PRINTERS PIPELINE

## PowerPage\* Level 2 PostScript-Compatible Interpreter

- Supports Black and White, High Resolution, Single Bit Color, and Continuous-Tone Color Devices
- Innovative Color Features
- PowerBand Patented Rendering Technique to Reduce RAM Size Requirements
- PowerSmooth For More Gradual Transitions of Colors in 1-Bit Per Pixel Color Devices
- Grayscale Font Rasterizer For Rendering Adobe Type 1 Fonts
- Antialiasing of PostScript Text and Graphic Objects
- Error Diffusion Color Smoothing Module For Low-End Continuous-Tone Printer Engines
- 35 Adobe Type 1-Compatible Fonts Included With Interpreter
- All Standard Level 2 Features Supported
- PowerPage Level 2J, Optimized to Gain Access to Asian Markets, Supports Downloadable Kanji Fonts (Disk Resident) From Sources Such as NIS, Bitstream, and Adobe.
- PowerPage Level 2C Includes
   Operations Facilitating High Speed
   Printing of Complex CorelDRAW
   Images.
- PowerPage Printer Operating System (PPOS) Offers OEM's a Totally Integrated Printing Architecture Designed to Manage All Printer Functions, and Reduce Time to Market, Custom Engineering Requirements, and Cost.
- TrueType Support
- Custom Engineering
- Support for Proprietary Font Formats
- Source Code Available to the OEM

The PowerPage\* Level 2 interpreter is a fully compatible implementation of PostScript Level 2. The interpreter is designed to drive any printer, plotter, typesetter, film recorder, or display technology. All output options are supported, including frame, banding, and Pipeline's proprietary PowerBand\* rendering tech-

nology, as well as black and white and color on binary and continuous-tone marking engines. The PowerPage Level 2 interpreter offers OEM's total control over their hardware/ software design requirements due to its open architecture design and is totally written in the "C" Programming language to provide maximum flexibility and portability across platforms.

When driving high resolution or wide format devices, PowerPage offers OEM's two rendering options. The first option works much like Adobe's high resolution version of PostScript; instead of rendering the entire page into memory, the graphics on the page are stored as a display list and rendered into strips or bands. The second is Pipeline's proprietary PowerBand option. This rendering technique dramatically reduces RAM requirements and eliminates the need for a hard disk for high resolution or multi-color implementations making resolutions of over 5000 dots-per-inch supported.

## PowerBand\*

The traditional approach to banding reduces memory by producing a display list of all the graphics on the page and making multiple passes over the display list, rendering the page in strips or bands that are smaller than a full frame buffer. PowerBand renders directly on the frame buffer using proprietary compression and decompression techniques developed by Pipeline. A hardware ASIC version of the PowerBand system will be available in the fourth quarter of 1995.

## PowerSmooth\*

This is a proprietary color smoothing software option for color devices with less than 24-bit color depth. Utilizing this method eliminates the usual striping effect that occurs on most PostScript devices. The smoothing provided by PowerSmooth makes the transition from one color to another less noticeable by increasing the number of available colors in the output device.

## **Antialiasing Rasterizer**

Pipeline is the first developer to offer an antialiasing font rasterizer for Adobe Type 1 fonts with hints. PowerPage will antialias PostScript text, as well as graphic objects at the resolution of the output device and not by running at a higher resolution and then downsample the bitmap which is time consuming and produces unacceptable artifacts.

PROCESSORS SUPPORTED: i960® Processor Family

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