NXP Announces Miniaturized “IoT-on-a-Chip” Solution to Advance the Future of Edge Computing

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Compact, flexible system combines i.MX processor, Wi-Fi connectivity and security to fast track IoT products to market

NUREMBERG, GERMANY (Embedded World 2018) – February 27, 2018 – NXP Semiconductors today announced its new IoT-on-a-Chip that significantly advances the future of edge computing. The scalable offering packs NXP’s ARM®-based i.MX applications processor, Wi-Fi and Bluetooth into a much smaller size, bringing a broad range of functionality, security and connectivity to IoT devices.

The new chip addresses the daunting task of designing applications for extremely size-constrained IoT devices. As a system-level miniaturized solution, IoT-on-a-Chip delivers the necessary performance, scalability and small footprint for developers to fast-track their designs into production.

“Representing a major step in the evolution from on-board offerings to the future vision of IoT-on-a-Chip, our highly integrated solution completely demystifies the Internet of Things,” said Martyn Humphries, vice president of i.MX applications processors for industrial and consumer markets with NXP. “NXP’s forward-looking design approach will provide customers with far greater efficiencies across their systems, allowing them to accelerate their time to market for products – at no additional cost.”

Flexible, future-proof solution from proven market leaders
IoT-on-a-Chip brings together the pre-integrated features from NXP’s i.MX applications processor family and Wi-Fi/Bluetooth solutions for consumer and industrial developers to quickly build compact IoT products using proven solutions.

Key features include:

1. **High performance compute and connectivity**
    1. Arm Cortex-A7 applications processor provides performance and power efficiency
    2. High bandwidth Dual-band 802.11ac Wi-Fi and Bluetooth 4.2
    3. Reference Wi-Fi certified module solution with proven Wi-Fi/BT software stacks
2. **Secure**
    1. i.MX applications processors provide advanced security implementation for secure boot, tamper detection and response, and high throughput cryptography
    2. For additional physical security, IoT-on-a-chip can be expanded with its custom inter-chip interface to include a secure element without increasing the package footprint
3. **Tight integration, compact footprint**
    1. 14mm x 14mm x 2.7mm solution includes applications processor and Wi-Fi/BT in a single footprint
    2. Package design allows DDR memory direct connect via pass-through board layout simplifies PCB design and provides additional space savings
4. **Scalable and modular**
    1. Access different levels of i.MX performance in the same 14x14 body size, using the same inter-chip interface
    2. Footprint compatible top-modules provide a range of Wi-Fi/BT options suited to your application

Availability
NXP’s first IoT-on-a-Chip product, based on the i.MX 6ULL applications processor, will be available in late 2018. i.MX 7 and i.MX 8 processor configurations will be available in 2019.

NXP at Embedded World and IoT Edge Corridor Experience
NXP will showcase its latest solutions including the IoT-on-a-Chip solution that advances the future of edge computing at Embedded World 2018 at the NXP booth, #4A-220.

A highlight for the show will be the NXP IoT Edge Compute Experience, located at the entrance to exhibition hall 4A.
To RSVP your personalized visit to the IoT Edge Compute Experience or schedule a meeting during Embedded World 2018, please contact pr@nxp.com.
To hear the latest news for NXP at the show visit the NXP Embedded World 2018 press room.