New Family of IoT Platforms Delivers Connectivity from Devices to the Cloud

NEWS HIGHLIGHTS

- Intel announced availability of Intel® Gateway Solutions for the Internet of Things (IoT), a family of integrated solutions based on Intel® Quark™ SoC X1000 Series and Atom™ processors, in addition to a Galileo-based development platform. These platforms enable businesses to reduce costs and offer new services by unlocking valuable data from legacy systems that were not connected to each other or the cloud.
- The Intel solutions integrate Wind River* and McAfee* software to help accelerate time to market, while providing built-in security. The gateways offer scale beginning with Intel Quark and Atom processors, and later extending to Intel® Core™ and Xeon™ processors.
- The processors and software are available today from Intel with qualified solutions coming later this quarter from ADI*, Advantech*, ADLink*, Eurotech*, Portwell* and Vantron*.
- Customers developing gateway solutions include Shaspa* for energy and building automation, RocKontrol* for energy management, TransWiseway* and Vnomics* for transportation, and Zebra Technologies* for locating solutions in retail, healthcare and manufacturing.

April 2, 2014 – Intel announced availability of the Intel® Gateway Solutions for the Internet of Things (IoT), an integrated solution based on Intel® Quark™ SoC X1000 Series and Atom™ processors, in addition to an Intel® Galileo-based development platform. These platforms will enable businesses to reduce costs and offer new services by unlocking valuable data from legacy systems that were not connected to each other or the cloud.

The Intel® Gateway Solutions for IoT is a family of platforms enabling companies to seamlessly interconnect industrial devices into an IoT-ready system of systems. Designed to connect edge devices to the cloud, the gateway is ideal for manufacturing, transportation and energy applications. By securely capturing and analyzing data from systems not previously connected, businesses can unlock new opportunities for understanding the behavior and uses of their existing products, as well as creates a foundation for designing new products.

The first platforms integrate Wind River® and McAfee software to help accelerate time to market and will be available from the ecosystem this quarter. Customers developing gateway solutions include Shaspa* for energy and building automation, RocKontrol* for energy management, TransWiseway* and Vnomics* for transportation, and Zebra Technologies* for locating solutions in retail, healthcare and manufacturing.

Enabling the Growing Internet of Things

The Internet of Things will include 50 billion units installed by 2020, according to IDC. While new connected devices are deployed every day, significant investments have already been made
and deployed in existing industrial environments. In fact, it’s estimated that more than 85 percent of connected devices that could benefit most from the Internet of Things already exist within installed infrastructure¹.

**Accelerating Innovation through Integration**

By integrating a combination of Intel technology with Wind River and McAfee software, the Intel Gateway Solutions for IoT is an application-ready solution that accelerates time to market and enables businesses to focus on value-add capabilities instead of reinventing foundational building blocks.

The Intel Gateway Solutions for IoT offers a scale of Intel processors, including Intel® Quark SoC and Intel® Atom™ processors, combined with the Wind River® Intelligent Device Platform XT development environment and McAfee Embedded Control. The solution is built on open architecture to ensure interoperability between systems, enable wide application development and allow easy services deployment.

- **McAfee Embedded Control**: McAfee Embedded Control provides complete protection from unwanted applications with comprehensive change policy enforcement and compliance management. The simple, lightweight software technology also makes IoT devices resilient to malware infections and attacks.

- **Wind River Intelligent Device Platform XT**: The Wind River Intelligent Device Platform XT is a scalable, sustainable and secure software development environment that provides pre-integrated and fully tested ready-to-use components to secure, manage and connect intelligent gateways. Based on Wind River industry-leading operating systems and development tools, the platform provides device security, smart connectivity, rich network options and device management.

**Hardware Ecosystem Offers Segment-Specific Solutions**

ADI*, ADLINK*, Advantech*, Eurotech* and Portwell* will all have segment-specific products based on the Intel Intelligent Gateways for IoT.

- **ADI** announced availability of its “White Oak Canyon” IoT gateway based on the new Intel® Quark™ processor X1000.

- Intel Gateway Solutions for IoT is another example of collaboration between ADLINK and Intel on new and emerging technologies to better serve ADLINK customers and partners. The gateway solution helps bridge ADLINK's embedded building blocks for intelligent edge devices to its Smart Embedded Management Agent (SEMA) cloud services, providing the M2M communications for an end-to-end IoT solution.

- **Advantech** announced the UTX-3115 fanless and wide temperature range embedded box integrated with the Intel® Gateway Solutions for IoT, an ultra-thin, industrial-grade system built for outdoor IoT applications.

- **Eurotech** announced the Everyware Software Framework (ESF) that resides on the Intel-based ReliaGATE family of products, providing a cost-effective, flexible and IT-oriented device application framework to simplify the next generation of connected, smart devices.

- **Portwell** brings many years of embedded computing expertise in the industrial automation, network security and medical equipment markets with its version of the Quark-based Intel Gateway Solutions for IoT.

¹ IMS Research
**Chengdu Vantron Technology** offers IoT gateway solutions based on the Intel Atom processor E6xx series and the latest E3800 series and Intel® Quark SoC X1000, to provide powerful tools for the front-end sensor data acquisition, back-end cloud platform data processing and terminal control unit data feedback in the IoT system.

**Gateways in Action**

Customers from around the world are quickly moving to market with the gateways based on Intel architecture for transportation, energy, healthcare, retail and manufacturing.

- **Cylon** is an international leader in smart building energy management systems (BEMS), and uses Intel Quark processors as part of the Intel Gateway Solutions for IoT to develop secure, integrated and scalable end-to-end building management solutions that help make smart buildings more efficient, sustainable and comfortable for occupants.

- **RocKontrol** is the leading IoT solution provider in energy management and environment protection. It offers end-to-end solutions from edge devices to backend cloud platforms. RocKontrol adopted an Intel Atom processor-based gateway solution in the National Energy Monitoring Project to precisely, remotely and securely collect the energy consumption data from state-owned companies. The Intel-based solution reduces the human burden of previous methods of manual data collection, improves data accuracy and time efficiency, and also enhances the data transition security from intranet to Internet. RocKontrol also runs a national cloud computing center to provide services and support IoT applications.

- **Shaspa**, a leading vendor of smart home and commercial building solutions, has selected the Intel Quark processor and Intel Gateway Solutions for IoT as the platform of choice for its next generation of gateway products. Together with partners, it will offer complete end-to-end solutions and services into residential, commercial and smart energy markets.

- **TransWiseway** is the leading telematics solution and service provider in China and is building the nationwide cloud platform for commercial vehicle trace monitoring, fleet management and valued-added services. The collaboration with Intel includes a telematics box, an in-vehicle tablet in the edge, and big data on the backend. End-to-end Intel architecture technology enhances the user experience on reliability and security and helps reduce the operation cost of the enterprise.

- **Vnomics**, a leading provider of next-generation fleet management software for commercial vehicles, has selected the Intel Quark processor and Intel Gateway Solutions for IoT to deliver its next generation of real-time solutions for improved fuel efficiency, safety and sustainability. Using Intel’s IoT architecture, Vnomics is able to assure data security and scalability while reducing the time-to-market deployment throughout the trucking industry.

- **Waterous** is a manufacturer of embedded mobile fire equipment. As such, quality, reliability and security are critical design considerations. By bundling scalable security with the high-performance Intel® Quark™ SoC X1000 series and the Intel® Atom™ E3800 processors, the Intel® Gateway Solutions for IoT lets Waterous focus on value-added customer features.

- **Zatar** is Zebra’s Internet of Things platform, a cloud-based, multi-sensor integration platform for connecting both legacy and smart devices to the Internet. Zatar enables third-party applications to easily connect, identify, locate, manage and sense the properties of connected things and assets. An Intel® Gateway Solution for the Internet of Things platform with integrated manageability and security technology allowed Zebra to introduce a scalable platform to market quicker while focusing on its value-add capabilities.
**Intel® Quark™ SoC X1000 Series**
The low-power, small-core Intel Quark processor is designed for emerging applications in rapidly growing IoT markets such as industrial, energy and transportation. The processor core at the heart of the system-on-a-chip (SoC) is a 32-bit, single-core, single-thread Intel® Pentium® instruction set architecture (ISA) compatible CPU operating at speeds up to 400 MHz. The SoC also includes support for DDR3, PCIe, Ethernet, USB device, USB host, SD, UART, 12C, PIO, SPI, JTAG, Arduino IDE and open source Linux.

Intel Quark features error-correcting code (ECC) for a high level of data integrity, reliability and system uptime for equipment required to run at all times such as on industrial factory floors. Additionally, support for industrial temperature ranges helps meet the requirements for industrial control and automations applications in factories, the smart grid and transportation infrastructure. Intel Quark processors are available today.

For more information, visit intel.com/newsroom/IoT.

###

Intel, Intel Quark, Intel Atom, Intel Core, Intel Xeon and the Intel logo are trademarks of Intel Corporation in the United States and other countries.
*Other names and brands may be claimed as the property of others.

CONTACT: Danielle Mann
973-997-1154
Danielle.mann@intel.com