



ORBexpress Doubles Message Throughput Using INTEGRITY 10 on Dual-Core PPC

HERNDON, VA – December 12, 2011 – Continuing its lead in enabling application developers to easily port their applications to multicore platforms, Objective Interface Systems, Inc. (OIS), the world's leading provider of high-performance, real-time and embedded communications middleware solutions, today announced that its ORBexpress® product doubles message throughput when used with Green Hills Software INTEGRITY® 10 real-time operating system (RTOS) with symmetric multiprocessing (SMP) on a dual-core processor.

The INTEGRITY RTOS provides complete SMP support that is optimized for embedded and real-time use. SMP support enables developers to realize the performance potential of multicore architectures while maximizing software reuse. ORBexpress provides a high-performance communications framework for INTEGRITY 10, enabling real-time and embedded systems to communicate seamlessly with ultra-low latency.

ORBexpress was designed and implemented from its inception with a multi-threaded architecture, fully supporting SMP for inter-process and intra-process communications. This enables ORBexpress to scale seamlessly in a multicore environment. Applications built with ORBexpress can therefore take advantage of the performance provided by additional cores of modern processors without changes to their source code. With ORBexpress, SMP support is automatic and requires no additional programming effort from application engineers.

"Our tests showed that operation invocation throughput doubled when moving from a single-core to a dual-core PowerPC at the same clock speed," said Kevin Buesing, the Director of Technology Services from Objective Interface Systems. "This performance gain was achieved using INTEGRITY 10 without modifying the test application code or recompiling the test image."

"The same architecture that makes INTEGRITY the leader in safety and security in real-time operating systems enables INTEGRITY to scale for multicore processors," said David Kleidermacher, Chief Technology Officer, Green Hills Software. "INTEGRITY 10 combined with ORBexpress offers embedded developers an easy path to migrate their mission-critical systems to multicore architectures while maintaining their investment in their high quality code."

About Green Hills Software

Founded in 1982, Green Hills Software is the largest independent vendor of embedded development solutions. In 2008, the Green Hills INTEGRITY-178B RTOS was the first and only operating system to be [certified by NIAP \(National Information Assurance Partnership comprised of NSA & NIST\)](#) to EAL6+, High Robustness, the highest level of security ever achieved for any software product. Our open architecture integrated development solutions address deeply embedded, absolute security and high-reliability applications for the military/avionics, medical, industrial, automotive, networking, consumer and other markets that demand industry-certified solutions. Green Hills Software is headquartered in Santa Barbara, CA, with European headquarters in the United Kingdom. Visit Green Hills Software at www.ghs.com.

About OIS

Objective Interface Systems, Inc. (OIS) is the leading global provider of middleware solutions for inter-process communication for disparate systems. OIS offers ultra-low latency, real-time connectivity software development tools for use in complex and demanding environments, such as aerospace, defense, automotive, telecommunications, financial, medical, robotics, industrial automation, and consumer electronics. The ORBexpress product family is the most widely deployed communications framework for distributed and heterogeneous systems where failure is not an option.

ORBexpress is a high performance, secure real-time implementation of the Common Object Request Broker Architecture (CORBA) standard. The ORBexpress product provides a common communication platform that is available on a variety of processors, operating systems, compilers, and in C++, Ada, Java and VHDL for FPGA implementations. For more information and product evaluations, visit www.ois.com.

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