

SYSTEM D/L

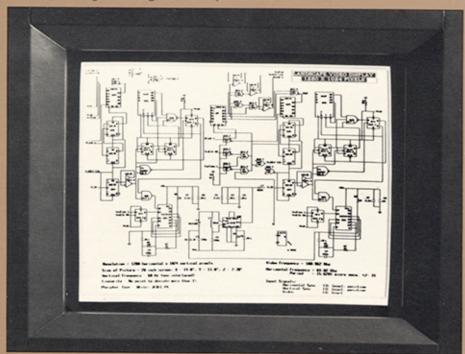
SYSTEM D/L enhances logic design productivity

SYSTEM D/L—The PERQ* Computer-Aided Engineering (CAE) System—is here. Developed by Three Rivers Computer Corporation, for its own use, SYSTEM D/L provides the integrated functions that logic designers, engineers, and managers need to design, debug and document digital and analog circuits, in a setting designers prefer. SYSTEM D/L offers unequalled graphics capability, standardized networking facilities and an approach to human/computer interaction that is refreshingly natural and efficient.

An integrated system

SYSTEM D/L simplifies and expedites the development of integrated and discrete circuits, eliminating the need for electronic bread boards by:

- □ Electronically capturing logic/schematic diagrams.
- ☐ Highly interactive editing of such diagrams.
- □ Automatically converting logic diagrams to wirelists.
- ☐ Integrating wirelists into a complete design.
- ☐ Checking for compliance with logic rules.
- ☐ Automatically generating bills of materials.
- □ Interfacing to several powerful logic simulators.
- □ Displaying simulated circuit waveforms.
- Analyzing circuit timing.
- ☐ Providing debugging facilities.
- □ Incorporating user augmentable parts libraries.



The complete system

SYSTEM D/L combines a comprehensive logic design software package with Three Rivers' PERQ, the definitive graphics workstation. Three Rivers developed SYSTEM D/L to support its own product design efforts. SYSTEM D/L actually helped design the very hardware it runs on, and continues to be used in the on-going development of the PERQ product line.

CAE as it was meant to be

SYSTEM D/L exploits the high performance features of the PERQ. It supports a CAE environment that maximizes the efficiency of hardware design teams with facilities like:

- □ Landscape Monitor—a large, high resolution screen with fast refresh rate, sized specifically for design work. Not just a horizontal orientation, PERQ's landscape screen increases the area AND resolution—almost 100 dots per inch.
- ☐ Powerful graphics processing hardware that allows rapid image manipulation.
- □ Ethernet[™]—the standard of networking that lets you communicate and share information and resources.
- □ Large main store capacity for quick access to information, plus sufficient disk capacity for permanent storage.

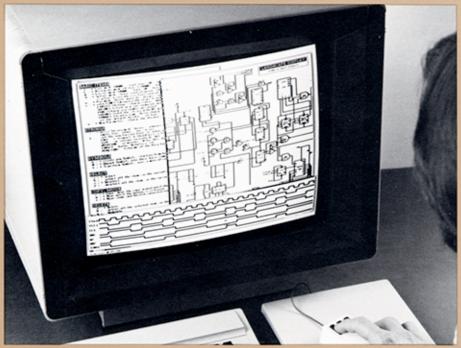
Who can benefit from SYSTEM D/L

SYSTEM D/L is an ideal package of integrated tools which help engineering, drafting, manufacturing and test personnel perform their jobs more efficiently. Appropriate applications include:

- ☐ Design of integrated circuits using gate arrays and standard cells.
- ☐ Design of discrete digital and analog circuits
- * PERQ is a trademark of Three Rivers Computer Corporation

Ethernet™ is a trademark of Xerox Corporation

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Visual computing at your fingertips

Responsive, friendly graphics facilities are the key to producing and altering a set of design documentation easily and efficiently. SYSTEM D/L's landscape screen (1280 x 1024 pixels) lets you work as you would normally-displaying entire designs in one piece, at one time. Using the PERQ tablet and puck instead of a pencil or just a keyboard, SYSTEM D/L lets you naturally interact with the computer. The tablet and puck provide you with all the design ease and comfort you'd normally associate with pencil and paper, coupled with the capability for uncompromised graphics quality you could not produce by hand. Hard copies of your documents can then be generated using Three Rivers' PLP-10 Laser Printer, a fast (10 pages/minute), high quality (240 dots/inch), plain paper graphics output subsystem.

Increases productivity

Increasing your productivity is what SYSTEM D/L is all about. It is comprised of software tools that improve the quality and reduce the time involved in traditional hardware design. SYSTEM D/L gives you:

Ease of drawing

SYSTEM D/L's powerful and responsive schematic editor enables you to create, modify and document designs in a natural, user-friendly environment. Working on the extra large landscape screen not only means that you can verify and edit your entire design in one piece, but you can also integrate pages of schematics into a complete, hierarchical design.

Ease of debugging

SYSTEM D/L has capabilities that can greatly reduce the tedious and expensive task of debugging. Its facilities include the Designer's Assistant—functions that eliminate the guess work

of the conventional approach to circuit design. It automatically verifies both the timing of the design (determining if there are any paths through the logic that are too long) and the mechanical accuracy (are there too many drivers for a bus, or inputs attached to a single output, etc.). The accuracy and efficiency of the computer free you to spend your time designing, not debugging.

SYSTEM D/L can also act as a hardware logic analyzer and show you how the simulated hardware will operate—before the prototype is even built. As an option, SYSTEM D/L interfaces with powerful, commercially mature logic simulators that run on mainframes. Linked by the Ethernet, the simulator enables testing of the circuit using inputs prepared with SYSTEM D/L. This allows you to do most of your debugging without building a costly prototype, which can be an even greater savings when designing integrated circuits.

Ease of communication
While SYSTEM D/L alone can
substantially reduce your time and
capital expenditures, taking advantage
of its Ethernet interface can provide
communication capabilities that cut
those expenditures even more.

A network of SYSTEM D/L workstations can assure that your designers, engineers, technicians, and documentors communicate effectively with each other, as well as with any variety of mainframes, printers, and other peripherals. Obviously, as the accessibility of your resources increases, so does the value.

One of many

SYSTEM D/L is a member of the growing family of application software packages developed for the PERQ graphics workstation. Please contact Three Rivers Computer for more information about this and other packages.

For further information contact

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