

Waveform Generator Breaks Price Barrier

The Agilent 33220A is billed as the first 20-MHz function/arbitrary waveform generator under \$1,900 to combine variable-edge pulse and PWM functions with a 50-MSa/s, 14-bit, 64K-point arbitrary waveform capability. The generator plies direct digital synthesis to create stable, accurate, and clean output signals having low distortion. An optional external time-base reference supplies a 10-MHz clock signal to synchronize multiple units. The Agilent 33220A function/arbitrary waveform generator sells for \$1,850. The Opt-00 external time-base reference is \$450. **Agilent Technologies Inc.**, Test and Measurement Organization, Santa Clara, Calif.; (650) 752-5000, www.agilent.com

DSP Analysis Tool Kit Speeds DSP System Simulation

The Analysis Tool Kit for TMS320C5000 and TMC320C6000 DSP platforms simulates DSP designs up to 21 times faster than prior products. It offers developers full system-level modeling to help optimize code, as well as visibility

into hardware and software to catch and fix bugs early in the design cycle. The tool kit is a key component of the Code Composer Studio (CCStudio) Integrated Development Environment, and includes an on-chip cache-memory conflict analyzer, pipeline stall analyzer, code coverage analyzer, and multievent function profiler. The Analysis Tool Kit is available free of charge to registered users of CCStudio 2.2, which sells for \$3,595. **Texas Instruments Inc.**, Dallas, Texas; (800) 477-8924, www.ti.com



Modular DSP Board Works Alone or In Groups

The HERON HEPC9 PCI DSP carrier board can be used individually or in groups to form extremely powerful DSP systems based on TMS320C6000 DSP platforms, Virtex-II FPGAs, and high-bandwidth analog interfaces. The board accommodates a combination of up to four HERON DSP, FPGA, and I/O modules.

This modular approach pushes PCI per-slot performance to 9,600 MIPS or 4 GFLOPS. Alternatively, each slot can hold a 24-Mgate FPGA or 12- or 14-bit A-to-D and D-to-A converters capable of taking over 100 MSa/s. Multiple boards are connected by the HEART communication system, which paves a deterministic 400-MB/s data highway. The HERON HEPC9 carrier board sells for \$3,570. Optional interboard connectors cost \$1,870 and individual DSP, FPGA, and I/O modules start at about \$2,000 each. **Traquair Data Systems, Inc.**, Ithaca, N.Y.; (607) 266-6000, www.traquair.com

JTAG Emulator Reaches Back to Expand Coverage

The USB560 JTAG emulator now connects to XDS510-class drivers, extending its compatibility to legacy

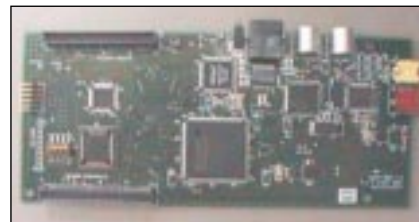


versions of Texas Instruments' DSP platforms and Code Composer Studio integrated development environment. In particular, the emulator now runs with CCStudio v1.x and Code Composer v4.1x for

legacy versions of the TMS320 DSP family. This capability adds to the USB560's existing support of the latest DSP technology, including CCS v2.0 and later, through a 480-Mps USB 2.0 interface. **Blackhawk**, Mount Laurel, N.J.; (877) 983-4514, www.blackhawk-dsp.com

Video Daughterboard Meets TMS320 DSP Family Standard

The model vDB high-performance, modular video daughterboard complies with v1.0 of Texas Instruments' TMS320 DSP family cross-platform daughterboard specification. The board works with the EVM6205 evaluation board and PCI



drivers to simplify the hardware and software development, using EVM/DSP Start Kits, of a wide range of advanced and low-cost video, graphics, and imaging products. The vDB video daughterboard is available with several options, including 10- and 100-Mbps Ethernet connectivity. Prices for the vDB start at \$1,395 each. **eInfochips, Ltd.**, Ahmedabad, India; +91-79-656-3705, www.einfochips.com

DSP Trio Shares 720-MHz Title

Three DSPs, each touting record-breaking 720-MHz clock rates, are designed to boost multichannel density, enhance multifunction flexibility, and raise data bandwidth for higher frame rates and resolution. The TMS320C6414,

TMS320C6415, and TMS320C6416 DSPs are all built using TI's advanced 130-nm copper process technology. Each chip includes 1 Mbyte of high-speed memory, as well as high-speed peripherals for real-time processing.

For example, the C6414 DSP has a 64-channel enhanced DMA controller and three multichannel buffered serial ports. The C6415 DSP features host-port and 32-bit, 33-MHz PCI interfaces and supports Utopia Level II ATM connectivity. As for the C6416 DSP, the most highly integrated of the trio, it includes Viterbi and turbo coprocessors to increase the channel capacity of 3G wireless base stations. **Texas Instruments**

Incorporated, Houston, Texas; (800) 477-8924, www.ti.com

32-Channel Data-Processing Card Harnesses TMS320C6711 DSP

Delfin, a high-performance DSP card for PCI-based data acquisition, playback, and coprocessing, features 32 simultaneous analog inputs and six analog outputs, each having 24-bit resolution and a 100-dB spectral-free dynamic range. The card, which is also available with fewer channels, is built around Texas Instruments' TMS320C6711 DSP for moving and processing data. The card comes with TI's Code Composer Studio integrated development environ-



ment, a Code Hammer JTAG emulator, and a Pismo toolset. Starting price for Delfin is \$7,490. In addition, a development package is available and sells for \$12,230. **Innovative Integration Inc.**, Simi Valley, Calif.; (805) 520-3300, www.innovative-dsp.com

CodeWarrior Kits for Symbian OS Showcase OMAP Platform

Two additions to the CodeWarrior family of wireless development kits

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for the Symbian OS take advantage of Texas Instruments' OMAP platform. The kits include development hardware and software tools that target products that use the Symbian OS with TI's Innovator Development Kit for the OMAP platform. The OEM version includes support for TI's XDS560 JTAG and target server, as well as an OMAP1510-processor Virtual Platform from Virtio Corp. The Professional version, for application developers, includes the TI Innovator kit and all peripherals needed for on-device debugging, via the Innovator kit's serial connection, Symbian applications. **Metrowerks Corp.**, Austin,

Texas; (512) 997-4700, www.metrowerks.com

Tiny Module Packs DSP, FPGA, and 400-Mbps Firewire Interface



The UC1394a-1, an ultracompact multichip module containing a Firewire interface and embedded DSP, is the first in a series of peripheral interface devices intended for camera, sensor, and embedded systems. Specifically, at only 30-by-36 mm, the PLCC surface-mount module

carries a 200-MHz Texas Instruments TMS320C5509 DSP; Xilinx 50-Kgate Spartan-II FPGA; 400-Mbps dual-port IEEE 1394a Firewire interface; and a variety of serial, analog, and configurable digital I/O resources. Application software can be developed on TI's Code Composer Studio integrated development environment. Prices for the UC1394a-1 are \$480 each for orders of 100 units or more; \$310 each for 1,000 units or more. Programmable UC1394a EVM development kits, featuring plug-and-play operation start at \$2,140. DCAM frame-grabber kits are also available. **Traquair Data Systems, Inc.**, Ithaca, N.Y.; (607) 266-6000, www.traquair.com

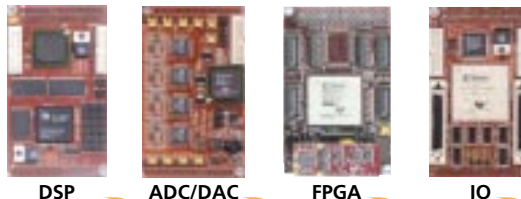
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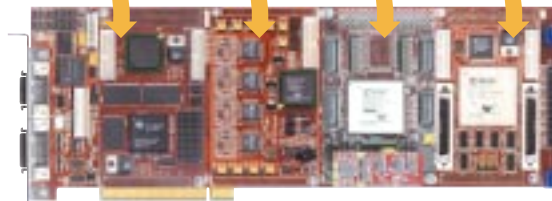
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