

RESEARCH ARTICLE | NOVEMBER 01 1992

Listings of the Latest Releases **FREE**



Comput. Phys. 6, 706–708 (1992)
<https://doi.org/10.1063/1.4823130>



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Listings of the Latest Releases

Comput. Phys. (September 1992)

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Computers in Physics selects new products for this section based on standards of relevance and significance to our readership. The manufacturers have supplied this information about their products, and Computers in Physics assumes no responsibility for its accuracy. For more details from the manufacturers, use the Reader Service Card, which is opposite the inside back cover.

Video Scan Converter

The RGB/Videolink 1500, the latest addition to a series of video scan converters, will convert the output from any workstation or imaging device to NTSC or PAL format for video transmission or videotaping.

The converter incorporates DSP technology for flicker reduction, full 24-bit color, and real-time operation. It will work with any system generating an interlaced or noninterlaced signal with a horizontal scan rate of 20–90 kHz, including workstations from Sun, HP, DEC, IBM, and Silicon Graphics.

The converter is priced at under \$10,000.

RGB Spectrum
Alameda, CA

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File Management Program

The Aldridge Company has announced the release of Version 4.0 of Tree86, a file management program/word processor. This new version offers support for drives of different sizes and number, and is Windows compatible.

New features include system management of up to 16,000 files and 2000 directories, the performance of operations across drives as if they were one unit, displays of files in specified branches of the tree, formatting of disks, and the configuration option for CD ROMs. Version 4.0 also has enhanced editing capabilities, with ALT/edit, a built-in ASCII editor. These capabilities include "wildcard" searches for text, editing in two windows, autoindent, and full support for block opera-

tions. The new version is faster and more user-friendly than the old one.

Tree86 and ALT/edit operate on IBM PC, XT, AT, P/S2, and compatibles with DOS Version 3.0 or higher. Suggested retail price is \$89.95.

The Aldridge Company
Houston, TX

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File Compatibility and Transfer

Mac-In-DOS 2.0 can now run under Windows 3.1 as well as Windows 3.0. The software gives DOS computers the ability to transfer files to and from Macintosh computers by means of a 1.44-Mbyte diskette. It also allows PC users to format Macintosh diskettes. Mac-In-DOS requires host software only and a small amount of disk space on the host computer.

Pacific Micro
Mountain View, CA

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Supercomputer

Intel Corporation has introduced its Paragon XP/S Supercomputer, a distributed-memory multicomputer based on the company's teraFLOPS architecture. The product allows for continuous technology insertion, and is compatible with the iPSC/860 family.

This computer can solve complex computational problems, and manage hundreds of simultaneous users in a supercomputer center environment.

Additional capabilities are a configuration of 5 to 300 Gflops, 2.8 to 160 kmips, node-to-node communications at 200 Mbytes/s (full duplex), an aggregate interconnect bandwidth to 12.8 Gbytes/s, a scalable main memory to 128 Gbytes, and a scalable internal disk storage to 1 Tbyte, accessible at an aggregate bandwidth of 6.4 Gbytes/s. The operating system is standard OSF/1 with multiple HiPPi, Ethernet, and

FDDI connections. The XP/S is programmable in Fortran-77, C, High Performance Fortran, and Ada.

Intel Corporation
Beaverton, OR

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Image Processing Software

SharpImage Software has introduced several products that allow its HIPS image-processing software to be used in X-windows. Some of the programs were written using only X11 calls, and hence will compile and run on any system with X libraries. The other tools were written for use with the XView toolkit.

Images may be displayed on either color or monochrome workstations. On color workstations, users have the ability to manipulate the colormap for color contrast and brightness adjustment, for linearization using a gamma curve, or for general pseudocolor of 8-bit images using a variety of halftoning methods. Users may display single still images or view animations of image sequences. With HIPS, images are self-documented: the program stores the history of the transformations applied on each image.

HIPS runs on most Unix systems, and has the ability to adapt to 98% of other image-display devices. The HIPS system, including libraries, source code, sample images, and online documentation, is available for \$2995. Discount arrangements are available for educational, nonprofit, and US government institutions.

SharpImage Software
New York, NY

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Laser Printers

Lexmark has introduced two high-resolution IBM laser printers which attach directly to Macintosh comput-

ers. Models 10A and 6A come as standard with Adobe PostScript, and offer users the same features and functions as previous models in the 4029 series, including 600x600 dpi resolution, edge smoothing and resolution enhancement, and connectivity with LocalTalk networks.

Also available now are models 10P and 6P for IBM computers and compatible systems. The "P" Series of printers can be operated in Novell Netware networks through the use of Intel's NetPort.

Prices of base models range from \$2295 to 3995.

Lexmark International, Inc.
Lexington, KY

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CD for Internet Information

SRI International has released a compact disc (CD) of technical information for Internet. The searchable TCP/IP CD contains online Requests For Comments and For Your Information documents released prior to February 7, 1992. Also included are all Internet Engineering Notes, GOSIP specifications, and other protocol, security, and miscellaneous information files, such as archives of Internet technical mailing lists, which discuss protocol implementation issues. A new addition to the CD is source code for the X window system.

The TCP/IP CD is compatible with Macintoshes, PCs, and Unix-based systems. It is in ISO-9960 (High Sierra) format, with ASCII files that are readable on other systems supporting ISO-9660 file systems. An executable version of the search program for IBM PCs and Sun SPARCstations is included, as is Unix/C source code for other systems. The TCP/IP CD is available for \$195.

SRI International
Menlo Park, CA

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Device Physics Simulator

SEMICAD DEVICE, from Dawn Technologies, provides 2D simulation of a range of semiconductor technolo-

gies. This software can simulate advanced silicon technologies, including MOS and BIPOLAR devices, as well as compound semiconductor technologies such as MESFET, HBT, HEMT, and optoelectronic devices. Users can also create their own physics models and material libraries for simulating a variety of semiconductor technologies.

With the help of the simulation control language SIM-C, SEMICAD DEVICE users can automate complex simulation analysis. Capabilities include arbitrary parametric analysis, design optimization, data extraction and analysis, interfacing, and graphics. In advanced physics, SEMICAD DEVICE can simulate the DC, AC, or transient electronic performance of an arbitrary 2D topology of semiconductors, conductors, insulators and terminals.

Three physics options can be added to the system: HETEROCOMP, which provides simulation of heterostructure devices, including abrupt heterojunctions and arbitrary spatial variation of semiconductor composition; PHOTORAD, which provides DC, AC, or transient analysis of free-carrier generation from optical beams and ionizing radiation; and TRAPS, which provides full dynamic simulation of multiple traps.

The FLEXVISION interactive data visualization tool is included free with SEMICAD DEVICE. This software is available on Unix workstations. Prices start at \$21,000. University discounts are available.

Dawn Technologies, Inc.
Sunnyvale, CA

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Printer Controller

XLI Corp. has announced the release of Laser Pix 4.0, an IBM PC/AT or compatible, high-resolution printer controller that produces high-definition text and pictures directly from HP LaserJet II and III and other popular laser printers. LaserPix 4.0 includes 35 PostScript matched fonts and will use Adobe, Bitstream, DTC, HP, Agfa, True Type, and other soft fonts. LaserPix outputs text at three selectable resolutions: 300 dpi, en-

hanced 600 dpi, and 1200 dpi. The 1200 dpi resolution allows the user to create camera-ready originals at the desktop. For pictures, LaserPix produces half-tone images with 256 grey levels at three operator-selectable resolutions that can be mixed with any text resolution.

All LaserPix packages come with a PC circuit board, printer interface card, interface cable, operating software, user manual, and sample image files. The price range for packages is \$1250-\$1950.

XLI Corporation
Woburn, MA

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Presentation Graphics

PC Publishing is offering Success, presentation graphics software for Lotus 1-2-3. Success can take data from a 1-2-3 worksheet, and create slides, overhead transparencies, speakers' notes, or handouts. The program combines DOS with a graphical interface, including pull-down menus, dialog boxes, and resizable windows.

Success allows users to preview windows or any operation at any time, so as to gauge the effects of formatting options before their implementation. Preview of imported files is also possible—Success supports Lotus 1-2-3 files with Impress/WYSIWYG enhancements, as well as graphics files in PCX, BMP, CGM, HPGL, GIF, and TIFF. Charts may be created using the program's outliner. A graphical slide sorter or "light table" displays up to 20 slides side by side.

Success for DOS requires Lotus 1-2-3 Release 2.x, with Impress 2, 2.L, or WYSIWYG (including release 2.4); IBM XT, AT, PS2, or compatible, with a hard disk and at least 640 Kbyte of RAM. The program is priced at \$159.95.

PC Publishing
Cambridge, MA

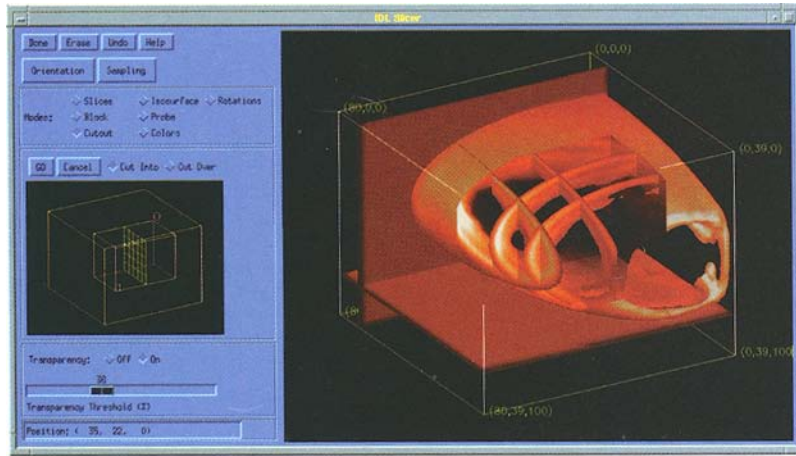
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Image Analysis Software

An upgrade for Media Cybernetics' Image-Pro Plus, which processes

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NEW PRODUCTS

24-bit color as well as grey scale or black-and-white images, is available. The program runs on any 386-based machine.

The program can filter, enhance, and manipulate images in RGB or HSI color model, and process either one or all channels. It can perform segmentation to triple the ability to separate objects from background using color information (also in both RGB or HSI color model). It can channel process by extracting, analyzing, and processing individual bands of a color image, then merging these with the original. Other features include multiframe capture, high-speed capture, improved TIFF file-handling capabilities, script-looping capability, and increased file-handling capability during scripting. Image-Pro Plus Version 2.0 is available for \$1995.

Media Cybernetics
Silver Spring, MD

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C-based Graphical Library

IMSL has introduced Exponent Graphics, a C-based graphical library that includes an interactive, graphical user interface (GUI) driven tool for manipulating generated results. Exponent Graphics allows the user to control plot attributes and customize the GUI. The customization capability provides an intuitive way to move data points, line segments and text nodes, and to change colors, fonts, markers, and other plot characteristics. The interface also includes interactive 3D rotation. The tree data structure allows users to customize graphics by controlling plot attributes.

Exponent Graphics for C, Version 1.1, is available for Sun SPARCstation, Hewlett Packard 9700, Silicon Graphics IRIS, Digital Equipment DECstation and IBM RISC System/6000 workstation. IMSL expects to add other supported platforms to the product in the future.

IMSL, Inc.
Sugar Land, TX

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