

**For Immediate Release**



## **Mistral announces availability of the new CHAMP-FX and CHAMP-FX2 FPGA Engines from Curtiss-Wright**

**Bangalore, April 19, 2007** - Mistral Solutions Pvt. Ltd., a leading provider of complete technology solutions and professional services in the embedded space, today announced the availability of the new conduction-cooled rugged version of the CHAMP-FX digital signal processor (DSP) 6U VME64x and VITA-41 engines and the CHAMP-FX2, the first FPGA-based VPX-REDI (VITA 46/48) compute engine from Curtiss Wright Controls Embedded Computing.

These dual-FPGA boards are ideal for demanding signal processing applications like radar, sonar, and signal intelligence that require survivability in harsh environments.

### **CHAMP-FX: DSP 6U VME64x and VITA-41 Engines**

The CHAMP-FX is now available in a new conduction-cooled rugged version which makes the high performance DSP card an ideal fit throughout the full range of Mil COTS application environments and sets the standard in the embedded defense and aerospace market for reconfigurable signal processing computing.

The dual Xilinx Virtex-II Pro™ based CHAMP-FX fully meets Curtiss-Wright's Level 100 (-40°C to 71°C) and Level 200 (-40°C to 85°C) ruggedization guidelines. Curtiss Wright conduction-cooled cards are designed for use in high shock and vibration environments and are constructed with a unique advanced hybrid aluminum/copper frame, which provides mechanical stiffening while conducting heat from the electronic components to the edge of the card where it is transferred to the chassis. These conduction-cooled cards comply with the mechanical specifications controlled by the IEEE 1101.2 VME specification.

The CHAMP-FX is supported with the CHAMPtools-FX Design Kit that provides reference designs and ready-to-use VHDL modules to implement memory interfaces, DMA, PCI, RocketIO and support for the Xilinx II Pro's two internal IBM PowerPC 405 processors.

The computing power of the FPGAs is complemented with more than 10GB/sec of I/O capability, implemented with an array of technologies including high-speed differential serial RocketIO™, XMC/PMC sites and StarFabric interfaces. With both large DDR SDRAM and fast DDRII SRAM memory, the FPGAs have more than 8GB/sec of memory bandwidth to service memory intensive algorithms.

## **CHAMP-FX2: VPX-REDI (VITA 46/48) Compute Engine**

The CHAMP-FX2 combines the flexibility of Xilinx FPGA-based reconfigurable computing, high performance Power Architecture™ (PowerPC®) processing, and the high bandwidth of serial switched fabrics provided by the new VPX standards. The board features dual high-performance Xilinx Virtex™-5 LXT FPGAs and an Altivec™-enabled dual-core Freescale 8641 PowerPC processor. It delivers the unmatched flexibility of reconfigurable computing with state-of-the-art general processing and VPX-level interprocessor communications bandwidth performance. Its heterogeneous FPGA/CPU design enables developers to optimize their designs by hosting the portions of their application on the processing resources best suited to their application. The board's high-end processing elements, rich I/O options, and rugged design make the CHAMP-FX2 an ideal platform for integrating FPGA processing into a rugged COTS-based system.

The CHAMP-FX2 uses the Serial RapidIO (SRIO), provided by the new VPX standard, to connect its three computational nodes and its on-board XMC mezzanine site with up to four 4-lane SRIO connectors to the backplane. The board's memory support includes double data rate (DDR2) SDRAMs and quad data rate (QDR-II+) SRAMs that complement inter-node bandwidth by providing multiple, independent memory banks for each of the dual Virtex-5 FPGAs. High-speed serial ports are provided to connect the FPGAs to each other, to the XMC site, and to front-panel or back-panel connections.

CHAMP-FX2 Software Support is provided by Continuum FXtools, a rich set of system and support software and tools, designed specifically to ease the developer's task of integrating FPGA-based computation into a larger heterogeneous multicomputer application.

## **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.cwembedded.com](http://www.cwembedded.com).

## **About Mistral Solutions**

Mistral Solutions is a professionally managed technology house undertaking Systems Integration and providing Value added Services. It provides specialized hardware and software solutions in the Embedded domain, as well as Professional Services in Systems Design and Development, Real-Time Applications, and Communications.

By virtue of its core technical expertise, Mistral has valued alliances with leading global companies and it markets scalable computer platforms from Motorola Embedded Communications Computing (previously Force Computers), RTOS and IDE tools from Wind River Systems Inc., telecommunications solutions from

NMS Communications, commercial & rugged grade COTS computing solutions from Curtiss Wright (Dy4 Systems, VISTA Controls, Synergy Microsystems, Systran, Peritek, Prima Graphics), board level computers for Industrial Applications from MEN Mikro Electronik, Single Board Computers for VMEbus and CompactPCI from Microsys, high-availability Network Service-Ready Platform (NSRP) solutions from Continuous Computing Corporation, standard and custom products for commercial, military, high-tech, medical, telecom, and research markets from Dawn VME, I/O modules from General Standards Corporation, modified COTS products for military, aerospace, and avionics applications from Targa Systems, Software Defined Radio solutions from Pentland Systems and high quality storage solutions from DNF Storage.

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