

Advantech 10GbE OEM-Ready Appliance Ships with Dual Intel® Xeon® Processor 5600 Series

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Advantech, a global manufacturer of telecom computing blades and multi-core network platforms announced first shipments of its FWA-6500 dual processor appliance based on the Intel® Xeon® Processor 5600 Series which Intel is introducing today.

The FWA-6500 features dual processor computing performance for high-speed modular I/O processing of multiple GbE and 10GbE links. Purpose built for high-end network security and packet processing applications, the system takes advantage of the Intel® AES New Instructions (Intel® AES-NI) which frees up valuable processor cycles for more virtualization and processing. Intel® AES-NI adds new instructions which provide robust encryption without needing additional appliances or increased performance overhead.

In addition, Intel® Trusted Execution Technology (Intel® TXT) performs SHA-1 hash measurements for RSA decryption key exchanges as part of the code authentication process. This means greater security in network transactions without loss in processing power.

The Intel® Xeon® processor 5600 series is manufactured on Intel's latest 32nm process technology and is pin-compatible with the Intel® Xeon® processor 5500 series allowing OEM's to add higher performance platforms to their offering or migrate their production to the new 6-core processors. The drop-in compatible 6-core processor allows a smooth upgrade path to the deployed base with minimal to no impact on application software.

The new processor series brings significant improvements in core density, performance and power consumption as well as the new instructions to accelerate encryption and reinforce security. With up to 6-core operation (up to 12 threads per socket with Intel® Hyper Threading Technology), 50% L3 cache increase to 12 MB, and support for lower voltage DDR3L DIMMs, the capabilities of the new processors will facilitate further platform consolidation whilst decreasing power budget.

Network connectivity is fast and flexible with up to 16 front accessible GbE ports supported by 4 quad Gigabit Ethernet modules based on the Intel® 82576EB Gigabit Ethernet Controller or with multiple dual 10GbE modules based on the Intel 82599EB 10 Gigabit Ethernet Controller supporting the latest platform offloading and virtualization technologies introduced

by Intel recently. The modules plug into a 32-way PCI Express (PCIe) gen2 mid-plane providing the high speed interconnects to the I/O controller hub which makes the system fly. RJ45 and SFP/SFP+ based modules are supported and can be mixed and matched as required. Copper modules come with optional LAN bypass capabilities.

“Networking customers are looking for off-the-shelf platforms where the processor cores get fed with maximum I/O subsystem bandwidth and benefit from modular and innovative I/O connectivity with controlled thermal performance. The FWA-6500 gives them just that. Once they have successfully benchmarked and tuned the software, Advantech begins the system branding or customization process with OEM packaging and global logistics support. We are there to accelerate and facilitate global deployment” explained Eddie Lai, Director of Business Development at Advantech Networks and Telecom Group.

Two further PCIe x4 slots are available internally for standard add-in cards for offload purposes or Network Processor-based co-processing. The combination of the latest Intel® processors, chipset and Ethernet controllers in one platform provide acceleration and off-loading features which give customers the ultimate in x86 processing performance and access to all the I/O scalability they need.

“The Intel® AES New Instructions in the Intel® Xeon® processor 5600 series are designed to accelerate tasks such as whole disk encryption/decryption, internet security, VoIP,” said Frank Schapfel, Product Line Marketing Manager, Intel Performance Products Division. “Accelerated hardware cryptography in processors is becoming more mainstream across multiple applications and market segments.”

“The modular IO concept is the backbone of our high end and mid-to-high end network application and server platforms to be consistently supported on our next generation designs. This approach gives customers the opportunity to upgrade to next generation motherboards and/or next generation IOs without the hassle of designing/qualifying a completely new system. This also applies to ODM customers with unique IO and system requirements: once a customized IO board and enclosure design is done, customers can enjoy free technology upgrades on the motherboard driven by Advantech's standard roadmap. Our membership in the Intel® Embedded Alliance enables us to deliver our latest platform technologies coincident with Intel's product releases” added Rover Chen, Director of x86 appliance products at Advantech Networks and Telecom Group.

For more information, visit Advantech networks and telecom at www.advantech.com/NCor E-mail to NCG@advantech.com.

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).

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