

# IBM 6152 Academic System

## **Advanced Function Workstation with the Personal Touch**

The IBM 6152 Academic System (IBM 6152) offers the advantages of two machines in one—the power of an advanced function workstation and the ability to run the breadth of applications on the IBM Personal System/2. The IBM 6152 can bring the price and functional advantages of two machines in one to the academic user. The system is intended for faculty, student and laboratory use in a local area network configuration.

In RISC mode, the IBM 6152 uses IBM Academic Operating System 4.3 (IBM/4.3), a derivative of the University of California at Berkeley 4.3BSD operating system. IBM/4.3 offers the X Window System version 11 (X.11), TCP/IP communications support for either the IBM Token-Ring or Ethernet<sup>1</sup> protocols, an optimizing C compiler, a Pascal compiler, the IBM Andrew Toolkit, the IBM Andrew File System, and utilities. The IBM 6152 is upward compatible with the IBM RT PC.

Alternatively, the IBM 6152, as an option, can run the PC Disk Operating System or Operating System/2, making available a wide range of application programs.

The IBM 6152 is designed for a Local Area Network (LAN) environment with initial software installation of IBM/4.3 provided by an RT PC via the LAN.



**IBM 6152 Academic System**

The IBM logo, consisting of the letters "IBM" in a bold, sans-serif font with horizontal stripes through the letters.

# Entry Level UNIX Workstation with a Path to the IBM RT PC

## Size Your System to Meet Your Needs

The IBM 6152 is available in a variety of configurations to fit your needs, ranging from a 2MB memory, 20MB disk system to an 8MB memory, two 70MB disk storage system. The growth path continues upward to the powerful RT PC.

## Variety of Display Capabilities

A variety of display options is available with the IBM 6152. The 8514 16" Color Display offers an option to add 256 colors of bright, high definition graphics. In addition, the 8604 15" high resolution Monochrome Display, 8513 12" Color Display and 8503 12" Monochrome Display are available.

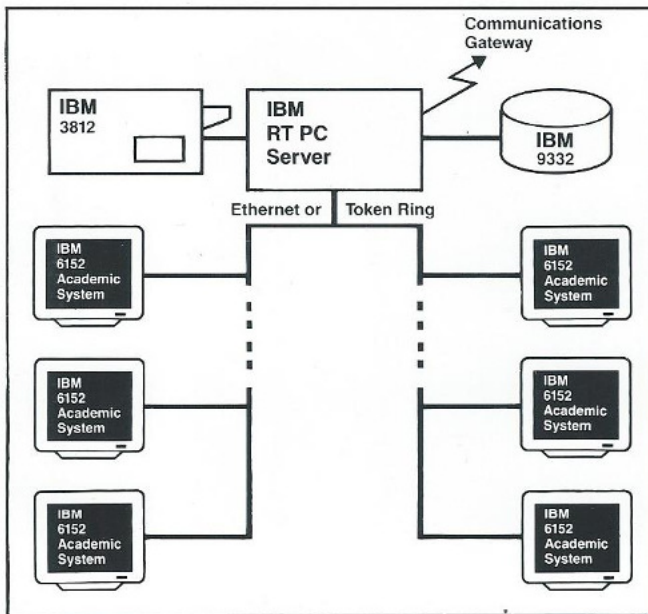
## Computing Power of Two Machines in One at Your Desk

The IBM 6152 comes with two processors:

- A Reduced Instruction Set (RISC) processor for running IBM/4.3 applications. The RISC processor is a 32-bit, high performance system. The RISC card includes up to 8MB of memory and an MC68881 Floating Point processor.
- A 10MHz, 80286 processor for handling IBM/4.3 I/O functions or for running PC DOS or Operating System/2 applications.

Standard features include a 1.44MB diskette drive, a hard disk drive, a built in Variable Graphics Array (VGA) port, a keyboard and mouse, a serial port, and a parallel port.

In addition, expansion slots are available for optional features. Options include IBM Token-Ring or Ethernet adapters and the IBM 8514/A graphics adapter.



Typical Academic Cluster



IBM 6152 with RT PC File Server

# Operating Systems

## **The best of both worlds**

With IBM/4.3, plus the option of alternatively running PC DOS or Operating System/2 on one system, IBM has provided a single platform with the ability to run the many programs available for the 4.3BSD and PS/2 environments.

## **IBM Academic Operating System 4.3**

IBM/4.3 is a multi-user, multi-tasking operating system derived from the 4.3 Berkeley Software Distribution. Pascal, Fortran and C programs are compatible with IBM/4.3 on the RT PC.

IBM/4.3 includes: the IBM Andrew Toolkit, IBM Andrew File System plus C compilers, X.11, floating point support, Remote Virtual Disk (RVD) and TCP/IP support.

A Pascal compiler is available.

## **IBM Andrew System designed for the Academic Community**

The IBM Andrew Toolkit consists of a variety of easy to use programs for software development and graphics display in an academic workstation environment. The IBM Andrew File System provides the capability for a shared file system in a distributed environment and operates by copying and saving standard UNIX files. Complete file copying and saving at the workstation dramatically reduces network traffic, while providing the user with locally running programs for consistent application performance.



*IBM 6152 running X.11*

## **Personal System/2 Operating Systems**

At any one time either of the Personal System/2 operating systems, PC DOS or Operating System/2, may be installed on the IBM 6152.

## **Distributed System Environment**

The IBM 6152 is designed to operate in a cluster environment on a LAN. Initial software installation is performed from an RT PC on the network. The RT PC can also serve as a network file server, print server and/or communication gateway.

## **Source Code**

IBM/4.3 includes source code.

## **Find Out for Yourself**

For additional information contact your local IBM representative.

# Specifications

## RISC MODE

<i>Operating System</i>	IBM Academic Operating System 4.3 for the IBM 6152 Academic System.
<i>Processor and Memory</i>	RISC 032 Advanced Processor. MC68881 Floating Point Processor.  2, 4, or 8MB of RISC RAM  Intel 80286, 10 MHz 1MB RAM, expandable to 7MB (depending on slot availability).
<i>Storage</i>	One 1.44MB 3.5 inch diskette drive.  Standard: One fixed disk Disk      Required Capacity Memory 20MB     2 or 4MB 44MB     4 or 8MB 70MB     4 or 8MB Optional: Additional 44MB or 70MB fixed disk.
<i>Displays</i>	8503 12" Monochrome 8513 12" Color 8604 15" Monochrome *8514 16" Color  *Requires 8514/A Graphics Adapter. (uses one expansion slot)
<i>Additional Standard Features</i>	Pointing Device Port and Mouse. Keyboard. Diskette Controller.  Video Graphics Array (VGA) and Display Port. Serial Port.
<i>Expansion Slots Available</i>	4 PS/2 slots
<i>Communications Adapters</i>	IBM Token-Ring or Ungermann-Bass NIC PS/2 Adapter for Ethernet.

## PS/2 MODE

<i>Operating System</i>	IBM DOS Version 3.3 or IBM Operating System/2 (must be separately ordered).
<i>Processor and Memory</i>	Intel 80286, 10 MHz 1MB RAM, expandable to 7MB (depending on slot availability)
<i>Other Specifications</i>	All IBM PS/2 Model 60 capabilities

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