Waveform Development Time Shortens for Software Defined Radios the JTRS Program WNM-SiS (Signals in Space)

Software defined radio (SDR) application development can now be much shorter thanks to the new AD350 PMC expansion card from 4DSP Inc. Created for use in wireless base stations and MIMO test-bed systems applications, the AD350 is the ideal prototyping system and already is significantly shortening waveform development for software defined radios in the JTRS (Joint Tactical Radio System) program and WNM-SiS (Signals in Space).

Reno, Nev. (PRWEB) August 9, 2009 -- Software defined radio (SDR) application development can now be much shorter thanks to the new AD350 PMC expansion card from 4DSP Inc. Created for use in wireless base stations and MIMO test-bed systems applications, the AD350 is the ideal prototyping system and already is significantly shortening waveform development for software defined radios in the JTRS (Joint Tactical Radio System) program and WNM-SiS (Signals in Space).

The AD350 is enabling the JTRS platform to reach into space by:
* Enabling emulation of the GMR EDM modem FPGA processing element with the JSR (JTRS Surrogate Radio) deployed by SPAWAR & T&E for WNW performance testing.
* Providing a target for porting the JTRS GMR MHAL (Modem Hardware Abstraction Layer) enabling porting of GMR waveform PHY components to the JTRS Surrogate Radio (JSR).
* Enabling the porting of the JTRS WNW of PIM-DM SiS as part of a successful port of the WNW to the JSR.

Featuring two Altera Cyclone III FPGAs, the AD350 PMC expansion card is an ideal prototyping system to implement flexible and scalable multi-input and multi-output antenna transmitter systems. In addition, it can also be used in synchrotron systems to regulate amplitude voltages, phase and resonant frequency of accelerator's RF cavities. The architecture provides high performance as well as flexibility with user-selectable external or on-board clocks, carefully designed, to minimize jitter and phase noise degradation of the A/D and D/A SNR.

Used recently in a project related to the JTRS Program, Dave Lofquist, a Senior Technical Fellow of The Boeing Company commented, "We were looking for a very specific FPGA signal processing capability to augment our software defined radio development platform to address the increasing signal processing needs of tactical waveform development. Working with 4DSP, we were able to very quickly respond to this need, and have been extremely happy with the resultant AD350 product. The AD350 platform is allowing us to shorten our SDR waveform development time, and significantly improve our test visibility and accuracy."

Douglas Sherrod, Director of Marketing and Business Development Manager for 4DSP, added, "Although Altera produces much higher performance FPGA devices, the Altera Cyclone III hits the center of the price-performance target for this particular SDR application, having lower power consumption and heat dissipation, the fact that it is less expensive than other products in its category is not lost on us and our customers. Both 4DSP and Boeing are extremely pleased with the performance of this design and 4DSP is honored to have its AD350 product selected as part of the JTRS program design."

Full technical details of the AD350 are available on a data sheet downloadable from the 4DSP at www.4dsp.com/pdf/AD350_DATA_SHEET.pdf
More Information

USA
Douglas Sherrod, Director of Marketing & Business Development
Tel. +1-800-816-1751 Fax. +1-775-473-9928
Web: www.4dsp.com
4DSP Inc, 955 South Virginia St, Suite 214, Reno, NV 89502, USA

Europe
Erik Barhorst,
Tel. +31-172-782-190 Fax. +31-172-891-261
Web: www.4dsp.com
4DSP BV, Onderemingsweg 66f, 2404HN, Alphen aan den Rijn, Netherlands

High res image can be downloaded from: www.clickintopr.com/editors/articleDetail.asp?pID=573 or following link: www.4dsp.com/Pictures/AD350.jpg

Notes:
Cyclone is a registered trademark of the Altera Corporation (NASDAQ: ALTR) a pioneer of programmable logic solutions.

About 4DSP Inc
4DSP is a Reno Nevada based corporation with offices in Europe. The company primarily provides commercial-off-the-shelf (COTS) FPGA IP and board and systems level hardware to military laboratories and defense industry contractors. In addition, 4DSP provides engineering design services and is a developer of FPGA algorithmic intellectual property (IP) Cores for high-speed digital signal processing (DSP) and analog signal conversion (A/D) hardware and specialized imaging systems.

4DSP's product developments are based on industry computer bus standards. PMC, XMC, FMC, cPCI, VME and VPX computer architectures and are the basis of 4DSP's systems designs. The 4DSP products are at the cutting edge of digital signal processing and analog-to-digital signal conversion. The company's strengths are centered in its efficient algorithmic development and FPGA coding optimized for maximum signal performance with the least use of FPGA logic.

Products are designed to meet the rugged application demands of their predominate Department of Defense (DoD) customer base. DoD customers demand small, light-weight and low power mixed signal processors use for high performance DSP, image processing and SIGINT as largely used in UAV sensors. 4DSP provides quick turnkey solutions for high performance mixed signal design across many application areas for the aerospace industries and defense (DoD) contractors which include customers such as Northrop Grumman, NASA, Philips, Boeing, Lockheed Martin, US Navy, ViaSat, Pratt and Whitney and many more.

4DSP is also an innovative hardware manufacturer of small and compact DSP and FPGA based systems designed in PMC and XMC form factors. The 4DSP premium board architecture is reconfigurable, flexible and scalable. Built around a mix of co-accelerator FPGA devices and embedded hardware and software processor cores, 4DSP's hardware platforms deliver unmatched performance in advanced digital signal processing applications for embedded computing systems. 4DSP's FPGA-based platforms are typically used to perform

If you have any questions regarding information in these press releases please contact the company listed in the press release. Our complete disclaimer appears here - PRWeb ebooks - Another online visibility tool from PRWeb
fast data acquisition and data recording, high-end parallel processing and algorithms acceleration.

More details at [www.4dsp.com](http://www.4dsp.com)

**TERMS:**
* JTRS GMR: The Joint Tactical Radio System, Ground Mobile Radios, is a software-programmable radio system providing secure, reliable, multi-channel voice, data, imagery and video communications for mobile military users. The system delivers networked communications on-the-move at the tactical edge supporting information sharing and combat readiness between service branches.
* JTRS GMR EDM = Engineering Development Models (EDM) of the Joint Tactical Radio System Ground Mobile Radios (JTRS GMR) to the U.S. Army's Future Combat Systems (FCS) program
* SPAWAR NED T&E = Network Enterprise Domain - Waveform Test & Evaluation.
* MHAL = Modem Hardware Abstraction Layer
* WNW = Wideband Network Waveform is the enabler for network centric operations and is being developed as part of the Joint Tactical Radio Systems (JTRS) Ground Mobile Radio (GMR) program.
* PIM-DM SiS = Protocol Independent Multicast - Dense Mode (PIM-DM), Signals in Space

###
Contact Information
Douglas Sherrod
4DSP Inc
http://www.4dsp.com
+1-800-816-1751

Adrian Maguire
CLICKintoPR.com
http://www.clickintopr.com/editors/articleDetail.asp?pjID=573
+44 (0)161 408 0152

Online Web 2.0 Version
You can read the online version of this press release here.