

# MCG application-enabling platform

Motorola's Computer Group has launched its first Application-Enabling Platform, the MXP, a pre-integrated and validated embedded infrastructure solution designed to accelerate the development of next-generation telecom equipment. The company is also developing Application-Enabling Platforms based on multiple technologies and also detailed platform elements that will be used in its AdvancedTCA Application-Enabling Platform.

The MXP Application-Enabling Platform, is an evolution of Motorola's original multi-service platform based on CompactPCI/PICMG 2.16 industry standards.

At its highest level of integration, an Application-Enabling Platform combines industry-standard hardware, system software, sophisticated middleware



and application-specific protocols. As a result, telecom equipment manufacturers can bring revenue-generating applications to market faster by using an Application-Enabling Platform to streamline internal development and operations. The platforms should also help telecom equipment manufacturers protect their investments and

manage risk by selecting the optimal mechanism for implementing both existing and new applications.

The MXP family now includes 21-slot and 11-slot chassis and payload options for combinations of general-purpose processors, network processors, digital signal processors, redundant IP (internet protocol)

switches, storage and media elements, and system management software to address many different applications and provide common development and deployment solutions.

The Advanced Telecom Computing Architecture (AdvancedTCA) is a series of industry specifications targeted to the requirements for the next generation of carrier grade communications equipment. Motorola's AdvancedTCA Telecom Shelf features Gigabit Ethernet implementations of the PICMG 3.0 base fabric and PICMG 3.1 data fabric, providing high performance with space-efficient design. The AdvancedTCA System Controller and Switching Blade combine switching and system management functionality on a single AdvancedTCA blade, maximizing the number of slots available for revenue-generating payload blades.

## Force debuts AdvancedTCA switch and SBC technology

Force Computers has introduced two ATCA products. One is the ATCA-F300 Gigabit Ethernet Switch which has both a base and fabric interface for telecommunications applications. The other is the ATCA-715 family of SBCs in the AdvancedTCA form factor featuring the Intel Pentium M processor with Intel E7501 chipset and Intel 6300ESB I/O Controller Hub. Each product is designed for PICMG 3.0 and 3.1 compliant systems and features a single-slot, 8U form factor.

These ATCA products continue the momentum set in 2003 when Force introduced its ATCA-710 SBCs, which offer 1.8GHz performance, and its Centellis DS31KX system, which enables immediate development of access equipment.

With the addition of the ATCA-F300 (pictured right) and ATCA-715, Force continues its commitment to cutting costs and speeding time-to-market for OEMs with products that provide a total AdvancedTCA solution,

including the chassis, shelf management controller, CPU blades and switches.

The ATCA-F300 features a 24-port managed Layer 3 switch with Gigabit Ethernet support for 14 payload slots, a Gigabit Ethernet interface for connecting to a Shelf Management Controller with IPMI support, and a connection for a second ATCA-F300 for redundant network architectures. It also includes

eight Gigabit Ethernet uplink interfaces for the base channel and one for the fabric channel via the rear transmission module, IPMC V1.5 functionality, an SNMP agent for switch management, and the option of adding a TDM clock generator module for synchronising line cards and other shelves.

The ATCA-715 is suited for wireless and wireline infrastructure solutions designed for RNC, SGSN or

Telco servers, as well as for central office servers. It features Intel's 1.6GHz Pentium M processor with a high MIPS/watt capability that delivers robust, server-class performance for control- and data-plane processing, and for supporting high-end communications. It also includes an Intel E7501 chipset with a memory bandwidth of 4.3 Gbytes/s, and accommodates four PMC modules with telecom clocking synchronisation for additional processing power and/or I/O.

Also available is the ATCA-717 version of the ATCA-715. It features a multi-layered 16-port Gigabit Ethernet switch that delivers the flexibility required for routing Gigabit Ethernet interfaces between the base board control processor, the PMC-based processing or I/O nodes, and the AdvancedTCA Base and Fabric interface.

The ATCA market is forecast to reach up to \$20 billion by 2007.

