ATASPI

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