

**For Immediate Release
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**Macraigor Systems to provide On-Chip Debug solutions for Intel® IXP2800,
IXP2400 and IXP425 Network Processors**

Engineers building applications for these new Intel® Xscale™ technology-based processors will be able to quickly and efficiently debug their hardware and software designs.

INTEL DEVELOPER FORUM, San Francisco, California, February 26, 2002 – Macraigor Systems will port their proprietary On-Chip Debug Technology (OCDemon™) to the Intel® IXP2800 , IXP2400 and IXP425 Network Processors. Engineers developing applications for these new Intel network processors will be able to control and debug their hardware designs and application software without the use of other system resources such as UARTs, Ethernet channels, or parallel ports. In addition to support from several debuggers, Macraigor also supplies a free port of the popular Gnu toolkit (gcc, gas and gdb) for Intel® XScale™ technology-based network processors on their website, www.ocdemon.com.

Macraigor's JTAG interface devices are immediately available for other Intel® Xscale™ technology-based processors such as the Intel® 80200 and the Intel® PXA210 and PXA250 Applications Processors. As a result, developers who will use the new Intel® Network Processors can begin writing or porting existing applications to currently available Intel® Xscale™ microarchitecture platforms ahead of full silicon availability. Development teams within Intel and at MontaVista Software have already used Macraigor's Raven interface devices for initial board bring-up of a prototype board as a precursor to adding the Network Processor device drivers.

Processors are becoming more sophisticated with higher bus speeds and integrated peripherals. Debugging via classic methods, such as In-Circuit Emulators and ROM monitors, does not hold up to the rigors of real-time system test and debug on these next-generation processors. As processors become more complex, on-chip debug resources have been added to aid hardware and software designers. The interface to these on-chip resources is where Macraigor Systems excels. Via a choice of communication

channels, a host debugger communicates with a Macraigor Systems' device and then to the target processor. Since there is no need for any resident code, this debug method is available for hardware initialization and debug as well as Flash EEPROM programming, kernel, driver, and application software debug. Macraigor Systems offers a host based application that allows programming of Flash EEPROM via the JTAG connection.

“Macraigor Systems is committed to providing hardware/software JTAG debug interface solutions for all current and future Intel XScale technology-based processors,” said Managing Partner James MacGregor.

“The designs of the Intel IXP2800 , IXP2400 and IXP425 Network Processors include JTAG debug ports to allow designers to rapidly debug their hardware and software applications,” said Doug Davis, general manager of the Intel Network Processor Division. “Macraigor Systems developed interface devices that give debugger suppliers access to these on-chip debug features”.

Further information about Macraigor Systems' products and interfaces may be found at their website, www.macraigor.com.

About Macraigor Systems

Macraigor Systems, LLC is a leading supplier of BDM/JTAG connection devices for on-chip debugging. Their reputation in the embedded industry has been built on the OCDemon™ product technology which provides a low-cost, full-featured connection from a PC parallel port to the on-chip debug facilities of 32 and 64-bit processors. In addition to parallel port connections, serial and high-speed Ethernet connections are available, providing host support for Windows, Linux and Solaris systems.

Macraigor Systems also provides Flash Programming software that allows in-circuit programming of target Flash EEPROM memory devices via a BDM/JTAG connection. The Flash Programmer works with a wide variety of the most popular Flash devices currently on the market.

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