announced it provided powerful subsystems for the world's first operational Long Term Evolution-Advanced (LTE-A) system demonstrated outside lab conditions. The fourth-generation (4G) mobile telecommunications system, developed by South Korea's Electronics and Telecommunications Research Institute (ETRI), can transmit data 40 times faster than the current 3G wireless network and 6 times faster than the 3.9G LTE systems currently being deployed.

The new LTE-A system uses a low-latency processing subsystem that combines multiple types of elements, leveraging Mercury's unique capability as a provider of integrated data plane platforms. The subsystem is based on Mercury's flexible, open standard Ensemble™ AdvancedTCA® Application Platform.

"It was exciting to support ETRI in its impressive achievement of successfully demonstrating a market-leading 4G solution," said Ken Kimura, Director, Asia-Pacific region, Mercury Computer Systems. "Our engineers worked closely with ETRI engineers to architect and integrate an optimized solution that met the extremely demanding LTE-A processing requirements. The final result is a testament to effective cooperation."

South Korea's Ministry of Knowledge Economy said that the new system from ETRI allows users to view high-definition, three-dimensional TV images while in a car moving 40 kilometers per hour and to transmit 600 megabits of data per second (Mbps), which enables a regular 700 megabyte CD to be downloaded in 9.3 seconds. This class of performance is enabled by Mercury's ATCA subsystems, which provide high density, multi-core processing power and next generation serial RapidIO®, allowing systems to perform complex calculations and deliver deterministic, low-latency responses and exceptional Quality of Service capabilities.

The broad technology content in Mercury's subsystems, including numerous DSPs, FPGAs, and QorIQ and control processors, coupled with integrated configuration and management tools, is ideally suited for developing and deploying leading-edge communications applications. Mercury's Ensemble AdvancedTCA Application Platform is a standards-based solution built around the power, functionality, and scalability of serial RapidIO, AdvancedMC™ (AMC), and AdvancedTCA (ATCA). The platform supports a variety of I/O sources and heterogeneous processing endpoints, thereby reducing integration costs, improving efficiency, and minimizing risks in design of next-generation applications.

Source URL (retrieved on *03/02/2015 - 7:08pm*):
http://www.wirelessdesignmag.com/news/2011/02/wireless-communications-systems-transmit-data-40-times-faster-3g-wireless-networks?qt-most_popular=0