**Optical Media for HD Video**

Maxell announced the release of its new professional disc optical media for the Sony XDCAM HD tapeless video systems. The media uses a high-precision, polycarbonate plastic cartridge to protect it against a variety of elements, including dust, scratches, and fingerprints.

The hardware has a transfer rate of 72 Mbps with one optical head and a rate of 144 Mbps with two optical heads. It has a 23.3-Gbyte storage capacity and provides up to 122 minutes of recording and playback time in a high-definition format (the MPEG HD LP mode). It also provides up to 65 minutes in the MPEG HD HQ format, 45 minutes at 50 Mbps in the SD format (MPEG IMX), or up to 85 minutes in the SD DVCAM format.

For more information visit http://www.maxell.com.

**Prevents Monitor Smudges and Scratches**

The Screen Pointer is a simple tool created by the Feather Pointer Company designed to encourage communication and collaboration while preventing oily smudges, scratches, and damage to LCD flat-panel computer monitors. Rather than using a pen, pencil, or fingers, the Screen Pointer can serve as a lightweight tool to point at a monitor. It also safely removes dust from the monitor, static-free, and can attach to the side of the monitor when not in use.

The product is customizable, coming in a variety of styles and colors. For more information visit http://www.thefeatherpointer.com.

**Industry’s Smallest Converters**

The AD57xx converters are Analog Devices’ family of digital-to-analog converters (DACs). They’re reportedly the industry’s smallest and most flexible multichannel DACs (more than 40 percent smaller than comparable devices), integrating output amplifiers, references, and diagnostic features.

The converters are ideal for designers needing flexibility when specifying converters for high-voltage applications. There are 12 converters, ranging from 12- to 16-bit dual- and quad-channel devices operating over a wide voltage range on either single or dual power.

The DACs feature software-programmable unipolar and bipolar voltage output ranges that can be independently set per channel. This gives designers the option of eliminating a number of discrete components, such as precision resistors, switches, and external amplifiers.

The devices also incorporate a 30-MHz serial peripheral interface, power-on reset, and a per-channel power down mode.

For more information visit http://www.analog.com.
Optimizes Designs
Curtiss-Wright released Champ-FX2, reportedly its first field-programmable gate array (FPGA)-based VPX-REDI computing engine. The board combines Xilinx FPGA-based reconfigurable computing, power architecture processing, and high bandwidth from serial-switched fabrics provided by new VPX standards.

The hardware is designed for demanding, high-performance signal and image processing applications such as radar, sonar, and signal intelligence. The board’s heterogeneous FPGA and CPU design lets developers optimize their designs by hosting portions of their application on the processing resources best suited to their application.

The board also has the capability of connecting its three computation nodes and its on-board XMC mezzanine site with up to four Serial RapidIO connectors to the backplane. The board’s memory support includes double-data rate SDRAMs and quad-data rate SRAMs that complement the internode bandwidth by providing multiple, independent memory banks for each of the FPGAs.

Visit http://www.cwcembedded.com for more information.

Laptops for CAD and Gaming
CompAmerica’s Tiger Shark 9500 X2 series of laptops in computer-aided design (CAD), multimedia, and gaming editions feature a 20-inch glass view LCD screen with WSXGA+ resolution, the TL-56 AMD Turion 64 X2 Dual Core CPU, five universal serial bus 2.0 ports, Firewire, wireless 802.11b/g/a, Bluetooth, a DVR burner with dual layer recording quality, and a high-speed serial ATA hard-disk drive design supporting up to 160 Gbytes.

For gamers and multimedia applications, the 9500 X2 offers a dual scalable link interface Nvidia GeForce GO 7950 GT video card with 512 Mybtes of a double-data rate (DDR3) chip. In addition, for CAD/CAM users, the 9500 X2 optionally features a dual SLI Nvidia Quadro FX GO 2500M Open GL video card with 512 Mbytes of DDR3 each.

For more information visit http://www.compamerica.com.

Embedded Board with Power over Ethernet
The SBC4670 from Micro/sys targets remote terminals, protocol conversion, or data logging in low-power environments. The product reportedly matches the PX270 Micro/sys ARM processor with several onboard communication formats: power over Ethernet; a socket modem capable of GSM/GPRS, CDMA, or Bluetooth; and onboard GPS. The board’s multimedia capabilities include support for an 800 × 600 color flat-panel display, audio output, and debounced keypad input. The board also features 8 channels of 14-bit analog to digital with simultaneous reads, 8 channels of 14-bit digital to analog, and 24 channels of digital I/O.

For communication requirements, the SBC4670 features five serial ports. The 10/1000 Base-T Ethernet controller can include the option of power over Ethernet, which supplies the board with 15 watts of power through the Ethernet connector.

The board has 128 Mybtes of SDRAM and a 64-Mbyte resident flash array. It can boot Linux, Windows CE, and VXWorks from its onboard flash. The I/O expansion through the Compact Flash slot lets users implement additional storage and I/O devices such as Wi-Fi cards.

The basic Micro/sys SBC4670 costs $595. For more information visit http://www.embeddedsys.com.

Bundle for Mobile Digital Entertainment
Corel announced that Asustek Computer is bundling InterVideo WinDVD HD (a DVD playback software) with its new ASUS W1J series notebooks.

Fully compliant with the HD DVD specifications established by the DVD Forum, WinDVD HD delivers smooth motion playback with clear resolution and full-fidelity audio. Reportedly offering the benefits of the high-definition experience without the complexity, WinDVD HD provides high-speed multithreaded decoding technology for standard and advanced HD. With these capabilities, users can enjoy subtitle additions, multiple viewing angles, a variety of play modes, and direct Internet connectivity for content updates.

For more information visit http://www.corel.com.
Updated 3D Animation and Character Creation

Avid Technology announced that its Softimage subsidiary has released Softimage|XSI 6, the latest version of its 3D animation and character creation software. XSI 6 software offers features and solutions for working with 3D characters and motion capture data in a mixed-studio pipeline.

Advances include animation and data management for 3D scenes and an updated rendering core. The software offers integration with the Autodesk mental ray 3.5 rendering application and expanded support for integration with third-party renderers via an open rendering API.

Additional features include the crosswalk, offering extensive asset transfer to and from other 3D software; the motor, a streamlined way to transfer and move animation and motion capture data between arbitrary XSI rigs and other 3D software character rigs; and delta referencing, a production-level referencing solution that streamlines the process of working with and making changes to 3D models and scene setups.

For more information visit http://softimage.com.

Create Mobile Video Content

The V4x Sequencer lets users produce media for interactive Web and mobile channels. The solution’s programming tools repackage content for viewing on mobile devices.

The sequencer can be accessed locally or remotely with a Web browser. Users can repurpose media from standard editing and automation systems. Preset wizards and show templates simplify and accelerate production.

The V4x applies special overlay processes to render logos and graphics on the handset. Features include tagging content for Web 2.0, autostreaming in a variety of formats, and exporting for podcast. Formatting to meet the specific technical criteria of different delivery platforms is automatically performed in the background.

For more information visit http://www.v-4-x.com.

Engineering Calculation Tool Enhanced

PTC’s Mathcad 14.0 offers several enhancements aimed at improving the user’s ability to solve engineering calculation needs and to improve documentation of these calculations.

Unicode support enables a consistent worksheet display regardless of the operating system, locale, or language setting. Users can access or use region- and discipline-correct notations in any area of a Mathcad worksheet, including variable names and plot labels.

Mathcad is available in nine languages: English, German, French, Italian, Spanish, Japanese, Korean, and traditional and simplified Chinese. The upgrade reportedly offers better support for Asian characters, improving usability and streamlining the insertion of Japanese characters.

A worksheet comparison feature lets users visually compare two similar worksheets to identify added, changed, or removed regions. The enhanced worksheet search identifies search results in collapsed (hidden) regions of worksheets. Mathcad’s online resources provide hundreds of live worksheets and tutorials.

For more information and additional features visit http://www.ptc.com.

Scanner Software for SolidWorks Users

NextEngine debuted RapidWorks software with special features for SolidWorks users. The product offers a suite of tools that lets designers take raw points and turn them into idealized SolidWorks SLDPRT part files. The output is a fully parametric solid model with a true feature tree.

The RapidWorks solution is available to NextEngine 3D Scanner users for $2,495. For more information on RapidWorks visit http://www.nextengine.com or http://www.rapidform.com.