Press Release

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X-ES Introduces Rugged COM Express® Module with 3rd Generation Intel® Core™ i7 Processor for Small Form Factor Systems

Middleton, WI – May 3, 2012 – Extreme Engineering Solutions, Inc. (X-ES) introduces XPedite7450, a rugged COM Express® module that complies with the PICMG COM Express Basic form factor (95mm x 125mm) and supports an enhanced Type 6 pinout. The XPedite7450 can be hosted on a standard COM Express carrier card or a custom carrier card built to include additional end-user requirements, or it can be integrated into an X-ES XPand6000 Small Form Factor (SFF) rugged system. Based on the 3rd generation Intel® Core™ i7 quad-core processor, the XPedite7450 operates at up to 2.2 GHz to deliver enhanced performance and efficiency, making it an excellent processor mezzanine for commercial, industrial, and military applications.

Designed and tested for the harshest military, aerospace, and industrial environments, the XPedite7450 includes enhancements above and beyond commercial COM Express modules. It provides a rugged and reliable COTS processor mezzanine solution with these benefits:

- Incorporates the same design and manufacturing principles as all X-ES Level 5 rugged products
- Designed and tested for operation from -40 to +85ºC
- Includes additional mounting holes for increased structural integrity
- Provides extended shock and vibration capabilities for operation in harsh environments
- Features conduction-cooled and air-cooled applications supported by a single design
- Soldered-down memory replaces less rugged/reliable SO-DIMMs
- Utilizes tin-lead manufacturing process to mitigate tin-whisker effects (RoHS-compliant process is also available)
- Provides BIT support

Targeting the quad-core Intel Core i7-3612QE processor with clock speeds up to 2.1 GHz, the XPedite7450 features up to 16 GB of DDR3-1333/DRR3-1600 ECC SDRAM, an integrated high-performance 3D graphics controller, enhanced Type 6 pinout, five Gen2 PCI Express ports, four USB 2.0 high-speed ports, six SATA 3.0 Gb/s ports, and an Intel® High Definition Audio port. BSPs for Linux, INTEGRITY, and VxWorks and Windows drivers are available. QNX, LynxOS, and other OS support may be available, as needed. The XPedite7450 is scheduled for initial delivery in July 2012.

The XPedite7450 is the perfect compute element for the rugged XPand6000 SFF system. Supporting natural conduction and convection cooling with minimal SWaP, an XPand6000-based system can be bolted to almost any available surface of a small UAV, ground vehicle, or heavy equipment. In an extremely small and lightweight package weighing as little as 3.5 lbs. and only taking up 72 cubic inches, XPand6000 systems combine high-performance processing and application specific I/O added via PMCs/XMCs to provide MIL-STD-1553, CANbus, video input, RS-232/422, GPIO, A/D, D/A and other I/O.

In addition to COM Express, X-ES is supporting 3rd generation Intel® Core™ i7 processors across our seven other industry-standard form factors: 3U VPX, 6U VPX, 3U CompactPCI, 6U CompactPCI, VME, air-cooled PrPMC/XMC, and conduction-cooled PrPMC/XMC. The XPedite7470 3U VPX Single Board

Computer (SBC) and the XCalibur4401 6U CompactPCI SBC, as well as the XPedite7450, are the first available products to use these processors.

About X-ES — Extreme Engineering Solutions, Inc. (X-ES), a 100% U.S.A. based company, designs and builds single-board computers, I/O boards, power supplies, backplanes, chassis, and system-level solutions for embedded computing customers. X-ES offers cutting-edge performance and flexibility in design, plus an unparalleled level of customer support and service. For further information on X-ES products or services, please visit our website at www.xes-inc.com, or call (608) 833-1155.

Data Sheet: http://www.xes-inc.com/assets/products/files/XPedite7450-DS.pdf
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