NXP Releases World's Smallest Integrated Single Chip System for the Internet of Things

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Customers can now purchase the i.MX 6Dual and i.MX 6Quad single chip system module (SCM), ideal for space-constrained products which require big processing power and functionality. The SCM line of products integrate the i.MX 6Dual or i.MX 6Quad applications processor, a fully featured power management system, memory and additional design simplifying components into a tiny 17mm X 14mm X 1.7mm package (1GB version)—the size of a U.S. dime.

SCM-i.MX 6Dual/6Quad key features include:
• Dual-core or quad-core processor
• Power management system
• Flash memory
• Over a hundred passive system components
• Designed and enabled for 1 or 2 GB LPDDR2 as a PoP configuration
• Exceptional video and graphics capabilities
• High-assurance boot
• Cryptographic cipher engines
• Enhanced system level tamper prevention
• Pin compatibility for ultimate performance flexibility

Cuts your development time by up to 25 percent or more
SCM products are designed to get products to market 25 percent faster by eliminating high-speed DDR layout and delivering a proven power delivery network. The i.MX 6Dual and 6Quad SCMs are enabled for DDR memory and combine the performance of NXP's proven i.MX 6 applications processor together with a power management integrated circuit (PMIC), flash memory, and system-level security technology including random number generation, cryptographic cipher engines and tamper prevention.

Eliminates board area by as much as half
The SCM's ultra-small-but-packed footprint makes it ideal for highly innovative and disruptive end-products including smart glasses, wearables, next-generation medical equipment, IoT gateway, industrial and portable applications.

Availability and pricing
In addition to the two fully tested, software-enabled SCM dual and quad solutions, a feature optimized Quick Start board enabled for Linux is now available from NXP, and through Arrow Electronics. Additional products in the SCM product roadmap are planned for release this year.

NXP's software/hardware solutions teams and a number of SCM ecosystem partners enable fully embedded component sourcing and enhanced design support to reduce supply chain complexity and overcome development challenges.

To get started, visit www.nxp.com/scm.