



**Personal System/2**  
**Hardware Interface Technical Reference**  
**- Architectures**

**84F8933**

## **First Edition (October 1990)**

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## **Preface**

The Technical Reference library provides hardware and software interface information for IBM Personal System/2 products. The volumes in the library are:

*IBM Personal System/2 Hardware Interface Technical Reference – Architectures:*

This volume describes the architectures used with Personal System/2 products that are based on the Micro Channel architecture.

*IBM Personal System/2 Hardware Interface Technical Reference – Common Interfaces:*

This volume describes those devices and interfaces that are common to PS/2 systems. It includes the technical information describing devices, such as the serial port and parallel port controllers, and general information, such as the microprocessor instruction set and the characters associated with each keystroke.

*IBM Personal System/2 Hardware Interface Technical Reference – System-Specific Information:*

These technical references provides information concerning hardware implementation and performance information for specific models of PS/2 systems.

*IBM Personal System/2 and Personal Computer BIOS Interface Technical Reference:*

This volume provides BIOS and Advanced BIOS interface information.

**Option and Adapter Technical References:**

These technical references provide hardware and programming information about individual PS/2 options and adapters.

This volume is divided into the following:

“Micro Channel Architecture” describes the Micro Channel signals, timing, electrical characteristics, interrupts, and arbitration.

“Micro Channel Adapter Design” provides information such as adapter dimensions and design guidelines.

“Setup Architecture” describes adapter setup, system configuration utilities, and optional configuration procedures used with PS/2 systems.

**Suggested Reading:**

- *BASIC for the IBM Personal Computer*
- *IBM Disk Operating System (DOS)*
- *IBM Operating System/2*
- *Macro Assembler for the IBM Personal Computer*

**Warning:** In this technical reference, the term “reserved” is used to describe certain signals, bits, and registers. Use of reserved areas can cause compatibility problems, loss of data, or permanent damage to the hardware.

When modifying a register, the state of the reserved bits must be preserved. When possible, read the register first and change only the bits required.

**Note:** The vertical bars in the left margin indicate technical changes. The technical changes consist of additions or corrections to the previous information. Only the changes from the last release of that specific technical reference are indicated.