

TI and ATEME Unveil Complete Development Platform for IP-Based Video Surveillance Systems

Enabling video surveillance system developers to make the transition from analog to digital technology quickly and cost effectively while adding their own differentiated features to products, Texas Instruments Incorporated (TI) (NYSE: TXN) and ATEME, a leading French-based provider of hardware and software solutions for video and signal processing, today announced the availability of the new Video Security over Internet Protocol (VSIP) development platform. Based on TI's high-performance TMS320DM642™ digital media processor, the VSIP development platform provides a complete hardware and software solution for the development of intelligent network video cameras. www.ti.com/vsipnr.

High Performance TMS320DM64X™ Digital Media Development Kit Available

To make it as easy as possible for designers to develop digital media applications, Texas Instruments (TI)

(NYSE: TXN) is introducing the comprehensive TMS320DM64x™ Digital Media Development Kit (DMDK) available today. This comprehensive kit TMS320DM642 evaluation board (EVM), high-speed XDS560 PCI-based emulator and the powerful Code Composer Studio™ (CCStudio) integrated development environment (IDE) along with a full suite of application software and utilities. For more information, see: www.ti.com/dmdklaunch.



TI Developer Conference - North America February 18-20, 2004, Houston, TX

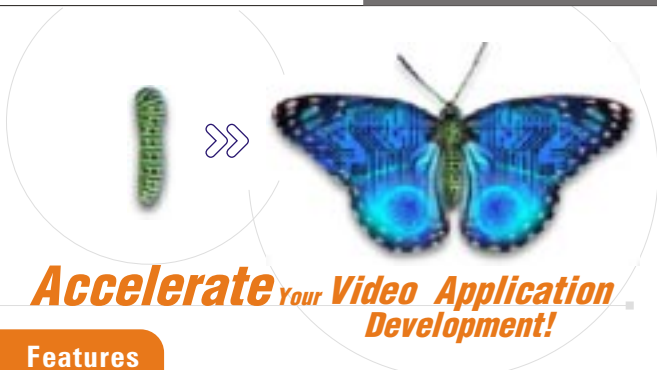
The TI Developer Conference provides networking opportunities with experts, must-have technical learning, and peer-to-peer interaction for embedded developers. Both novice and expert-level designers can improve design efficiency by attending this 3-day conference. Topics include solutions on audio, control, security, telecom, and video/imaging applications; hardware, software, and tools information for both new and experienced users signal processing applications; and partner-specific sessions for university and third party delegates. Don't miss out on your chance to meet this powerful community of experts and influencers. Make your plans today to be at the TI Developer Conference, February 18-20, 2004 in Houston, Texas.

Data Acquisition and Playback Card Nabs 64 Analog Channels

Oruga, an intelligent PCI data-acquisition and playback card, simultaneously captures up to 64 analog channels with 16-bit resolution at 39 KS/s for each channel. It can also play back signals from its four analog output channels at up to 2 MS/s. Peripheral functions include digital I/O, private external data port, and multiboard synchronization. A TMS320C6713 DSP controls all peripherals and performs math coprocessing. A development pack includes the card, Code Composer Studio integrated development environment, JTAG emulator, I/O cabling, and the Pismo software toolset. Unit pricing for Oruga starts at \$2,875. **Innovative Integration Inc.**, Simi Valley, Calif.; (805) 520-3300, www.innovative-dsp.com



Video Daughter Board



Accelerate your Video Application Development!

Features

- Supports EVM6201, EVM6205, TEB6416, DSK6416, DSK6711 & DSK6713
- 10/100 MBPS Ethernet connectivity and TCP/IP Stack libraries (Optional)
- FPGA for video receive and transmit buffers and other glue logic with extra space to implement data manipulation algorithms such as filtering, compression, decompression etc.
- Demo application based on H.263 algorithm

Applications

- Video surveillance system
- Video monitoring system
- Video recorders (Set-top box)
- Video conferencing applications
- Networked video applications
- Imaging application
- 3-D graphics application



www.einfochips.com

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Fast Data Acquisition Board Harnesses TMS320C6711

Moving data at up to 480 Mb/s, the DT9841 scalable, real-time, data-acquisition board packs a TMS320C6711 DSP and two 24-bit sigma-delta A/D and D/A converters onto a standard 6U-size card. The board, which communicates with a host through a USB 2.0 interface, simultaneously handles eight A/D and two D/A channels, each at 100 kS/s. Digital I/O capability consists of eight inputs, eight outputs, and eight ports programmable as inputs or outputs. Also on board are three counter timers with up and down capability. The unit comes with host and DSP communications libraries, APIs, and example and demo programs. A Sleek Box version of the DT9841 adds a shielded metal enclosure with built-in connectors. Starting price is \$3,995 each in single quantities. OEM volume discounts are available. **Data Translation, Inc.**, Marlboro, Mass.; (800) 525-8528, www.datatranslation.com

Tiny Module Packs DSP, FPGA, and FireWire Punch

The UC1394a-1 is a multichip general-purpose DSP module crammed into a 30-by-36-mm 116-pin surface-mount PLCC package. Included are a TMS320C5509



DSP (up to 400 MIPS); 50,000-gate Spartan-II FPGA; 400-Mb/s Firewire interface; and multiple I/O functions including RS-232, USB, McBSP, I2C, and JTAG. The UC1394a-

1 sells for \$500 each in quantities of 100 or more. Supporting EVM-Kits for evaluating DSP and embedded image-processing applications start at \$3,125 each. **Traquair Data Systems, Inc.**, Ithaca, N.Y.; (607) 266-6000, www.traquair.com

External Mixer Option Sends Spectrum Analyzer Range Soaring

Option AYZ adds an external mixing capability that pushes the frequency range of PSA series high-performance spectrum analyzers from 50 GHz to as high as 325 GHz. The option includes software that preserves all the spectrum analyzers' capabilities and works with 110-GHz 11970 series harmonic and 75-GHz 11974 series preselected mixers. Coverage to 325 GHz is available with third-party mixers. For third-party mixers that require a bias voltage be sent to the analyzer's IF port, the option allows that voltage to be adjusted local-

ly or via the IEEE-488 bus. Option AYZ sells for \$2,000. It is also available for the same price as an upgrade kit for PSA series instruments already in service. **Agilent Technologies Inc.**, Palo Alto, Calif.; (650) 752-5000, www.agilent.com

Test Software Marries Design and Manufacturing Data

Encounter Test Solutions, consisting of Encounter Test Design Edition and Encounter Test Manufacturing Edition, is a unified test methodology that bridges design and manufacturing. Of the two constituent components, Encounter Test Design Edition includes such features as automated design-for-test insertion, memory built-in self test, embedded core test, test compression with x-state masking, and compact high-coverage delay tests. Encounter Test Manufacturing Edition, a state-of-the-art diagnostic environment, analyzes design intent and manufacturing information. A one-year, time-based license for Encounter Test Solutions ranges from about




The Compact DSP Solution



micro-line C6713 Compact Embedded DSP/FPGA board

The C6713 Compact is a high performance single board DSP/FPGA Solution, offering exceptional capabilities and flexibility.

Measuring only 67 x 120mm, it features Texas Instruments' most powerful floating point DSP processor, the TMS320C6713, together with a Xilinx Virtex® - II FPGA, up to 64MBytes of SDRAM, 8MBytes of FLASH ROM, FireWire and optional Ethernet communications.

It is suitable for stand-alone operation or as a mezzanine daughter card, and has extensive digital I/O capabilities for easy integration with the on-board DSP, FPGA and FireWire resources.

Download the datasheet and learn more at:
www.traquair.com/ads/edge/c6713compact.html

Traquair Data Systems, Inc. Tel: 607-266-6000 Email: sales@traquair.com Web: www.traquair.com

TMS3206713 DSP
Up to 1800 MIPS/1350 MFLOPS

Virtex® - II FPGA
250k, 500k or 1MGates

IEEE 1394 FireWire
400MBit/sec.

Optional Ethernet
10/100BaseT



\$75,000 to \$750,000. **Cadence Design Systems, Inc.**, San Jose, Calif.; (408) 943-1234, www.cadence.com

Software Option Adds Lawful IP Intercepts

PowerIntercept is a focused lawful-intercept software intended to run on BladeWare host-signal-processing IP platforms. Together, the combination gives OEMs an open, scaleable way to monitor and record IP-based voice and fax call streams. Included in the software is a call classifier, which distinguishes among secure telephone, voice, fax, and data communications. Fax rendering, which converts recordings of both T.38 and G.711 PCM-based fax transactions to TIFF-F image files, is also included. Depending on customer needs, many licensing options are available, including both royalty-based and royalty-free arrangements. A development license goes for as little as \$20,000. **Commetrex Corp.**, Roswell, Ga.; (770) 449-7775 ext. 420, www.commetrex.com

ATM SAR Algorithms Target TMS320C64x DSP Generation

A series of ATM SAR software modules for the TMS-320C64x DSP generation that complies with eXpress DSP Real-Time Software Technology helps designers assemble wireless ATM infrastructure equipment like 3G base stations. Different modules meet the requirements for both AAL2-CPS SSSAR and AAL5-SAP CPCS ATM layer (with Utopia driver) packet processing. The algorithms include a suite of telephony functions for bridging conventional telephone service voice calls from the public switched telephone network to a packetized ATM network. **Infochips, Inc.**, Santa Clara, Calif.; (408) 496-1882, infochips.com



NI LabVIEW Toolkit Simplifies Design Validation and Debugging of TI DSPs

National Instruments announced the LabVIEW DSP Test Integration Toolkit 2.0, a LabVIEW add-on that integrates with Texas Instruments Code Composer Studio™ (CCStudio) Development Tools. This toolkit simplifies debugging and validation of code executing on TI TMS320™ digital signal processors (DSPs) with an executable that design engineers use to establish communication and control of data internal to DSPs in seconds. The executable runs parallel to CCStudio and uses the real-time data exchange (RTDX) communication protocol. **National Instruments** www.ni.com/nati

Sundance's New Module Allows Designers to Develop DSP-Based, Internet-Ready Applications

Sundance Multiprocessor Technology Ltd., today announced the immediate availability of SMT363-XC2, an innovative expansion module that provides a unique means of connecting high-speed digital signal processors (DSPs) to the Internet. As the first of its kind, the module allows design engineers to quickly and easily Web-enable their DSP-based applications. In the past, DSP based applications had to have a host computer of some sort for communication with Ethernet/Internet. The new SMT363-XC2 allows a sophisticated collection of DSP modules to connect to Ethernet/Internet directly and without the involvement of a host computer. It is now possible for a developer sitting anywhere in the world to develop applications running on a multi-DSP system physically located thousands of miles away as long as there is





TRAQUAIR
www.traquair.com

The Ultra-Compact DSP Solution



**ultra-compact
UC1394a-1 Multi-chip Module**

The UC1394a-1 multi-chip module incorporates DSP, FPGA and ready to use FireWire communication resources, all in a tiny 30 x 36mm 116-pin surface mount PLCC package.

It can be utilized as a ready to use IEEE 1394a FireWire bridge, allowing digital cameras, image sensors and other embedded devices to be easily integrated into a FireWire environment, with only a few days work and without any embedded software development effort.

For involved applications, requirement specific software can be written for the TMS320C5509 DSP processor and 50kGate Spartan® - II FPGA, while a diverse range of on-board I/O options facilitate integration with application specific hardware.

Learn more about how to get started with an ultra-compact EVM-Kit at:
www.traquair.com/ads/edge/uc1394a1.html

TMS320C5509 DSP
Up to 400MIPS

Spartan® - II FPGA
50kGates

IEEE 1394 FireWire
400MBit/sec.

Extensive I/O Capabilities
8MBytes of SDRAM
512MBytes Flash EPROM



Traquair Data Systems, Inc. Tel: 607-266-6000 Email: sales@traquair.com Web: www.traquair.com

an internet connection. The application thus developed can be loaded to the DSP hardware and controlled remotely through the internet/Ethernet. **Sundance Multiprocessor Technology Ltd.** www.sundance.com

Commetrex Adds Highly Optimized Version of G.729a/b to OpenEndpoint™

Developers of an endpoint gateway targeting the small to mid-size enterprise, which typically requires POTS-line interfaces, will benefit from Commetrex' latest upgrade of OpenEndpoint™. OpenEndpoint, an IP-endpoint licensed-technology suite, now includes a highly optimized implementation of the G.729a/b voice coder (vocoder) for the Texas Instruments TMS320C62x™ generation of DSPs. G.729a/b is the ITU recommendation for a vocoder that compresses 64-Kbps speech to 8-Kbps. Commetrex' G.729a/b requires only 10 MCPS for duplex operation on a TMS320C62x DSP. Commetrex has previously shipped OpenEndpoint with support for G.711, G.726, and G.723.1. The OpenEndpoint algorithms are available in C and C6000 assembly. They are also available in TI eXpressDSP' and MSP Consortium M.100 versions. A single low-cost 200-MHz TMS320C6000™ DSP provides, for example, 12 non-blocking channels running G.729a/b with OpenEndpoint's echo canceller. **Commetrex Corp.**, Roswell, Ga.; (770) 449-7775 ext. 420, www.commetrex.com

Samsung Electronics Selects Innovative Integration's Quixote DSP Card For Wireless Development

Korean electronics giant Samsung has chosen the Innovative Integration's Quixote DSP platform for advanced development of a 4th generation mobile system using their Orthogonal Frequency Division Multiplexing (OFDM) technology. Combining 105 MHz 14-bit dual analog I/O, the Texas Instruments TMS320C6416 DSP, a 6-million gate Virtex-II FPGA and high-speed digital ports, Quixote merges the best of analog & digital worlds with unprecedented levels of integration. Quixote is the perfect platform for Software Defined Radio, Signal Intelligence, Advanced RADAR, Electronic Warfare, and High-Speed Physics. Customers can avoid the expense and complexity of a multi-board implementation and move their design to a performance-oriented, single-board platform. The analog front-end features 105 MHz analog channels tightly coupled to the FPGA, ideal for wireless applications. The onboard FPGA may be programmed channel spreading/despreading, channel coding etc. The DSP handles systems functions, adaptive algorithms and communication with the host layer via PCI. The newly added IEEE 1386 PMC site allows

fast integration of peripheral mezzanine cards for additional I/O, while the dual 2.5 Gbps StarFabric ports provide flexible board-to-board on-chassis to chassis communication for the most advanced system architectures. With the power and flexibility of these resources on Quixote, developers have the ability to implement in software a wide variety of radios, communication testers and other high-speed applications to add new capabilities to their products. The Quixote Development Package includes baseboard, TI Code Composer Studio(TM) DSP debugger hardware and software and the Pismo board libraries. Single unit pricing starts under \$10,000. **Innovative Integration Inc.**, Simi Valley, Calif.; (805) 520-3300, www.innovative-dsp.com






The High Performance DSP Solution



HERON DSP Systems

HERON DSP Systems offer the ultimate in high performance DSP and FPGA hardware capabilities, for use in PCI, CompactPCI and embedded system real-time environments.

A modular and extensible hardware architecture allows developers to realize their ideas and address complex system requirements.

Powerful Texas Instruments TMS320C6000™ DSP Processors, high density Virtex® - II FPGAs from Xilinx, ultra-fast A/D, D/A and user-configurable Digital I/O Interfaces can be combined in single and multi-board systems to address application requirements bounded only by the imagination.

Download product datasheets and learn more at:
www.traquair.com/ads/edge/heron.html

Multiple C6000™ DSPs
TMS320C6201, C6203, C6701
Up to 9600MIPS/4GFLOPS per board

Multiple Virtex® - II FPGAs
Up to 32MGates per board

High Speed Interfaces
12, 14 and 16-bit Analog I/O
User Configurable Digital I/O

Extensible Configurations
PCI, CompactPCI, Embedded



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