

**For Immediate Release**



## **Industrial High-Performance Networking PowerPC®-based Microprocessor Announced by AMCC**

*AMCC's fast PPC405EZ networked industrial MPU utilizes analog and digital peripherals, including an innovative timer architecture and IEEE1588 Ethernet to enable networking and connectivity*

SAN JOSE, Calif. – April 3, 2006 – Leveraging its long-established networking expertise, AMCC (Nasdaq:AMCC) has announced the PowerPC 405EZ networked industrial processor, the first of a family of high-performance networked industrial MPUs. The PPC405EZ is available in speeds ranging from 100 MHz to 400 MHz for high performance, low power consumption (typically 0.6 Watts) solutions for small footprint system-on-a-chip designs. Key to the performance of the PPC405EZ is its on-board 32 Kbytes of SRAM, CellularRAM-compatible external bus with arbitration, 64-bit on-chip bus, along with a fully configurable Chameleon Timer®, IEEE1588-compliant Fast Ethernet, USB and CAN.

Networking has found its way into even the most deeply embedded devices in the industrial, scientific, and commercial market segments. Applications that were once the exclusive domain of 8-bit and 16-bit MCUs performing only a few tasks embedded in isolated equipment is now often accomplished by tightly networked, intelligent devices with multi-tasking capabilities. These new systems require higher performing 32-bit SoCs (system-on-chip) to handle the additional tasks of networked communications, more sophisticated processing algorithms, and more complete operating systems such as Linux, while still providing the low cost and extended temperature operation required by these classes of equipment. Traditional sub-100 MHz 32-bit RISC-based and DSP-based MCUs, burdened with their slow speed on-chip busses and Flash memory, struggle under this new additional communications and processing workload. Even if these traditional Flash-based MCUs can be pushed to higher clock speeds, the on-chip Flash and narrow 32-bit bus speeds do not scale: this usually results in little data and I/O throughput improvement.

The PPC405EZ's connectivity package consists of one fast Ethernet port with an integrated IEEE1588 controller, three USB 1.1/2.0 Full Speed compatible ports, with integrated PHYs, and two CAN 2.0b ports. Its industrial package consists of an 8 input 10-bit ADC, a 10-bit DAC, and a "set-and-forget" 15

channel Chameleon Timer©/PWM controller that significantly offloads CPU and software involvement. The IEEE1588 time base function is fully integrated directly into these key analog and timer functions to optimize performance and eliminate CPU involvement in capturing, triggering and time-stamping real-time events in devices deployed across entire networks.

As the name implies, the PPC405EZ's unique configurable Chameleon Timer© enables designers to mimic or construct virtually any type of timer architecture and produce complex deterministic timing functions without resorting to specialized complex scripting or DSP programming language expertise. It offloads the CPU and software from being involved in even the most complex timing and waveform generation algorithms, thereby freeing the CPU and bus bandwidth for use elsewhere in the customer's application. Examples of these complex real-time functions include PWM and space vector PWM functions with non-overlap times, quadrature encoder sensing and control, programmable "deadband" intervals, pulse period measurement, 48-bit input capture function, 48-bit output compare function, and IEEE1588 timestamps.

The PPC405EZ offers a high level of compute processing, analog I/O, and networking diversity in a single SoC device. With its shift away from traditional on-chip Flash and external DRAM in favor of on-chip SRAM and external Flash PSRAMs and CellularRAMs, the PPC405EZ enables system designers to break through the 80 MHz Flash MCU "barrier". The PPC405EZ, packaged in 324-pin 23 mm x 23 mm EPGA and available in industrial (-40 C to +85 C) and extended (-40 C to +105 C) temperature range, is the basis for a highly scalable system design. The PPC405EZ's "roomy" 1mm ball pitch results in very inexpensive and reliable printed circuit board layouts that avoid blind vias. Cost-effective 150 to 600 DMIPS-class systems - ranging from a two-chip solution (PPC405EZ+SPI boot device), to Linux-on-a-chip and multi-chip multi-master implementations - can be built based on the PPC405EZ SoC fed by a single 33-50 MHz oscillator and consuming as little as 0.6 Watts.

Brian Wilkie, Vice President and Assistant General Manager of the Integrated Communications Processing Business Unit of AMCC, noted "The PPC405EZ networked industrial processor represents a distinct evolutionary departure from standard microcontrollers. Newer networked systems are requiring faster speeds, greater flexibility utilizing buses, optimized external memories, and more configurability in their timers. The PPC405EZ addresses these challenges at a very effective price."

The AMCC PPC405EZ networked industrial processor is expected to be available in sample quantities in the fourth quarter of 2006, at a suggested resale list of \$15.00 in quantities of 10,000 for the 133 MHz industrial temperature version (-40 C to +85 C).

A low-cost, easy-to-use evaluation kit for the PPC405EZ will also be available in the fourth quarter to facilitate product evaluation and project development. Through the AMCC Partners Program, AMCC's PowerPC embedded processors are supported by an ecosystem of industry-leading suppliers of operating systems, hardware/software development tools, embedded software, board-level products, and system design services. For full details of the products and services available through the AMCC Partners Program, or to browse support available for a specific processor, please visit: <http://www.amcc.com/Embedded/Partners/>.

### **About AMCC**

AMCC (Nasdaq:AMCC) is a global leader in network and embedded PowerPC processing, optical transport and storage solutions. Sales in fiscal 2004 were US\$254 million. Our products enable the development of converged IP-based networks offering high-speed secure data, high-definition video and high-quality voice for carrier, metropolitan, access and enterprise applications. AMCC provides networking equipment vendors with industry-leading network and communications processing, Ethernet, SONET and switch fabric solutions. AMCC is also the leading vendor of high-port count SATA RAID controllers enabling low-cost, high-performance, and high-capacity storage. AMCC's corporate headquarters are located in Sunnyvale, California. Sales and engineering offices are located throughout the world. For further information regarding AMCC, please visit our web site at <http://www.amcc.com>.

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### **Forward Looking Statements**

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by words such as expects, anticipates, plans, believes, estimates, will or words of similar meaning. Such forward-looking statements, including statements relating to the products discussed in this press release, are subject to a number of risks and uncertainties, including the risk that the products may not be successfully or timely developed, completed or manufactured or achieve market acceptance, risks relating to general economic conditions, as well as the risks and uncertainties set forth in the Company's Annual Report on Form 10-K, and in the Company's other SEC filings. As a result of these risks and uncertainties, actual results may differ materially from these forward-looking statements. The forward-looking statements contained in this press release are made as of the date hereof and AMCC does not assume any obligation to update any forward-looking statement, whether as a result of new information, future developments or otherwise.

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