

ATASPI

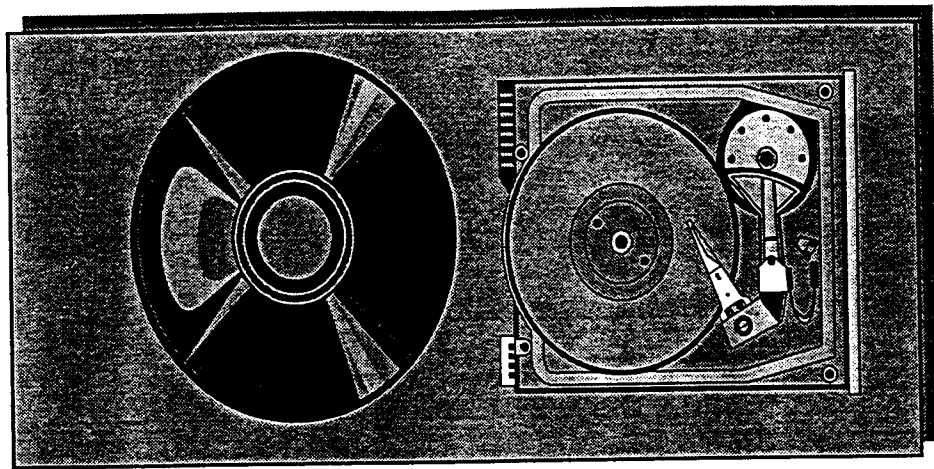
*The solution in I/O management for IDE,
Enhanced IDE
and ATAPI devices*



ATAPRES.PPT

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The eIDE Dilemma

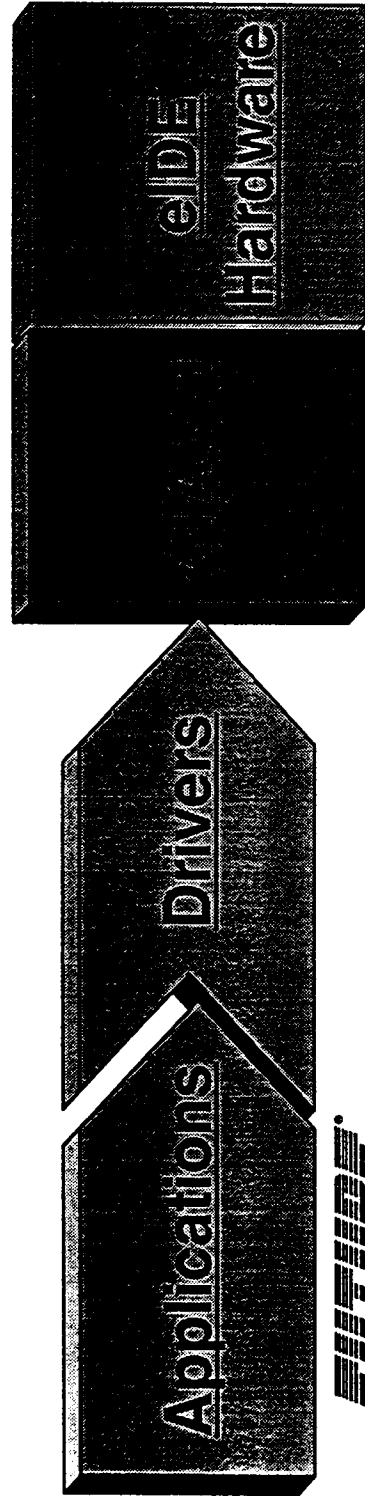


- ✓ Universal support for enhanced IDE disks, ATAPI CD-ROMs, ATAPI Tape and other ATAPI Devices
- ✓ Windows High Performance Multimedia I/O solution
- ✓ Eliminate I/O Conflicts
- ✓ Support for alternate IDE controller configurations, PCI bus resource assignments
- ✓ Common Software Programming Interface
- ✓ Easy port of SCSI applications to IDE Interface



The ATASPI Solution

- ✓ ASPI is the SCSI industry accepted I/O standard
- ✓ Large software base of ASPI applications
- ✓ ATASPI is based on the ASPI standard
- ✓ Ensures compatibility with eIDE controllers
- ✓ Simplifies porting SCSI software to IDE
- ✓ Only one module controlling IDE hardware



ATA SPI Manager Features

✓DOS Manager

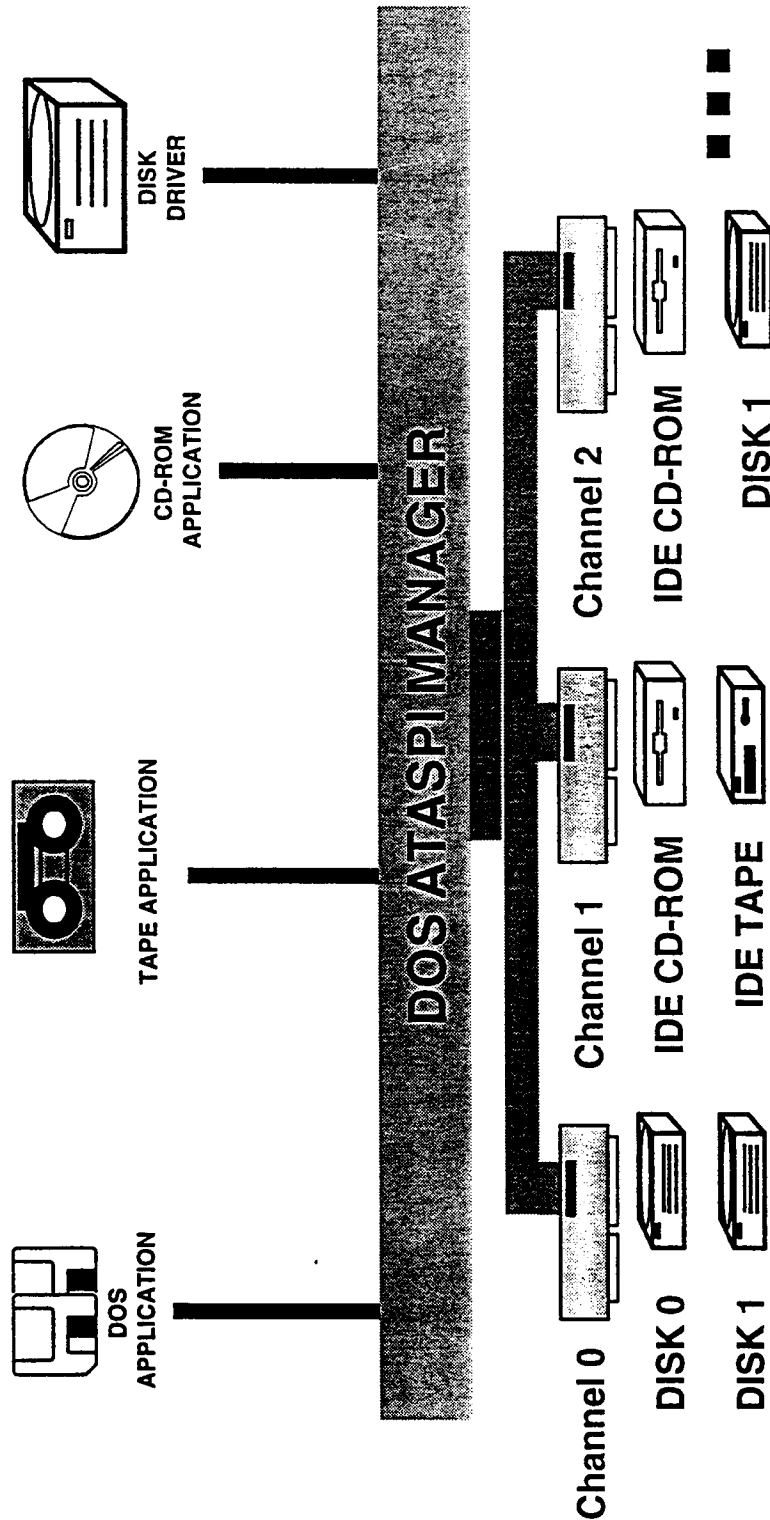
- ✓ 16-Bit Code
- ✓ ASPI Compatible Interface
- ✓ Request Queue Manager
- ✓ Posting(Callback) Notification
- ✓ IDE Controller Independent
- ✓ Support for Multiple Channels
- ✓ Easy Porting of Existing Applications
- ✓ Growth potential for ATA-3

✓Windows(DLL) Manager

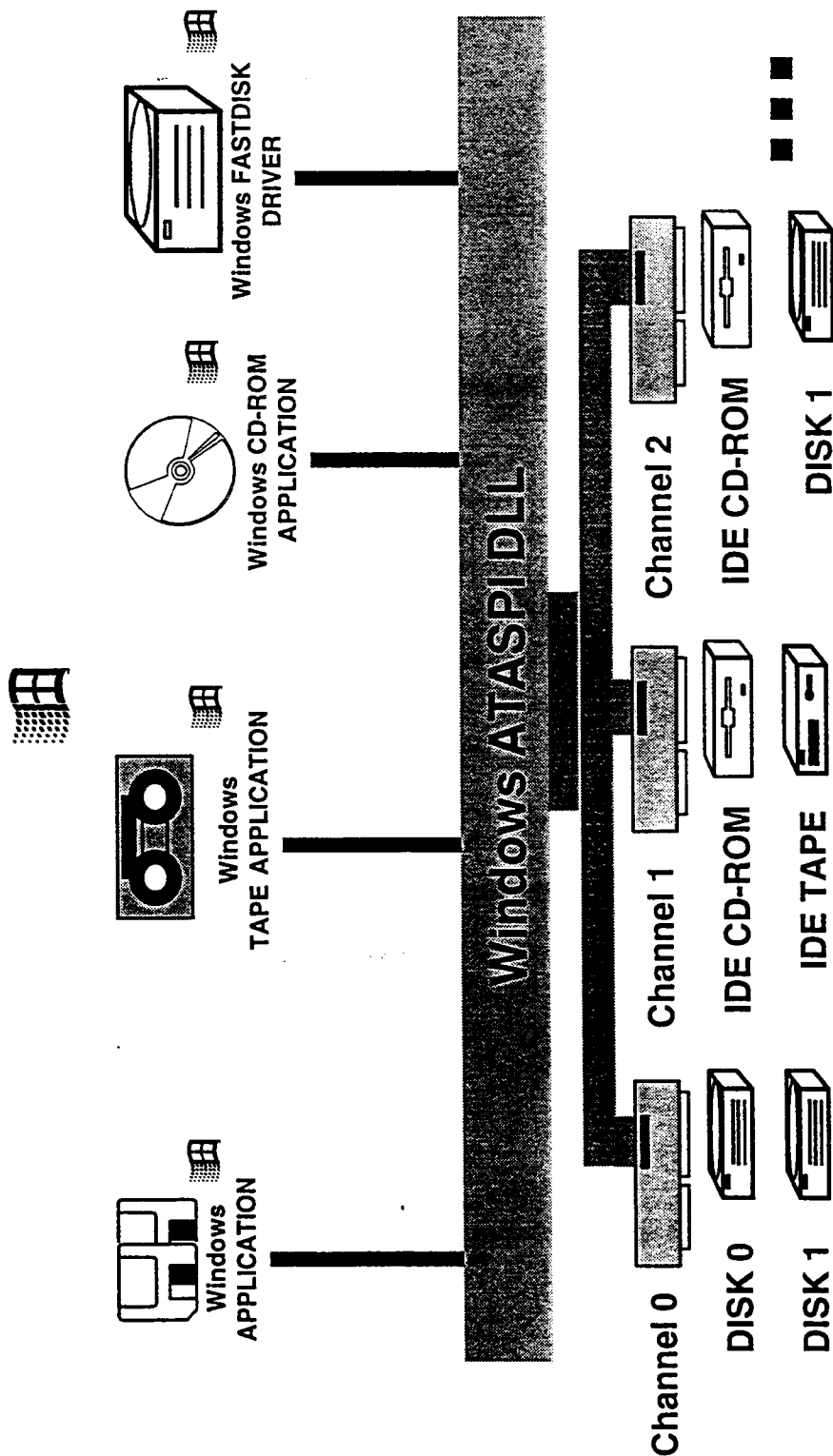
- ✓ 16-Bit Protected Mode DLL
- ✓ WINASPI Compatible Interface
- ✓ Request Queue Manager
- ✓ Posting(Callback) Notification
- ✓ IDE Controller Independent
- ✓ Support for Multiple Channels
- ✓ Easy Porting of Existing Applications
- ✓ Concurrent I/O on separate channels for existing systems
- ✓ Growth potential for ATA-3



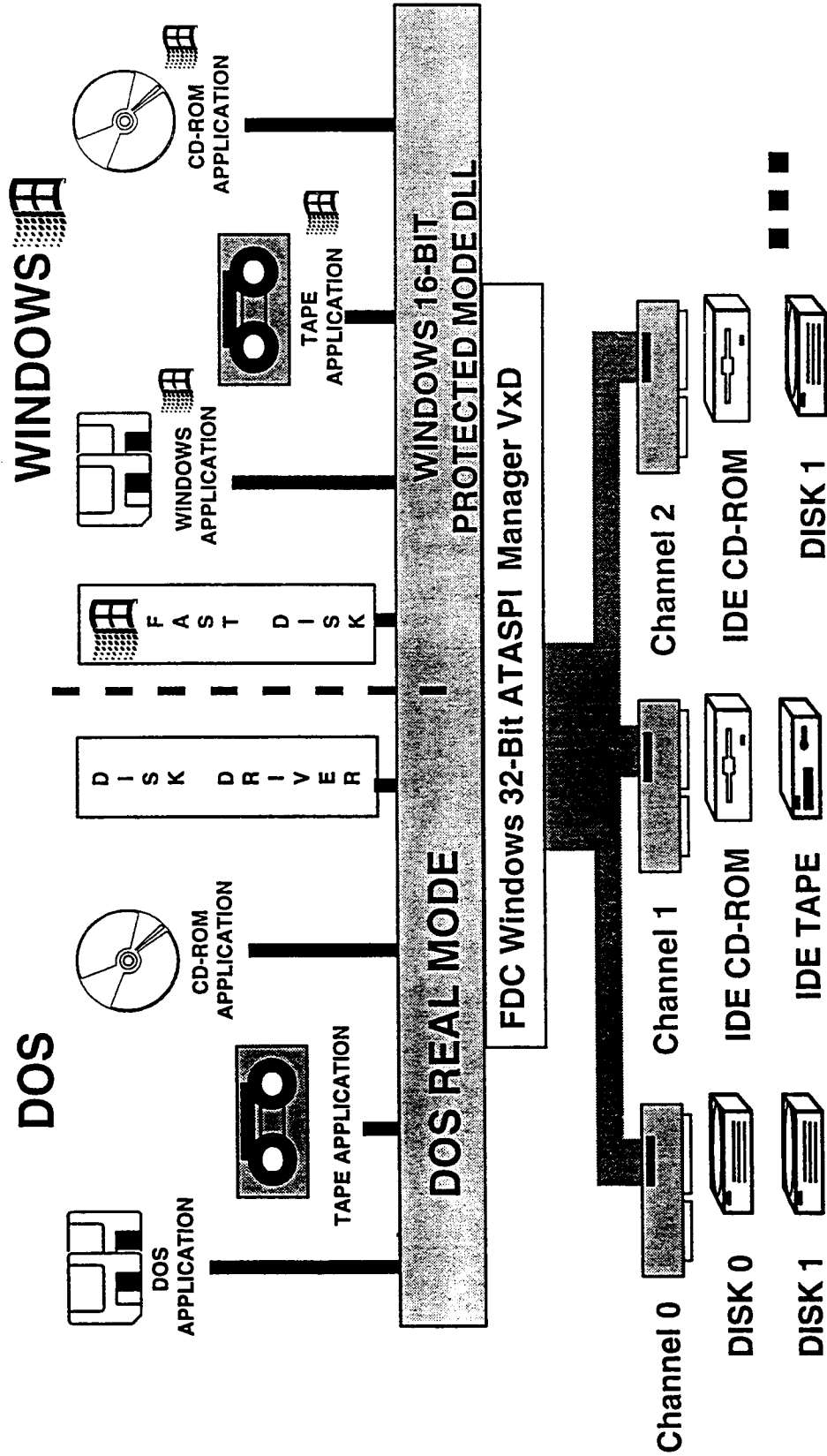
DOS ATASPI Manager Overview



Windows ATASPI DLL Overview



PowerIDE! Functional Overview



ATASPI Differs From ASPI

- ✓ ATASPI Command Packets
 - ✓ 12 Byte vs 6 or 10 Byte SCSI
- ✓ eIDE Task File or ATAPI Command Support
- ✓ Controls IDE Hardware not SCSI Controller
- ✓ No LUN Device Addressing Support
- ✓ No SCSI Request Block Support
- ✓ Command Link Not Supported



ATASPI Similar to ASPI

- ✓ Finding ATASPI
- ✓ Calling ATASPI
 - ✓ Command Block Structures
- ✓ ATASPI and ASPI Commands
 - ✓ Controller Inquiry
 - ✓ Get Device Type
 - ✓ Execute I/O
 - ✓ Abort Request
 - ✓ Reset Device
 - ✓ Set Controller Features
 - ✓ Get Disk Drive Information
- ✓ Status Values
- ✓ Posting(Callback) Feature



ATASPI Growth Potential

- ✓ ATASPI isolates the eIDE hardware
- ✓ Each manufacture can support their own features
- ✓ Overlapped I/O features already designed in
- ✓ Device independent
- ✓ API can be available in any OS

