PRESS RELEASE

SecureRF and Andes Technology Join Forces to Deliver Quantum-Resistant Security Solutions for Constrained IoT Devices

Provides Fast, Ultra-Low-Energy Authentication and Data Protection

Shelton, Conn., United States and Hsinchu, Taiwan – May 8, 2017 – SecureRF, a leading provider of quantum-resistant security solutions for the Internet of Things (IoT), and Andes Technology, the leading Asia-based supplier for high performance, small gate count and low-power 32-bit embedded CPU cores, today announced they have partnered to offer fast, quantum-resistant security for constrained IoT devices. This collaboration enables companies to use AndesCore™ secure processor in combination with SecureRF's asymmetric (public-key) cryptosystems. Andes' secure memory protection and tamper-resistance protection provides shield against attacks. SecureRF's authentication and data protection solutions provide strong protection for IoT devices that are lightweight, compact, and require ultra-low-energy consumption.

Low-resource 32-, 16-, and 8-bit IoT devices are often deployed with little or no protection because most security solutions overwhelm available memory and power. Many security solutions also require a network connection and ongoing administration of a universal key or password database. These databases are subject to their own security risks, and can be extremely impractical to manage, particularly for high-volume industrial and consumer devices that may be distributed worldwide.

SecureRF's asymmetric solutions, which include the Ironwood™ Key Agreement Protocol and Walnut Digital Signature Algorithm (WalnutDSA™), provide strong and fast security that will protect IoT devices even when quantum computers become available and render currently-used methods obsolete. Based on Group Theoretic Cryptography, SecureRF's cryptographic protocols are at least 60 times faster than ECC, and consume up to 140 times less energy. Furthermore, there is no need to manage a database or maintain a network connection.

Andes' 32-bit AndesCore™ S801 security processor and SecureRF's security solutions are particularly well-suited. S801 uses a secure memory protection unit (SMPU) to isolate and protect different users/applications based on security privilege levels. S801 also provides unique tamper-resistance protections to shield against physical fault-injection attacks and side channel attacks. Its instruction/data/address scrambling, secure interruption and secure debugging features defend against hacks targeting all possible CPU interface.

"Partnering with SecureRF enables us to address the rapidly-growing need for high-performance authentication and data protection solutions that work efficiently in constrained environments," said Frankwell Lin, president, Andes Technology. "This joint endeavor allows companies developing smart cards, smart appliances, wearables and other low-resource IoT applications to completely protect their users with an economical, silicon-based IP solution that is easy to implement. To further speed up and conceal SecureRF's efficient algorithms, the powerful Andes Custom Extension™ (ACE) supported by extensible AndesCores such as E830 can be used to automate the design of special custom instructions".

"Widespread consumer acceptance of IoT devices will be challenging until manufacturers make strong authentication and data protection the rule rather than the exception," said Louis Parks, chief executive officer, SecureRF. "Our quantum-resistant cryptosystems combined with AndesCore™ processors offer manufacturers a competitive edge by enabling them to provide their customers with peace-of-mind that their information and device access are fully protected."

For more information on SecureRF's security solutions, call +1.203.227.3151 or email info@securerf.com. To learn more about Andes Technology's 32-bit embedded CPU cores, call +886-3-6668300 or email hllin@andestech.com.

About SecureRF

SecureRF Corporation (securerf.com) develops and licenses quantum-resistant, public-key security tools for low-resource processors powering the Internet of Things (IoT). The company's authentication and data protection solutions are highly efficient when compared to techniques like ECC and RSA. SecureRF delivers ultra-low-energy, fast, and small footprint solutions ideally suited for 32-bit, 16-bit, and even 8-bit devices like the ARM Cortex M0/M3 and RISC-V processors.

SecureRF security solutions are used to address wireless sensors, NFC, Bluetooth, and RFID tags as well as embedded platforms including FPGAs, microcontrollers, and ASICs. Software Development Kits, RTL, and tools are available for a wide range of environments. The company also offers Veridify®, a comprehensive, cloud-based solution providing real-time connectivity via smart apps that make products and supply chains smart, secure, and visible.

About Andes Technology

Andes Technology Corporation (www.andestech.com) was founded in Hsinchu Science Park, Taiwan in 2005 to develop innovative high-performance/low-power processor cores and associated development environment to serve worldwide rapidly growing embedded system applications. The company delivers the best super low power CPU cores with integrated development environment and associated software and hardware solutions for efficient SoC design.

In order to meet demanding requirements of today's electronic devices, Andes delivers configurable software/hardware IP and scalable platforms to respond to customers' needs for quality products and faster time-to-market. Andes' comprehensive CPU includes entry-level, mid-range, high-end, security extension, custom instruction extension and DSP extension families to address full range of embedded electronics products, especially for smart and green applications.

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