

Andes e-Report

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Andes Technology Corporation and Acer BYOC™ Announce Inter-Platform Support on Internet-of-Things Cloud Solutions for SoC Design

Andes Technology and Acer BYOC's Efforts Will Enable IoT SoC Designers to Empower Their Products with Cloud Computing Capabilities Through Andes' [Knect.me](#)™ Ecosystem

Andes Technology Corporation, the leading Asia-based supplier of small, low-power, high performance 32-bit embedded CPU cores, and [Acer BYOC™ \(Build Your Own Cloud™\)](#) today announced plans to support each other's Internet-of-Things cloud service solutions for SoC Design. Andes and Acer BYOC will each develop technology offerings that will enable SoC engineering design teams to build IoT SoCs with Acer cloud services using Andes [Knect.me](#) ecosystem resources. Andes will support Acer BYOC's open platform and help expand Internet-of-Things cloud ecosystem to the level of IC and SoC design. Acer BYOC will grow the vertical coverage of Andes' CPU IP and IoT [Knect.me](#) ecosystem on their expanding cloud service platform.

“Both Acer and Andes offer complementing IoT solutions to the global market,” said Maverick Shih, President of BYOC Business Group at Acer Inc. “By offering inter-platform compatibility, we hope to create a mutually beneficial ecosystem for our joint customers.”

“We admire how Acer has studied the progress of the IoT market trend over the long-term and devoted itself early on to building up cloud technology,” Frankwell Jyh-Ming Lin, President of Andes Technology Corporation, stated. “Our collaboration with Acer BYOC will enable Andes customers that design hardware and develop software for IoT SoCs the convenience of obtaining cloud service solutions plus underlying building blocks from Knect.me, our IoT ecosystem providing open-source and commercial solutions for modern connected devices based on the highly performance-efficient AndesCore™ processors. Customers will derive great benefit through this technology and business relationship.”



Cloud Service Platform and IoT Computing

Emerging services and innovative applications are raised by the development of ubiquitous computing and IoT devices. Equipped with sensing, connectivity, and intelligence, connected IoT devices change the computing paradigm. Legacy resources, such as storage and computation, are migrating from computing devices to the cloud for emerging networked applications. In addition to storage capacity and computing power, SoC designers for IoT applications also face the daunting task of integrating silicon intellectual property and software stacks as well as easy access to cloud services to complete real world usages of the IoT computing. The example of a fitness wearable illustrates how the cloud becomes a component of an SoC design. The SoC controls an intelligent sensor, but the cloud provides the sensor output.

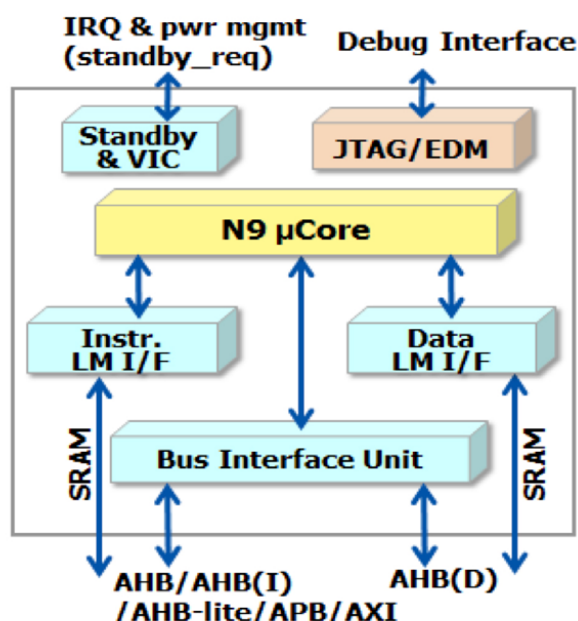
The challenge is to build both device and service infrastructure. The inter-platform support of Andes and Acer BYOC combines the market proven elite software stack and hardware platform from Andes Knect.me ecosystem with the cloud service open platform from Acer BYOC. The Acer BYOC platform provides modular services such as music, file storages, media and document applications, and it also allows developers to rapidly bring new and innovative applications to IoT devices. By introducing such a flexible cloud platform on top of the rich device hardware-software framework, Andes and Acer BYOC enable developers to quickly bring smart connected applications to reality.

Wave Computing Selects Andes Technology for Embedded Core, Wave to use N9 5-stage pipeline CPU Core

Andes' Ease of SoC IP Integration, High Performance and Low Power Consumption

All in a Compact Silicon Footprint Contributed to Winning the Business

Andes Technology Corporation, the leading Asia-based suppliers of small, low-power, high performance 32-bit embedded CPU cores, today announced that Wave Computing (www.wavesemi.com) has licensed Andes N9 low power, 32-bit, 5-stage pipeline CPU core and Andes AE210P peripherals for a new chip design. Wave selected the Andes core to provide boot-time configuration and continuous monitoring of Wave's SoC operation. The ease of integrating the Andes N9 and peripherals into its larger SoC design, the native AXI4 support, high performance at low power consumption, and small silicon footprint contributed to Wave's decision.



"We are pleased with our choice of the Andes N9 CPU core for our next SoC design," said Richard Terrill, Vice President of Marketing at Wave Computing. "We needed a small but powerful CPU to manage critical tasks at power-up boot and on-going observation of chip operation. The N9's programming tools and support of the AXI bus interface fit our requirements nicely. Its straightforward synthesis made for integration into our larger design and its small silicon footprint provided an added bonus."

"Andes is thrilled that Wave Computing chose our N9 CPU core for their new SoC design," said Frankwell Lin, President of Andes Technology Corporation. "The N9 delivers high performance in a small gate count and on a low power budget. Its ability to provide low-latency vectored interrupt makes it very efficient for high performance real time

monitoring. The N9's ability to mix 16- and 32-bit instruction format enables compact code and the five-stage clock-gated pipeline contributes to the core's 3.43 CoreMark/MHz performance, while its power management instructions conserve power."

About Wave Computing

Wave is a systems startup that has developed a low power, high-performance data flow computing platform to accelerate critical applications such as machine learning (CNN/DNN/AI), national/cyber security, unstructured search and big data analytics. Wave is developing a family of compute acceleration hardware ranging from OCP mezzanine to 1U appliances, all based on their proprietary Byte-Fabric™ programmable SOCs. By placing special emphasis on low-power computing, Wave offers best-in-class performance as measured in operations/Watt. The company is venture-backed (Tallwood and Southern Cross) and staffed with a cadre of industry veterans and entrepreneurs.

www.wavesemi.com

2016 Andes-Embedded Forum

To drive the Internet of Things with innovative technologies, 2016 Andes-Embedded Forum features versatile sessions to provide insightful market trend analyses as well as low-power, high-performance, highly-configurable SoC solutions that address the diverse requirements of IoT applications.

Taipei :

Date:

Jun 2, 2016

Venue:

Taipei International Convention
Center

Shenzhen :

Date:

Jun 22, 2016

Venue:

Grand Mercure Oriental Ginza
Hotel

Andes Technology Corporation Achieves 10,000 Installations of Its AndeSight™ Integrated Development Environment

Demonstrates Growing Market Adoption of Andes Powerful Cores which Minimize Manufacturing Costs, Reduce Power Requirements and Speed Time to Market

About AndeSight

Andes Technology began offering AndeSight in 2007. In 2015, the company released the latest [AndeSight version 2.1.0](#), which includes four editions: STD, MCU, RDS and Lite. The STD edition supports the entire series of Andes Technology CPUs with functionality designed for high-end applications in the global SoC market. The STD edition's Linux debugging features are well suited to the AndesCore D10, N10, and N13 cores. The MCU edition is designed for microcontroller development. It supports AndesCore N7, N8, E8, S8 and N9. The RDS edition is based on MCU edition but targeted at software developers at downstream customers of Andes Technology's IC design company customers.

The Lite edition is a compact and free IDE targeting IoT and wearable applications. It can be downloaded from the [knect.me™](#) website and is ideal for software evaluation. In addition, Andes Technology also collaborates with academia to provide AndeSight for uses in embedded system training courses, IoT applications, and SoC system. Through this collaboration program, Andes Technology aims to engender more software developers familiar with the AndeSight IDE and the AndesCore CPU families.

[Andes Technology Corporation](#), the leading Asia-based supplier of small, low-power, high performance 32-bit embedded CPU cores, today announced that it has achieved 10,000 installations globally of its [AndeSight™](#) Eclipse-based integrated development environment (IDE). The powerful AndeSight IDE, which supports the entire range of [AndesCore™](#) embedded CPU IP cores, enables Andes Technology's customers to achieve minimum code size as well as highly reliable software code, while reducing customers' time to market.

"AndeSight, with its complete and highly efficient features, has helped our customers to achieve cumulative shipments of over 1.4 billion SoCs," stated Andes Technology Corporation President, Frankwell Jyh-Ming Lin. "This volume testifies to both the quality and adoption of AndeSight. Since AndeSight's introduction, Andes Technology has continuously incorporated customers' experiences, simplified development flow, and

included new technology development, to provide superior software tool to the market. In the future, Andes Technology will continually enhance AndeSight to improve ease of use; to provide broad support of hardware, software, and system layers; and to boost higher efficiency and optimized code. In this way we will enable our customers to provide an even better product and service.”

“AndeSight implements a highly efficient compiler,” stated Charlie Su, Ph.D. Andes Technology Corporation CTO and Senior Vice President of R&D. “Across numerous applications, customers have found that our compiled code delivers best-in-class performance and compactness. Besides program development, code upgrading, and debugging, AndeSight also provides numerous advanced features. These include code coverage analysis, function profiling, performance meter, and a simple interface for customers to hook up their SoC-dependent GUI. With its rich features and friendly user interface, AndeSight has gained widespread user adoption. Today’s announcement of AndeSight reaching a 10,000-installation represents AndeSight has been used by more than 30,000 engineers, this milestone shows strong market endorsement of the stability and popularity of AndeSight. AndeSight serves both IC design houses and system companies, while enabling the latter to facilitate their market development.”

Andes Technology Corp.

Founded in March 2005, **Andes Technology Corporation** headquartered in SiSoft Research Center, Hsinchu, Taiwan is a leading Taiwan CPU intellectual property (IP) supplier, with over 100 licensees in Taiwan, Japan, Korea, China, Europe, and USA that have shipped over a half billion units. Its products range from the entry level **N7** and **E8**, **S8** and **N8** with 2- and 3-stage pipelines, to the high-end **N13** with 8-stage and longer pipelines. The mid-range **N9** has the highest customer shipping volume while the mid-range **N10**, **D10**, and high-end **N13** support Linux and floating-point coprocessor. Configurable and extensible Andes cores enable designers to create unique designs. **AndeSight™** IDE enable customers to efficiently develop, debug, tune and regress their software. **AndeSoft™** provides customers optimized fundamental software such as OS, drivers, standard C libraries, middleware, etc. for rapid application development. The company has sales offices throughout Asia and the U.S.

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