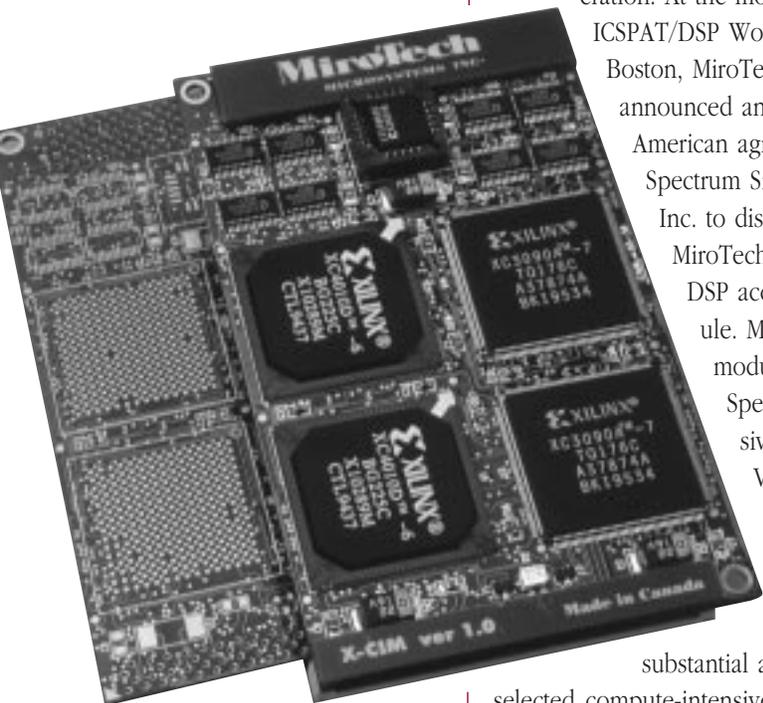


**MiroTech**  
The Acceleration Company

# MiroTech Microsystems: Real-Time Reconfigurability for DSP Acceleration



Our congratulations to the development team at MiroTech Microsystems Inc. (Montreal, Canada). MiroTech Microsystems has released a commercial product that uses reconfigurable computing to advance the state-of-the-art for DSP acceleration. At the most recent

ICSPAT/DSP World Exposition in Boston, MiroTech Microsystems announced an exclusive North American agreement with Spectrum Signal Processing Inc. to distribute

MiroTech's FPGA-based DSP acceleration module. MiroTech's X-CIM module complements Spectrum's extensive PCI, VXI and VME C4x-based DSP product line. Together these products provide

substantial acceleration for selected compute-intensive, high-performance applications.

X-CIM is an FPGA-based reconfigurable computer in a TIM form factor that is fully-compliant with Texas Instruments' TMS320C40 DSP processor. The module features 80 Mbytes/s communication port bandwidth, 30 ms on-the-fly reconfigur-

ability, and hardware-implemented parallel processing. It's a sophisticated, highly portable architecture based on Xilinx reconfigurable FPGAs and banks of high-speed RAM.

As the tendency towards more complex DSP systems continues to grow, designers are constantly seeking new ways to reach higher performance and to unravel bottlenecks while reducing development costs. "What is unique with our X-CIM is its implementation in an IEEE standard and off-the-shelf product packaging," noted MiroTech President and CEO Pierre Popovic. "The X-CIM module can deliver acceleration up to 100 times that of a general-purpose DSP processor for highly repetitive 'inner loops' within algorithms."

The marriage of the X-CIM module with Spectrum's products allows the design of very compute-intensive systems while staying within Spectrum's C40 environment and DSP development tools. X-CIM modules are supported by a comprehensive suite of software tools referred to as COREKIT. With these tools, developers can transparently accelerate a wide range of DSP functions in applications such as radar, sonar, voice and image processing.

**For more information on the X-CIM product line, contact MiroTech Microsystems Inc. at 514-956-0060 or at [MiroTech@montreal.com](mailto:MiroTech@montreal.com).** ♦

The **Xilinx Reconfigurable Computing Developer's Program** is promoting the commercial use of FPGAs in reconfigurable computing applications. These systems add significant value by dynamically changing FPGA designs, in real-time, while the system is operating. Applications that can exploit the benefits of the RC concept include graphics and image processing, audio processing, and data communications.

*For more information on the Xilinx Developer's Program and our reconfigurable computing efforts, please see our web site at [www.xilinx.com](http://www.xilinx.com), or call John Watson at 408-879-6584.*