

## Advantech Selects Cavium OCTEON® II for Packetarium™ Line Expansion with Two New Platforms

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Advantech's 1U rack mount appliance debuts with 6-core OCTEON II while high-end Packetarium platform doubles capacity to 256 cores 680 hardware acceleration engines providing 7x gain in performance

Advantech, a global manufacturer of telecom computing blades and multicore network processor platforms, in close collaboration with Cavium Networks (NASDAQ: CAVM), a leading provider of semiconductor products that enable intelligent processing for networking, communications and the digital home, announced today the first two products in Advantech's Packetarium™ product line to feature breakthrough next generation OCTEON II processors from Cavium.

Advantech's Packetarium NCP-3120 integrates a 6-core OCTEON II CN6335 into a 1U rackmount form factor targeting mainstream, high volume enterprise routers, unified threat management (UTM) appliances and enterprise gateways. At the high end, the NCPB-2320 is a 32-core OCTEON II CN6860-based board which slots into Advantech's flagship Packetarium NCP-7560. With a payload of up to eight NCPB-2320 boards, the system now packs as many as 256 cores into the 4U server space to handle 80 Gbps of network traffic from multiple 10 GbE and GbE ports. Applications which will reap the performance benefits of the new OCTEON II processor family include high-capacity radio network controllers, network acceleration platforms, as well as data center and LTE gateways.

The OCTEON II processors integrate 32 enhanced MIPS64 cores for up to 320GHz of 64 bit compute power and 680 advanced hardware acceleration engines in a Packetarium system. This is combined with an extensive set of on-chip L3-L7 application and security acceleration engines, enabling superior performance for a wide range of application workloads. For Deep Packet Inspection (DPI) and content processing applications, third generation DPI engines deliver deterministic throughput up to 15Gbps per chip and over 80Gbps per system independent of number of rules and number of flows, a new and essential capability not available in alternative solutions.

The NCP-3120, based on the 6-core Cavium OCTEON II CN6335, brings new scalability to the Packetarium range. Network Processor Boards used in the high-end system integrate seamlessly into the 1U platform to facilitate software re-use and allow OEM's to market entry level variants for cost-sensitive higher volume deployment. The system is designed with flexibility in mind and offers a range of replaceable front I/O cards for GbE and 10 GbE connectivity as well as a standard PCIe x8 card expansion slot. With the accelerated packet processing capabilities of the OCTEON II, the NCP-3120 is a cost effective platform which meets a wide range of UTM connectivity and bandwidth requirements. It also supports up to eight 2.5" SATA-2 Solid State Disks for data caching or database applications.

"Next generation networking and communication infrastructure require ultra dense, very high performance, Deep Packet Inspection capable systems scalable from 10Gbps to 160Gbps," said YJ Kim, Senior Director Embedded Processor Group. "We are pleased that Advantech is able to leverage the latest features of OCTEON II multi-core products and to continue delivering innovative solutions to address these requirements to the Telecom and Networking Equipment Providers."

The NCPB-2320 32-core Packetarium™ board, with up to 16GB DDR3, routes four XAUI (10GbE) ports to the Packetarium™ NCP-7560 system's main board for high-speed switching. All boards are linked to a Broadcom BCM56820 10 GbE switch on the carrier board which also provides six front panel 10 GbE SFP+ ports and sixteen GbE SFP ports via a Broadcom BCM56512 GbE switch.

"The new OCTEON II processors deliver up to 7x higher performance over our current OCTEON Plus designs in a fully software compatible fashion enabling OEM customers to easily upgrade their existing systems for higher performance," said Byron Lin, Director at Advantech's Networks and Telecom Group. "In addition, the power saving technology in OCTEON II significantly reduces the total cost of ownership and more importantly, the overall carbon footprint" he added.

The NCP-3120 runs Debian Linux and will also be available with 6WINDGate software which simplifies the integration of high-performance packet processing into multi-core networking equipment. The 6WINDGate software solution includes a comprehensive set of high-performance Layer 2 through Layer 4 networking protocols that accelerates time-to-market while maximizing the performance of Packetarium Octeon II –based products.

The NCP-3120 system will be sampling with key OEMs in 3Q10 with volume shipments planned for 4Q10. Advantech Packetarium™ systems integrating the NCPB-2320 board will be sampling in 2Q11.

For further information please visit [www.advantech.com/NC](http://www.advantech.com/NC)

About Advantech –Founded in 1983, Advantech delivers visionary and trustworthy industrial computing solutions that empower businesses. We cooperate closely with solution partners to provide complete solutions for a wide array of applications in diverse industries, offering products and solutions in three business categories: Embedded ePlatform, eServices & Applied Computing, and Industrial Automation groups. With more than 3,400 dedicated employees, Advantech operates an extensive support, sales and marketing network in 18 countries and 39 major cities to deliver fast time-to-market services to our worldwide customers. Advantech is a Premier Member of the Intel® Embedded and Communications Alliance, a community of embedded and communications developers and solution providers. (Corporate Website: [www.advantech.com](http://www.advantech.com)).

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