



Color Subsystem



Assessing your professional worktools is usually as challenging as any project you will undertake. Your goal is to fundamentally rethink what you do and how you do it so you can stay on top of your profession, maintain a competitive edge, or manage the most complex tasks. A color graphics workstation can boost your productivity by changing how you work. It can enlarge your capabilities in ways a monochrome or less powerful color system does not usually do. Data can be differentiated at a glance and small but important differences can be highlighted, all in the more realistic interface provided by PERQ.

The PERQ Color Subsystem, with its high resolution display, produces superb color graphics for computer-aided engineering and design, research, architecture, and appropriate business applications such as production or process monitoring. The Color Subsystem also enlarges the capabilities of the PERQ network of graphics workstations, providing color to those who need it while allowing others in a network to work at tasks more appropriate for monochrome displays.

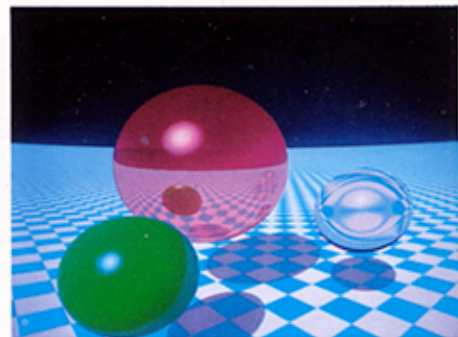
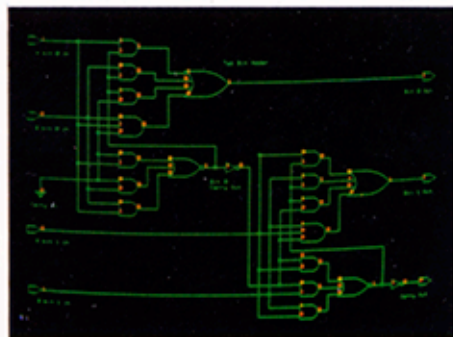
With PERQ's crisp graphics, designs can readily be moved anywhere across the screen. The PERQ Color Subsystem's microprogrammed, bit-sliced hardware is also equipped with special functions such as pan, zoom, and fill, which provide the user with significant

enhancements over less powerful color systems.

As an add-on option to either the PERQ 1 or PERQ 2 graphics workstation, the Color Subsystem consists of (1) a 19" landscape monitor, displaying 1024 x 768 pixels, which allows 256 colors to be displayed simultaneously from a palette of 16.7 million and (2) a color controller box which has a memory consisting of 4 or 8 planes, each with 1024 x 1024 bits refreshed at 33 Hz. A high level Pascal graphics routine package is available. Display electronics are on a single circuit board, eliminating multiple edge connectors for both high reliability and

serviceability. The color controller box also contains 1 Mbyte of RAM, the PERQ interface, power supply, and other associated hardware. In addition, the color system can analyze and diagnose itself, then disclose any faults via on-board LEDs.

Color graphics extend your range of capabilities by highlighting distinctions between the elements of your working vocabulary, be they plan, section and form in architecture, dynamic processes in geology, hierarchical architectures in electronics, atomic bonding in molecular biology, or any application that relies on modelling and the visualization of information by professionals.



Features

Custom bipolar bit-slice processor
Proprietary architecture dedicated to graphics instruction set
64 bit microcode wordlength to substantially increase throughput
220 nanosecond cycle time with 64k RAMs
19" high resolution color monitor
4 or 8 color planes, 1024 × 1024 bits
256 simultaneous colors from a palette of 16.7 million
1024 × 768 pixels displayed and refreshed at 33 Hz
Vectors, characters, filled polygons drawn at 1 pixel every 220 ns
Average vector drawing rate 1 million pixels/second;
flash fill 16 million pixels/second
Hardware pan and zoom
On-board LED diagnostics
Ethernet* Local Area Network (LAN) capabilities

*Trademark of Xerox Corporation

Options

PERQ Color Graphics (PCG) Software
Long persistence phosphor to minimize flicker
Digital dynamic convergence to easily converge the color monitor

General Specification

Color Controller

Dimensions	17" w × 5.25" h × 21" d
Weight	30 lbs
Power requirements	100, 120, 220, 240 VAC ±10% 47-63 Hz 200 Watts

Color Monitor

Dimensions	20.4" w × 17.6" h × 20.8" d
Weight	115 lbs
Power requirements	100, 120, 220, 240 VAC ±10%

PERQ Interface

Printed circuit board
Cable set

Necessary power cords, cables, and user manuals included

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