Curtiss-Wright Debut's Industry's First VITA 46 (VPX) DSP Engine: CHAMP-AV6

New 6U DSP Engine Combines Quad PowerPCs and Serial Switched Fabric Support to Launch New Era in Embedded Multi-Computing

LEESBURG VA -- January 16, 2006 – Curtiss-Wright Controls Embedded Computing has introduced the CHAMP-AV6, the industry's first VITA 46 (VPX)-based digital signal processing (DSP) engine. The CHAMP-AV6 combines quad PowerPC 8641 devices with the serial switched fabric capabilities made possible by VPX, the new military aerospace COTS board standard. The VPX standard, collaboratively developed by COTS industry leaders and prime military integrators, delivers a high-speed serial interconnect with a form-factor and feature set specifically designed to meet demanding military/aerospace applications

"The CHAMP-AV6 takes embedded signal processing to levels previously unreachable by embedded COTS computing," said Tom Quinly, President of Curtiss-Wright Controls Embedded Computing. "The first VPX-based DSP engine, this quad processor board delivers the bandwidth and compute power today's military systems need to handle the increasing amounts of sensor data generated by the new network-centric battlefield. The CHAMP-AV6, with its unparalleled performance, sets a new standard in open standard signal processing, further establishing Curtiss-Wright's position as the leading provider of rugged single board computers for mil/aero applications."

The CHAMP-AV6 features four on-board 8641 single-core PowerPC devices. The 8641, FreeScale's latest Altivec-enabled processor, has dual integrated 64-bit memory controllers and offers vastly increased memory performance compared to prior generations of PowerPC processors. This enhanced performance translates directly to reduced execution times for user application software. For numeric-intense processing the 8641 offers the powerful Altivec instruction set extension which performs up to 8 floating point operations per cycle. With four 1.33GHz 8641s, the CHAMP-AV6 delivers 42 GFLOPS of peak floating point performance.

Multi-processor systems based on the CHAMP-AV6 will benefit from the 10 GB/s full duplex bandwidth provided by the board's four Serial RapidIO ports; this represents a data throughput rate approximately 10x faster than today's best VME/StarFabric implementation. Streaming data applications will benefit from the board's 8.5 GB/s memory bandwidth and up to 2 GB of DDR-II SDRAM.

A key enabler to the unmatched capabilities of the CHAMP-AV6 is its VPX format which provides backplane connectors capable of handling signaling speeds of up to 6.25 Gbits/sec. The VPX connectors easily support the 2.5 Gbits/sec signaling rate of the

board's Serial RapidIO ports and also allows multigigabit/sec I/O to be handled from its XMC mezzanine card site.

The CHAMP-AV6 (along with the newly introduced VPX6-185 single board computer) represents the industry's first board-level support for 2-level in-the-field maintenance requirements. 2-level maintenance can significantly reduce sparing and logistics requirements, thus reducing the total life-cycle cost of the systems in which the CHAMP-AV6 is deployed. The board's VPX connectors include an ESD protection mechanism that, coupled with top and bottom covers at the module level, enable the CHAMP-AV6 to be safely handled in flight-line environments where standard ESD precautions are not practical.

The board's PCI Express-compliant XMC/PMC (VITA 42.3) site supports system expansion with the addition of new generation mezzanine modules. It conforms to the VITA 42.3 standard and can accept either standard PMC modules or XMC modules featuring PCI Express, with automatic detection of the module type. With PCI Express connectivity, the XMC site provides the high bandwidth to memory required for high-performance graphics, networking, and data acquisition modules. By virtue of the VPX format's increased I/O count, the XMC I/O connectors are provided with 20-pairs of dedicated backplane I/O pins for 3.125 Gbaud throughput rates. XMC delivers levels of performance ideal for the capture of sensor data for radar, signal intelligence and electro-optical systems. The CHAMP-AV6 also features an on-board Gigabit Ethernet (GbE) switch for integration with command and control networks.

CHAMP-AV6 Performance Features

- Four PowerPC 8641 CPUs up to 1.33 GHz
- Up to 2Gbytes DDR II-266 SDRAM with ECC per processor
- Up to 512 Mbytes Flash with write protection
- Permanent Alternate Boot Site
- 128 Kbytes NVRAM
- Multi-board synchronous time-stamping feature
- Real Time Clock
- Temperature sensors
- VITA 48 1" pitch format
- VxWorks® BSP
- Linux support
- SSSL DSP function library
- Inter-Processor Communications Library
- Range of air and conduction-cooled ruggedization levels available

CHAMP-AV6 I/O Features

- On-board Serial RapidIO interconnect
- Four Serial RapidIO ports to the VITA 46 core fabric
- Option for PCI Express (PCIe) port to the VITA 46 core fabric
- Gigabit Ethernet (GbE) with on-board switch
- One XMC site with x8 PCIe interface
- Additional x8 PCIe interface to the backplane
- Four EIA-232 serial ports
- Two EIA-422 serial ports
- Sixteen discrete LVTTL I/O signals

Software for the CHAMP-AV6 includes support for operating systems including VxWorks, Linux, and Gedae. Curtiss-Wright provides signal processing libraries and a high performance Inter-Processor Communications Library for message passing and bulk data transfers, extending to multiple boards connected via Serial RapidIO

Pricing for the CHAMP-AV6 start at $16,500. Evaluation units will be available in Q4 2006.

For editorial information regarding Curtiss-Wright Advanced Multi Computing products or services, contact John Wranovics, public relations director, Curtiss-Wright, Tel: (925) 640-6402; Fax: (510) 530-8563; email: jwranovics@curtisswright.com; Web site: www.cwcembedded.com.

Sales inquiries: Please forward all Sales and reader service inquiries to Jerri-Lynne Charbonneau, Curtiss-Wright Controls Embedded Computing, Tel: (613) 254-5112; Fax: (613) 599-7777; e-mail: sales@cwcembedded.com.

About Curtiss-Wright Controls Embedded Computing

Curtiss-Wright Controls Embedded Computing is the industry's most comprehensive and experienced single source for embedded solutions, ranging from Processing, Subsystems, Data Communication, DSP, and Video & Graphics to the most advanced board level components and fully integrated custom systems. The Embedded Computing group serves the defense, aerospace, commercial and industrial markets and is part of Curtiss-Wright Controls Inc. For more information about Curtiss-Wright visit www.cwcembedded.com.

About Curtiss-Wright Controls, Inc.
Headquartered in Charlotte, North Carolina, Curtiss-Wright Controls is the motion control segment of Curtiss-Wright Corporation (NYSE: CW). With manufacturing facilities around the world, Curtiss-Wright Controls is a leading technology-based organization providing niche motion control products, subsystems and services internationally for the aerospace and defense markets. For more information, visit www.cwcontrols.com.

Forward-looking statements in this release are made pursuant to the Safe Harbor provisions of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those expressed or implied. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. Such risks and uncertainties include, but are not limited to: a reduction in anticipated orders; an economic downturn; changes in the competitive marketplace and/or customer requirements; an inability to perform customer contracts at anticipated cost levels; a change in government spending; and other factors that generally affect the business of aerospace, defense contracting, marine electronics and industrial companies. Please refer to the current SEC filings for Curtiss-Wright Corporation under the Securities and Exchange Act of 1934, as amended, for further information.

Trademarks are the property of their respective owners.