

Analog-I/O DSP Board Stars 16 Independent Channels

Toro, a PCI-based analog-I/O DSP board powered by a 150-MHz TMS320C6711 DSP, features 16 simultaneous, independent channels, plus 32 MB of one-wait-state SDRAM, and a wide choice of triggering modes. Each channel is dedicated 16-bit, 250-kHz A/D and D/A converters, allowing for simultaneous, nonmultiplexed sampling. A built-in real-time event log precisely records trigger times and user-defined events. Multiple Toro boards can share triggers for additional channel capacity. Toro sells for \$2,850. An 8-channel version costs \$1,850. **Innovative Integration, Inc.**, Simi Valley, Calif.; (805) 520-3300, www.innovative-dsp.com



Telecom Development Platform Pushes 2,400 MIPS

The TIGER 620x, a PCI-based development platform for TMS320C6202, C6203, and TMS320C6204 DSPs, allows processing throughputs of up to 2,400 MIPS and can run in a PC or as a stand-alone system. Suited for developing sophisticated telecom



systems, it carries a 32-bit PCI interface, 16 MB of SDRAM, and 4 MB of flash memory and accepts H.100 bus connections and XBUS and EMIF daughtercards. It also includes a stereo audio and phone interface. Prices start at \$3,350. **DSP Research, Inc.**, Sunnyvale, Calif.; (408) 773-1042, www.dspr.com

Telecom Software Suites Add eXpressDSP-Compliant Packages

A line echo canceller for the TMS320C54x generation and an adaptive multirate (AMR) encoder-decoder for the TMS320C55x generation are the first in a series of eXpressDSP-compliant additions to the HelloVoice, HelloWireless, and HelloWLAN software suites. For release later this year are both line and acoustic echo canceller, G.729, A+B encoder-decoder, GPRS PHY layer, and DTMF packages for the C55x DSP, as well as an 802.11x PHY layer for the C64x DSP. License fees range from \$75,000 to \$125,000 for the encoder-decoder and from \$50,000 to \$150,000 for the echo canceller. Royalties are negotiable. **HelloSoft, Inc.**, Campbell, Calif.; 408) 377-0110, www.hellosoft.com



Modem and Telephony Development Kits

The Modem Developers Kit and Client-side Telephony Developers Kit for the TMS320C54V90 and TMS320C54CST DSPs include an evaluation module with a 120-MHz DSP, 256 kB of RAM, DAA/line-interface circuitry, 1Mb-x-16 flash, six LEDs, and user-definable switches. Each also has variety of standard interfaces, as well as a JTAG header to connect the kit to an emulator or use it with Code Composer Studio. Power supply, cables, and documentation and software on a CD-ROM are included as well. Both kits, which run on Windows 95, 98, NT 4.0, and 2000, are distributed in the U.K. by Kane Computing. Each kit sells for \$495. **Spectrum Digital, Inc.**, Stafford, Texas; (281) 494-4500, www.spectrumdigital.com;

Kane Computing Ltd., Northwich, U.K.; +44-01606-351006, www.kanecomputing.com

Tone Detector-Generator Skirts Incompatibilities

A universal multifrequency tone detector and generator (UMTD/UMTG) for CPTD, DTMF, MF-R1, and MF-R2, as well as some fax and CID tones, is available for TMS320C54x DSPs. The software module complies with eXpressDSP Real-Time Software Technology, as well as the signaling standards of Europe, Asia, and the U.S., thereby overcoming the various incompatibilities. The detector portion also can serve as a simple spectrum analyzer. A worldwide nonexclusive object-code license costs \$7,999. **SPIRIT Corp.**, Moscow; +7 (095) 911-7654, www.spiritcorp.com



Protocol Stack Boasts eXpressDSP Compliance

A serial communications protocol algorithm, bf3Scp helps to design Windows user interfaces for DSP applications. The architecture is based on an ActiveX host protocol engine and an eXpressDSP-compliant target-side protocol engine algorithm. It's available for the TMS320C54x generation and TMS320C6000 DSP platform. A second package, bf3Net, is a TCP/IP protocol stack for the C54x that connects DSP algorithms to the Internet. Its modular architecture allows for customization; Code Composer Studio plug-ins speed configuration, code generation, and debugging. License fees are \$7,500 for bf3Scp and \$20,000 for bf3Net. **Windmill Innovations**, Nijkerk, The Netherlands; +31-33-246-5314, www.windmill-innovations.com

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