

Section 1 Indy (tm) Overview

Indy(tm) introduces a new concept in interactive 3D graphics computing while setting a new industry standard for the price/performance ratio of a RISC-based computer. More than simply a powerful workstation, Indy represents a new way of gathering and processing data from a variety of media. The Indy base configuration includes the IndyCam(tm) digital color video camera; an SGI Digital Video input; NTSC/PAL composite and S-Video inputs; ISDN network interface; CD-quality audio processing; and a plug-in microphone. Indy even allows you to access information from a Macintosh or PC with a floptical disk drive that reads and writes both those formats.

Indy also offers a new way of working with information through the Indigo Magic(tm) User Environment--- a revolutionary user interface that simplifies the UNIX operating system without sacrificing its power. The Indigo Magic(tm) User Environment lowers the learning curve and raises your productivity by giving you an iconic environment that you can organize any way you like. You can create multiple desktops containing all the applications, files, and tools you need to work on specific projects, or organize your desktops by functions; for example, creating one desktop for software development and another for computer aided design. The Indigo Magic(tm) User Environment also includes an extensive collection of media tools including Media Mail (you can send electronic mail with video and audio) and IRIS Showcase(tm) 3.0 which provides all the features you need to create interactive multi-media presentations.

As a member of the Indigo family of desktop workstations, Indy offers the same powerful, interactive 3D graphics that have made Silicon Graphics the industry leader in technical, scientific, and creative visual computing. As a full-featured UNIX computer, Indy offers network file access, virtual memory, multitasking, and all the UNIX standards that technical users demand.

With its innovative modular design, Indy allows an easy upgrade of CPU module, graphics board, and memory configuration. Three CPU modules are currently available: the R4600PC(tm) module, the R4600SC(tm) module and the R4400SC(tm) module. Indy offers a new generation of system architecture designed to take full advantage of these CPUs. The Indy system buses and main memory buses are 64 bits wide (plus parity) to take advantage of the 64-bit wide processor bus of the CPU which can transfer data at 267 MByte per second.

The R4600PC, R4600SC, and R4400SC CPU modules all provide primary data and instruction caches of 16 KByte each. In addition, the R4600SC and R4400SC provide a secondary unified cache of 512 KByte and 1 MByte respectively.

Indy can be configured with either 8-bit or 24-bit Indy Graphics or the more powerful 24-bit XZ Graphics.

Figure 1 illustrates the Indy system unit with an attached monitor, IndyCam video camera, microphone, keyboard, and three-button mouse. The system unit measures 3.0 inches high by 16 inches wide by 14 inches deep. Its shape and sturdy construction allow

it to be placed beneath a large monitor.

FIGURE 1 Indy with accompanying keyboard, mouse, monitor, microphone, and IndyCam digital color video camera.

The Indy system unit houses a power supply, a speaker, a bay for a hard disk drive, and a bay for an additional data storage device such as a floptical disk drive or a second hard disk drive. The top of the unit can be lifted off to access removable storage media, memory, printed circuit boards, CPU module, power supply, and two 32 bit-wide GIO32-bis expansion slots.

