



**A** comprehensive roundup of a MacWorld Convention becomes increasingly difficult to write each year. The show is huge and the rate of Macintosh computer development is swift. I am increasingly overwhelmed trying to gain a thorough understanding of the products relevant to video production and graphics. When I arrived in Boston, with a bad cold and little sleep, I decided to relax and simply see what I could at the show. Join me for a casual walk down the aisles; you won't find every important product discussed here, but those covered represent a rapidly maturing set of video production tools (see also Craig Birkmaier's MacWorld wrap-up in this issue, "Tell a Computer"). Imagine you're a friend I bumped into at the show. We'll talk about the products that I liked.

Digital disk recording (DDR) with full-motion video serve as the engine driving the digital video revolution. The image quality varies with the type of compression and the data rate achieved, but even the less expensive systems were impressive. The Radius VideoVision Studio provided the best quality from a lower-cost system. It produces full-frame,

60-field-per-second video when using a hard drive array system. A demonstration showed the same material in a side-by-side playback with a 3/4-in. VTR. I'd guess that Radius digitized the video from a 3/4-in. source because the most objectionable artifact in the VideoVision playback was the characteristic U-matic chroma crawl. If Radius recorded live video to both the VideoVision and the 3/4-in. deck, the Radius system might well have produced the more pleasing image. The VideoVision Studio retails for \$4,500. Both RasterOps and SuperMac announced 60-field systems that are soon to ship.

The products of Avid Technology and Data Translations products represent the \$10,000-\$15,000 range. Avid announced a 60 field-per-second upgrade to their \$10,000 Media Suite Pro. The 60-field option adds nearly \$4,000 to the price and a new edit decision list option will cost another \$1,000. A consensus seems to have formed at both MacWorld and NAB that the Data Translation Media 100 produces the best image quality of these systems. Interestingly the Media 100 is the only system that can produce this level of image quality without using a disk accelerator or SCSI disk array. The ability to use

a single large hard disk measurably reduces the cost of a system using a Media 100. Can Data Translation deliver an editing software package as feature-rich as the Avid system? Avid understands intimately what editors want. At \$12,000 for the Media 100 there is no question that the competition will be heated.

HSC Software, along with a cool new version of Kai's Power Tools, demonstrated Live Picture, which many believe is the most significant development in image processing since the release of Photoshop. This amazing software uses algorithm-based storage and processing to manipulate image files at blistering speeds. In HSC's presentation huge image files were composited in a fraction of the time it would have taken using Photoshop. Photoshop may not even have allowed the operation to be completed with the RAM and disk limitations of the system used for the demonstration. Live Picture will reduce the enormous RAM requirements of high-resolution image processing systems. Users will welcome the savings on memory, particularly since Live Picture will sell for \$3,500.

Fractal Design Corp. describes its new X2 option to Painter 2.0 as

an "expert extension." Both Painter and X2 represent breakthrough products. A Painter owner installs X2 into the main application to gain an extended feature set designed for compositing. The extension allows users to store a set of bitmapped images, with alpha channels, in a portfolio where their thumbnails are displayed and they can be manipulated as objects. You can drag a "paint object" into position and compose it into a graphic with full antialiasing while maintaining it as a discrete object. Paint into it, paint behind it, scale, rotate or apply an effect to it, and it remains an object that can be repositioned at any time. X2 vastly improves the business of compositing for about a \$100 for Painter users. If you produce graphics on a Mac you should purchase Painter and X2.

ASDG (Advanced Systems Design Group) is now shipping Elastic Reality for the Mac. The company offers professional morphing and warping tools for the Silicon Graphics Inc. and Amiga platforms. It offers dynamic morphing between two segments of motion imagery, simple outlines to control morph shape, wireframe previews, batch processing, and several other professional features. Elastic Reality will provide healthy competition for Morph 2.0 from Gryphon. The new version of Morph has many of the same professional features.

Tree is an interesting software from Onyx Computing that renders realistic pictures of oaks, aspens, willows, and other trees. You may select the stage of growth, the season, and color and geometry of the



tree's structure and foliage. You can render PICT image files or output DXF files to render in your favorite 3D package.

PhotoFusion, an Adobe Photoshop Acquire module, brings Ultimatte bluescreen compositing to Mac image processing. Ultimatte's unequaled compositing technology allows the creation of a color difference mask for an object photographed against a blue, green, or red background. It uses the mask to suppress the background color and remove discoloration in the object caused by reflections. PhotoFusion's linear mask preserves transparent objects, soft edges, and fine detail in foreground scenes when

## Environmental Multiload Videocassettes

- All New Tape
- All Major Brands
- 3/4", Betacam
- Shelf Cases-Sleeves

**EXCELLENT SERVICE  
GREAT PRICES  
GREAT CAUSE**

**CoarcVideo™**

**800-888-4451**

P.O. Box 2, Route 217 • Mellenville, NY 12455

FAX (518) 672-4048

Also Available - Manufacture VHS,  
8 MM, Packaging and Fulfillment

CIRCLE 118 ON INFO CARD

## Introducing "OTTO". The First True Autosync Scan Converter.

When you need to convert your high-resolution images to broadcast quality video, you need it done right the first time, without adjustments and configuration "guesswork".

Meet "OTTO", the first true Autosync Scan Converter from the leaders in scan conversion technology.



**Folsom  
RESEARCH**



526 East Bidwell Street, Folsom, CA 95630  
Tel: 916.983.1500 ■ Fax: 916.983.7236

CIRCLE 138 ON INFO CARD

**HOLLYWOOD  
DIGITAL TAPS  
BTS D-1 VTRS**

Hollywood's newest all-digital post-production facility, Hollywood Digital, has selected two BTS DCR-500 D-1 digital VTRs as its primary recording systems for editing, storage, and tape transfers. The DCR-500, the newest generation of BTS D-1 digital component VTRs, is designed to provide optimum flexibility for high-end postproduction. The DCR-500 also works in analog component environments without external A/D or D/A converters, racks, or cabling.

"When we first conceived of this project, we set out to build a facility that would offer the state-of-the-art in services and talent," Bill Burnsed, Hollywood Digital President/CEO recalls. "The BTS VTRs were the 'hands down' winners in our choice of D-1 VTRs."

In addition to user-configurable operation menus, the DCR-500 features more input/output ports than any comparable D-1 VTR for access to 4:2:2 graphics systems, film-to-tape transfers, and 16:9 EDTV images. The VTRs include both composite and component monitor outputs and provide built-in control for up to four VTRs running in parallel for HDTV, matte reel, and machine-to-machine editing applications. For more information, circle number 51 on the Free Literature Card in this issue.



The BTS DCR-500 D-1 digital VTR.

significant these new technologies are. The main processor may provide only an incremental speed increase, albeit a welcome one, but what conclusion can we draw from a desktop machine offering input and output of video and CD-quality audio? A professional producer may not find the video to be that significant, but the multimedia media-user will.

The audio hardware in the AV machines, on the other hand, could easily prove useful to an audio or video producer. A user can now buy a powerful and easily configured multimedia personal computer for under \$3,000. These machines may represent a turning point in the integration of video production, multimedia, and personal computing.

This article deals with only a handful of the great products shown in Boston, and MacWorld focuses on only one of the important computer platforms. But when we view these tools and technologies together, they draw a picture of a future industry—a broader industry with more possibilities, more consumers, and more producers. □

composited against a background. Version 1.1 is now shipping and a more full-featured version 2.0 will follow next year.

The Debabelizer, from Equilibrium, provides image-processing tools and translation of picture files between a broad range of formats. This program is a problem solver for anyone producing videographics or multimedia on a Mac. It reads and writes picture and animation files from a dozen different computer platforms. This sophisticated application allows the use of Photo-shop plug-ins, but unlike other programs that use plug-ins, it also supports acquire modules. Debabelizer provides powerful scripting and batch processing that makes its capabilities extremely valuable to animators or anyone producing motion video effects. It can catalog,

slideshow, and composite images. It can compare two images and report on the differences between them. It performs more advanced palette manipulation than any program I've seen. The Super Palette function can take a group of 24-bit images and build an 8-bit palette that is ideal for that range of images and then map those images to the 8-bit palette. This feature would have saved dozens of man hours on a multimedia project my company produced last year. Although Equilibrium could certainly improve the interface, Debabelizer is a "must have" tool.

Finally, I'll briefly discuss the Quadra 840AV, examined more closely in the aforementioned Birmaier's "Tell a Computer," in this issue. By now you may know the specs of the new Mac "AV" machines, but you may still be asking how

For more information on the products mentioned in this article, circle corresponding reader service numbers on the Free Literature Card in this issue.

Adobe (PhotoFusion).....	40
Apple Computer ( AV Macs).....	41
ASDG ( Elastic Reality).....	42
Avid Technology (Media Composers).....	43
Data Translation ( Media 100).	44
Equilibrium ( Debabelizer).....	45
HSC Software/Kai's Power Tools (Live Pictures).....	46
Onyx Computing ( Tree).....	47
Radius ( VideoVision Studio)...	48