



For Immediate Release

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Company Press Release
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**SEAKR ENGINEERING VIRTEX-4 FPGA RECONFIGURABLE COMPUTER
REACHED TRL9 ON BOARD TACSAT-3**

CENTENNIAL, COLORADO, June 9, 2009 — Providing over 14 GFLOPs of on-board processing, SEAKR Engineering Incorporated (SEAKR) announced today that the Application Independent Processor (AIP) used as the primary payload processor on TacSat-3 has begun mission operations. The AIP utilizes both Virtex-4 FPGA based ReConfigurable Computing (RCC) and PowerPC processing elements which are ideally suited for very computational intensive algorithms traditionally handled by Application Specific Integrated Circuits (ASICs). The RCCs can be reprogrammed even while in orbit allowing for unique mission applications while also saving costs, risks, and schedule associated with ASIC based systems. The PowerPC processing element has a clock speed of 600 MHz providing 600 DMIPS and 2.0 GFLOPs. The AIP also integrates other payload control elements such as on-board memory, payload state-of-health monitoring, and payload power distribution. By integrating these elements into one subsystem, the AIP reduces Size, Weight, and Power (SWaP) and costs.

The ARTEMIS AIP will process the Advanced Responsive Tactically-Effective Military Imaging Spectrometer Hyperspectral Imager (ARTEMIS HSI) data to detect and identify targets of interests, battlefield situational awareness, and damage assessment. Processed data will be available directly to the warfighter. SEAKR Engineering President and COO Eric Anderson states “SEAKR is proud to be a part of the TacSat-3 team because this program clearly demonstrates the advantages of Operationally Responsive Space (ORS) by providing the warfighter near real-time information that can help save lives and make our troops more effective. We’re grateful to be part of the AFRL team and look forward to seeing ORS be successful.”

The AIP concept has been adopted by a number of different programs most notably the hosted IP Router and MODEM payload which is schedule to launch in Q4’2009. For this program, the AIP is used as a

reprogrammable Ku-band and C-band MODEM and is qualified for a 10 year GEO mission. SEAKR's next generation AIP is in development for an autonomous docking and rendezvous multi-sensor processor with HDTV H.264 video compression. The AIP has also been baselined for a JPEG2000 image compression, a staring IR sensor processing, an S-band software defined radio, and signals intelligence processing. "The level of performance at these price, schedule, and costs points is really changing the playing field as to what is possible for space missions," states Dave Jungkind, SEAKR's director of business development.

About SEAKR Engineering, Inc.

SEAKR Engineering is a world-leading provider of advanced state-of-the-art avionics for space and airborne applications. Since our inception in 1982, SEAKR has delivered over 100 flight units. More than 70 of these units have launched with all having met or exceeded their mission objectives. This 100 percent on-orbit success rate establishes a track record simply unsurpassed in the industry. SEAKR is proud of our heritage and our significant contribution to national defense by providing the warfighter increased communication bandwidth and advanced battlefield/space situational awareness. In addition to military systems, SEAKR provides avionics hardware for our commercial and civil partners with subsystems for space station, shuttle, and many planetary missions. Our high-performance digital payloads include Hyperspectral Image Processors, Software Defined Radios; IP Routers; Programmable MODEMS for Ku, Ka, and C-band; and Image Compression. Our modular command and data handling avionics support both single string systems for tactical missions such as Operation Responsive Space and fully redundant hardened systems for national asset class missions such as Space Based Space Surveillance. Our Solid State Recorders (SSRs) lead the field in capabilities and performance with more SSRs delivered than all other companies combined. SEAKR is a small business proud to serve our customers and our country. For more information about SEAKR Products, call, or write, SEAKR Engineering, Incorporated, 6221 South Racine Circle Centennial, CO 80111-6427, 303.790.8499 or visit our web site at www.seakr.com.

SOURCE: SEAKR Engineering, Incorporated.

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