

A Complete
Guide to
Adaptec Kit
and Software
Products



IOware® Products
Enabling Powerful
Applications

| | |
|--------------------------------------|----|
| IOWare Solutions from Adaptec | 1 |
| Adaptec Software Solutions | 2 |
| Basic Connections-SCSI | 4 |
| Basic Connections-EIDE | 6 |
| High-Performance Host Adapters | 8 |
| RAID Solutions | 12 |
| Portable Computing | 14 |
| Wireless Solutions | 16 |
| Macintosh Solutions | 18 |
| Adaptec Cable Kits | 19 |
| Glossary of Key Terms | 20 |



IOWare™ SOLUTIONS FROM ADAPTEC

Adaptec, an industry leader in input/output (I/O) technologies, develops and markets a comprehensive family of I/O technology solutions — collectively called IOWare products. Adaptec IOWare solutions combine both high-performance I/O hardware and intelligent software to optimize data flow between personal computers and peripherals, improving overall system performance.

Adaptec pioneered the I/O technology known as SCSI (Small Computer System Interface). Today, SCSI technology is more critical than ever to successfully implement a range of popular applications on personal computers.

The Adaptec family of SCSI host adapter kits — I/O choices for a wide variety of applications

With today's fast microprocessors, sophisticated software applications and wide range of peripherals, SCSI technology is key to alleviating I/O bottlenecks inherent to personal computers.

Increased performance. SCSI solutions eliminate the I/O bottlenecks that occur when files are transferred from peripherals to system processors.

Multitasking. SCSI can manage and prioritize multiple requests from peripherals, and direct traffic through the I/O bus, delivering true multitasking performance and increasing overall system throughput.

Easy connection to diverse peripherals. SCSI overcomes limits to the number of peripherals, the size of hard drives, and the number of available slots in a computer. A wide variety of up to seven peripherals can be connected in any combination to a single SCSI host adapter.

Adding peripherals with ease. With Adaptec® EZ-SCSI® software, adding peripherals takes only minutes.

Support for both internal and external peripherals. Only the SCSI interface allows for connection to external peripherals for maximum flexibility.

Adaptec's comprehensive family of SCSI host adapters are ideal for a wide range of applications from multitasking and multimedia, to image management and desktop publishing. Solutions range from simple connectivity products for single-user and small office desktops, to intelligent subsystem, high-performance SCSI and RAID products for enterprise-wide computing and networked environments.

Adaptec Software Solutions

Optimizing SCSI Peripherals

Adaptec IOWare products reflect the integration of high-performance I/O hardware and intelligent I/O software for a systems approach to optimize data flow between personal computers and peripherals.

The software component of Adaptec IOWare products meets the interface demands of diverse operating systems such as DOS, Windows®, UNIX, Windows 95, NetWare, OS/2 and Windows NT. This ensures performance, compatibility and connectivity - now and in the future.

Benefits of Adaptec software solutions include:

- Easy to use and install.
- Connectivity to most SCSI peripherals.
- Application software to optimize SCSI peripherals.

Adaptec EZ-SCSI Software

Adaptec simplifies SCSI with Adaptec EZ-SCSI 4.0 software. EZ-SCSI software is a user-friendly, Windows-based suite of 32-bit applications that allow easy connection and management of a full range of SCSI peripherals. EZ-SCSI software also includes a selection of SCSI tools that help maximize the power of your system, enhance your system's performance, and get more out of your SCSI peripherals. EZ-SCSI supports Windows 95 and Windows NT, with backward compatibility to Windows 3.1.

Adaptec EZ-SCSI software includes:

- Adaptec Backup™ - Point-and-click simplicity to select volume, directory or file for backup.
- CD Player - Easily play audio CDs with Windows access to the CD audio control panel.
- Photo CD Viewer - View and edit photographs stored on CD-ROM.
- CD Writer and Copier - Master and duplicate personal CDs
- SCSI Explorer - Includes Power Management, SCSI Interrogator™ and Read/Write Cache Utility, to optimize system configuration.

immediate viewing.

- *SCSITutor™* - On-line tutorial with answers to the most frequently asked questions about SCSI.
- Japanese, French, German, Spanish and Portuguese language versions soon available.

Adaptec EZ-SCSI Lite Software

A customized version of Adaptec EZ-SCSI software for Adaptec Altira™ line products. *EZ-SCSI Lite* is a user-friendly Windows-based application program that allows easy connection of SCSI peripherals in Windows. The software is menu driven and provides all that is necessary to install, configure and use a variety of SCSI peripherals.

SCSISelect® Optimization Utility

BIOS-resident configuration and optimization utility that eliminates the need to handle jumpers and termination resistors while installing the board or adding peripherals. The software also has a diagnostic test, SCSI disk formatter and a disk media verifications test. In addition, it reports the status of the host adapter BIOS, firmware and all attached SCSI devices.

Adaptec CI/O™ Software

A tool that remotely monitors and manages all SCSI devices connected to servers. Running on a Windows client, the software will support any size network from a single local server to a global network. Adaptec CI / O integrates with HP OpenView management tools.

Remus™ and Remus Lite

RAID Disk Array Software for the Macintosh O/S combines multiple hard drives into a disk array, providing greater speed for disk-intensive applications such as desktop publishing and digital video. The perfect software solution for keeping critical data safe from drive failures. Supports RAID levels 0, 1, 4 and 5 for full data protection. Lite version supports RAID level 0 and 1 only. Works with any combination of SCSI hard drives to improve performance and data integrity.

BASIC CONNECTIONS-SCSI

Adaptec provides basic connections that are innovative, economical and expandable. Designed for single-user, small-office environments with all the advantages of SCSI device connectivity, compatibility, and seamless installation, in one source.

Benefits of Adaptec SCSI host adapters for basic connections include:

Adaptec connectivity and compatibility at an affordable price.

PIO data transfer for optimal performance in the desktop environment.

Adaptec EZ-SCSI *Lite* or Adaptec EZ-SCSI software, the all-in-one solution for quick and easy management of SCSI peripherals.

Basic SCSI Host Adapter Kits:

OptalCD™ (AVA™ -1505 Kit)

Designed for easy connectivity to virtually any CD-ROM.

- 16-bit, ISA-to-SCSI-2 host adapter.
- Engineered to accommodate virtually all SCSI-2 CD-ROM drives.

OptalConnect™ (AVA-1515 Kit)

The affordable ISA connectivity solution for multiple peripherals.

- 16-bit, ISA-to-SCSI-2 host adapter with BIOS.
- On-board BIOS, supports boot capability directly from a SCSI hard disk drive.

OptalAdvantage™ VL (AVA-2825VL Kit)

Combines Fast SCSI-2 and EIDE on a single VL card for maximum connectivity in a single slot.

- 32-bit, VL-to-Fast SCSI-2 and VL-to-EIDE host adapter with floppy.
- Supports up to 12 internal and external peripherals (seven SCSI, two standard or EIDE, two standard floppy and one floppy tape drive).
- FLEXI-Driver® software to optimize EIDE hard disk drive performance.
- Includes SCSI*Select* configuration utility which eliminates the need to handle jumpers and termination resistors.

SCSI peripheral connections for PC desktops and file servers.

- 16-bit, ISA-to-Fast SCSI-2 host adapter.
- On-board BIOS, supports boot capability directly from a SCSI hard disk drive.

| Product Number | AVA-1505 Kit | AVA-1515 Kit | AVA-2825VL Kit | AHA-1522A Kit |
|---------------------------|---------------------|---------------------|--|---------------------------------|
| Product Name | TotalCD | TotalConnect | TotalAdvantage VL | SCSI Direction |
| Host Bus | ISA | ISA | VL | ISA |
| Host Bus Width | 16-bit | 16-bit | 32-bit | 16-bit |
| Device Support | 7 | 7 | 12 | 7 |
| Operating System Software | DOS/Windows only | DOS/Windows only | DOS/Windows only | DOS/Windows NT/OS/2/NetWare |
| SCSI Transfer Rate | up to 5 MB/sec | up to 5 MB/sec | SCSI-up to 10 MB/sec EIDE-up to 16.6 MB/sec | up to 10 MB/sec |
| Added Features | N/A | On-board BIOS | On-board BIOS SCSI & EIDE | On-board BIOS Floppy support |
| Included Software | EZ-SCSI <i>Lite</i> | EZ-SCSI <i>Lite</i> | EZ-SCSI <i>Lite</i> FLEXI-Driver | EZ-SCSI |
| External SCSI Connector* | DB 25-pin | DB 25-pin | 50-pin HD | 50-pin Centronics |

See Adaptec cable kit chart

Basic Connections - EIDE

Adaptec provides affordable basic connections for EIDE devices. The Future Domain® VALUEPAK™ line of Enhanced IDE host adapters has been specifically designed for the small-office, home-office environment.

Benefits of the VALUEPAK line of EIDE host adapters for basic connections include:

PIO data transfer for optimal performance in the desktop environment.

PowerIDE! software - a full-featured I/O Manager for EIDE hard disk and CD-ROM.

MCS CDMaster and Image Pals for robust Windows CD play and image management applications.

Basic EIDE Host Adapter Kits:

Enhanced IDE CD-ROM Kit (EIDE-CD Kit)

A convenient ISA connectivity solution for up to two EIDE CD-ROM drives.

- 16-bit, ISA-to-IDE host adapter.
- 32-bit disk and file access to run multiple applications faster on EIDE peripherals.
- Host adapter with audio pass-through and an MPC-2 audio cable.

Enhanced IDE-AT32 VALUEPAK™ (EIDE-AT32 VP Kit)

Additional connectivity with a dual-channel ISA card for up to four EIDE peripherals.

- 16-bit/32-bit ISA-to-EIDE dual-channel host adapter.
- Double word (32-bit) data transfers for accelerated data transfers of up to 46% faster than standard IDE.
- Includes support for hard disk and CD-ROM drives.
- On-board BIOS to boot from a secondary EIDE hard disk drive.
- Support for drives greater than 528 MBs.

Enhanced IDE-AT42 VALUEPAK™ (EIDE-AT42 VP Kit)

All of the features of the Enhanced IDE-AT32 VALUEPAK Kit with the addition of floppy support.

Enhanced IDE VALUEPAK (EIDE VALUEPAK)

High-performance upgrade kit - Connect up to four EIDE peripherals while upgrading serial and parallel ports.

- 32-bit, VL-to-EIDE host adapter.
- Enhanced Parallel Port (EPP and ECP) for printer data transfers of up to 2 MB/sec.
- On-board BIOS to boot from a secondary EIDE hard disk drive.
- 32-bit disk and file access to run multiple applications faster on EIDE peripherals.

| Product Number | EIDE CD-Kit | EIDE-AT32 VP Kit | EIDE-AT42 VP Kit | EIDE-VL VP Kit |
|--------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Product Name | Enhanced IDE CD-ROM | Enhanced IDE-AT32 VALUEPAK | Enhanced IDE-AT42 VALUEPAK | Enhanced IDE-VL VALUEPAK |
| Host Bus | ISA | ISA | ISA | VL |
| Host Bus Width | 16-bit | 16-bit/32-bit* | 16-bit/32-bit* | 32-bit |
| Device Support | 2 | 4 | 4 | 4 |
| Operating System Support | DOS/Win, Win 95/NT, OS/2, NetWare | DOS/Win, Win 95/NT, OS/2, NetWare | DOS/Win, Win 95/NT, OS/2, NetWare | DOS/Win, Win 95/NT, OS/2, NetWare |
| Added Features | | On-board BIOS | On-board BIOS Floppy support | On-board BIOS Floppy support |
| Included Software | PowerIDE! | PowerIDE! | PowerIDE! | PowerIDE! |

*double-word data transfers

High-Performance Host Adapters

For today's performance PC users who need fast processors, a lot of memory, large hard drives, and a multitasking OS, SCSI is the key to ensuring that I / O keeps pace with overall system performance.

Benefits of Adaptec SCSI host adapters in high-performance computing applications include:

Bus mastering data transfer methodology allowing the system to offload I/O processing to the host adapter, freeing the system's CPU and accelerating application access and information handling.

Enhanced performance in multitasking environments such as OS/2, Windows 95, Windows NT, NetWare, and UNIX by managing multiple requests from peripherals, increasing overall system throughput.

Easy system expansion for multitasking operating systems and large applications.

Adaptec EZ-SCSI software, the all-in-one solution for quick and easy management of SCSI peripherals.

Adaptec CI/O software allowing remote management of any network from a local server to a network of up to 100 servers.

High-Performance Host Adapter Kits:

CI SCSI Master™ (AHA-2940 Kit)

Combines PCI technology with Adaptec's PhaseEngine® RISC processor, for improved I/O performance.

- 32-bit, PCI-to-Fast SCSI-2 host adapter.
- Designed for use with PCI 2.0-compliant systems.
- Includes SCSI*select* configuration utility which eliminates the need to handle jumpers and termination resistors.
- Japanese, French and German language versions available.

Combine the power of PCI with Wide UltraSCSI for the maximum performance on your system - get twice the connection and four times the performance.

- 32-bit, PCI-to-Fast SCSI-2 host adapter.
- Provides backward compatibility to support any SCSI device from Wide UltraSCSI to legacy Fast, Fast and Wide, and non-wide Ultra devices.
- Provides connectivity for both 8-bit and 16-bit SCSI devices for maximum configuration flexibility.
- Supports up to 15 Wide SCSI devices simultaneously.
- SCSI transfer rate up to 40 MB/sec.
- **PCI Differential Adapter (AHA-2944W Kit)** available specifically for support of Wide differential SCSI devices up to 25 meters away from the host adapter.

PCI MultiChannel™ SCSI (AHA-3940 Kit)

Increases I/O performance in today's demanding servers by combining the power of two independent processors in a single SCSI card.

- 32 bit, PCI-to-Fast SCSI-2 host adapter.
- SCSI transfer rate up to 20 MB/sec (2x10MB/sec).
- Supports up to 14 Fast SCSI-2 devices, 7 devices per SCSI channel.
- Includes SCSI*Select* configuration utility which eliminates the need to handle jumpers and termination resistors.
- Includes Adaptec CI/O single-server software.

PCI MultiChannel Wide SCSI (AHA-3940W Kit)

This server solution supports Fast and Wide SCSI peripherals utilizing two independent SCSI channels in one PCI slot.

- 32-bit, PCI-to-Fast and Wide SCSI-2 host adapter.
- SCSI transfer rate of up to 40 MB/sec (2x20MB/sec).
- Supports up to 30 SCSI devices.

VL-BUS MASTER™ (AHA-2742AT Kit)

Combines the VL-bus with Adaptec's PhaseEngine RISC processor, for improved I/O performance.

- 32-bit, VL-to-Fast SCSI-2 host adapter.
- Includes SCSI*Select* configuration utility which eliminates the need to handle jumpers and termination resistors.

ISA SCSI Master® II (AHA-2742AT Kit)

Combines EISA bus with Adaptec's PhaseEngine RISC processor, for improved I/O performance.

- 32-bit, EISA-to-Fast SCSI-2 host adapter.
- Supports up to 14 Fast SCSI-2 devices on a single TwinChannel® host adapter.

ISA Wide SCSI™ (AHA-2742W Kit)

For higher levels of performance with EISA and Fast Wide SCSI drives, use EISA Wide SCSI with increased bandwidth on the SCSI bus.

- 32-bit, EISA-to-Fast Wide SCSI host adapter.
- Supports up to 15 Wide SCSI devices simultaneously.
- SCSI transfer rate up to 20 MB/sec.
- **EISA Differential Adapter (AHA-2744W Kit)** available specifically for support of Wide differential SCSI devices up to 25 meters away from the host adapter.

CSI Master™ (AHA-1542CP Kit)

The industry standard high-performance ISA solution with SCSI Plug-and-Play support. Features compatibility and ease of use.

- 16-bit, ISA-to-Fast SCSI-2 Plug and Play host adapter.
- Fully backward compatible with previous AHA-154X products.
- Sets the standard for SCSI compatibility with added support for Windows 95.
- Includes SCSI*Select* optimization utility which eliminates the need to handle jumpers and termination resistors.

CSI Channel™ (AHA-1640 Kit)

Features multitasking performance for Micro Channel environments.

- 16-bit, Micro Channel-to-SCSI-2 host adapter.
- Designed to work with IBMPS/2 models 50, 55SX, 50X, 60, 70, 80, 90 and 95.

| Product Number | AHA-2740 Kit | AHA-2740W Kit | AHA-2750 Kit | AHA-2740W Kit |
|----------------------------|--------------------------------|---------------------|--------------------|----------------------------|
| Product Name | PCI SCSI Master | PCI Ultra Wide SCSI | PCI MultiChannel | PCI MultiChannel Wide SCSI |
| Host Bus | PCI | PCI | PCI | PCI |
| Host Bus Width | 32-bit | 32-bit | 32-bit | 32-bit |
| Device Support | 7 | 15 | 14 (7 per channel) | 30 (15 per channel) |
| SCSI Transfer Rate | up to 10 MB/sec | up to 40 MB/sec | up to 20 MB/sec | up to 40 MB/sec |
| Localized Version* | Japanese, French, German | N/A | N/A | N/A |
| Floppy Support** | N/A | N/A | N/A | N/A |
| External SCSI Connector*** | 50-pin HD | 68-pin Wide | 50-pin HD | 68-pin Wide |

| Product Number | AHA-2842A Kit | AHA-2742AT Kit | AHA-2742W Kit | AHA-1542CP Kit | AHA-1640 Kit |
|----------------------------|-----------------|---------------------|-----------------|------------------------------|----------------|
| Product Name | VL SCSI Master | EISA SCSI Master II | EISA Wide SCSI | SCSI Master | SCSI Channel |
| Host Bus | VL | EISA | EISA | ISA | MCA |
| Host Bus Width | 32-bit | 32-bit | 32-bit | 16-bit | 16-bit |
| Device Support | 7 | 14 | 15 | 7 | 7 |
| SCSI Transfer Rate | up to 10 MB/sec | up to 10 MB/sec | up to 20 MB/sec | up to 10 MB/sec | up to 5 MB/sec |
| Localized Version* | Japanese | Japanese | N/A | Japanese French German | N/A |
| Floppy Support** | Yes | Yes | Yes | Yes | N/A |
| External SCSI Connector*** | 50-pin HD | 50-pin HD | 68-pin Wide | 50-pin HD | 50-pin HD |

* Japanese version kits run under DOS/V Japanese OS. Spanish and Portuguese localized versions available for AHA-1542CP Kit.

** PC specification does not allow for floppy support on the host adapter.

*** See Adaptec cable kit chart.

**** Requires PCI bridge support on the motherboard bios.

RAID SOLUTIONS

RAID (Redundant Array of Inexpensive Disks) system can protect data integrity and dramatically improve performance compared to standalone drives. Adaptec's low-cost, high-performance PCI RAID adapters for entry-level and midrange servers deliver real-time data recovery beyond tape backup for uninterrupted data access.

Benefits of Adaptec RAID adapters in fault tolerant computing include:

- ▶ Support for multiple RAID levels 5, 1, 0, 0/1 over four arrays to meet specific requirements
- ▶ Leading edge PCI-to-PCI bridge design allows RAID adapters to transfer data between the three SCSI channels, RAID coprocessor and host system memory at a burst rate of up to 133 MB/sec.
- ▶ On-board RISC-based RAID coprocessor offloads all RAID 5 parity calculations from host server CPU.
- ▶ Supports hot-swappable drives without interrupting data access.
- ▶ Supports on-line hot-spare drives with auto rebuild.
- ▶ Includes custom RAID software and Adaptec CI/O software for remote status and performance monitoring of disk arrays and non-disk peripherals.
- ▶ Unmatched scalability for additional performance and capacity.

RAID Adapter Kits:

PCI MultiChannel™ RAID (AHA-3985 Kit)

Utilizes innovative multi-processing RAID architecture to deliver high-performance data transfer with fault-tolerant disk storage.

- 32-bit, PCI-to-SCSI RAID adapter.
- Connects up to 21 SCSI devices over 3 RISC-based PCI-to-SCSI channels
- SCSI transfer rate up to 30 MB/sec.

PCI Wide MultiChannel RAID (AHA-3985W Kit)

Combines real-time data protection with the highest levels of scaleable performance and connectivity.

- 32-bit, PCI-to-SCSI RAID adapter.
- Connects up to 45 SCSI devices over 3 RISC-based PCI-to-SCSI channels
- SCSI transfer rate up to 60 MB/sec.

| Product Number | AHA-3985 Kit | AHA-3985W Kit |
|--------------------------|----------------------------|----------------------------|
| Product Name | PCI MultiChannel RAID | PCI Wide MultiChannel RAID |
| Host Bus | PCI | PCI |
| Host Bus Width | 32-bit | 32-bit |
| Device Support | 21 | 45 |
| Operating System Support | NetWare | NetWare |
| SCSI Transfer Rate | up to 30 MB/sec | up to 60 MB/sec |
| Included Software | Adaptec CI/O single-server | Adaptec CI/O single-server |
| External SCSI Connector* | 50-pin HD | 68-pin Wide |

*see Adaptec cable kit chart

Portable Computing

With SCSI connections, portable computer users now have access to the same sophisticated peripherals as desktop users. From sales presentations to remote access, from databases to diagnostic testing, portable solutions that include SCSI peripherals are indispensable. These portable host adapters are lightweight, yet rugged enough to survive in the challenging portable environment.

Benefits of Adaptec portable SCSI adapters in portable computing include:

- ▶ Quick connectivity to high-performance SCSI peripherals through PCMCIA slots, parallel ports, or infrared.
- ▶ File transportability between desktop and portable systems with simple SCSI connections to removable and optical storage devices.
- ▶ Increased storage capacity, as needed, for large files and applications.
- ▶ Adaptec EZ-SCSI software, the all-in-one solution for quick and easy management of SCSI peripherals.

Portable Adapter Kits:

SlimSCSI® (APA™ -1460 Kit)

APCMCIA solution that provides an instant high-performance connection to a wide range of powerful peripherals. Includes detachable 3-foot cable.

- 16-bit, PCMCIA-to-Fast SCSI-2 host adapter.
- Compatible with PCMCIA Type II, III and “Type IV” slots.
- Features data transfer rates of up to 10 MB/sec on the SCSI bus.
- Reliable, seven-peripheral daisy-chain with fully shielded, 32-wire cable.
- Low 0.3-watt standby power consumption for longer battery life.

Simple external plug-in connector, perfect for portable or desktop PCs without giving up use of the printer port. Convenient, integrated 3-foot cable.

- Parallel-to-SCSI adapter.
- Compatible with uni-directional and bi-directional ports.
- Features data transfer rates of up to 260 KB/sec.
- Simultaneous parallel port pass-through with no performance degradation.

MiniSCSI EPP (APA-358 Kit)

All of the features of MiniSCSI Plus with increased performance up to 1 MB/sec for computers that support Enhanced Parallel Port (EPP).

- Parallel-to-SCSI adapter.
- Compatible with uni-directional, bi-directional and EPP ports.
- Features data transfer rates of up to 1 MB/sec.

| Product Number | APA-1460 Kit | APA-348 Kit | APA-358 Kit |
|--------------------------|-----------------------|----------------------|----------------------|
| Product Name | SlimSCSI | MiniSCSI Plus | MiniSCSI EPP |
| Host Bus | PCMCIA | Parallel Port | Parallel Port |
| Host Bus Width | 16-bit | 8-bit | 8-bit |
| Device Support | 7 | 7 | 7 |
| Data Transfer Rate | 2 MB/sec | 260 KB/sec | 1 MB/sec |
| Included Software | EZ-SCSI | EZ-SCSI | EZ-SCSI |
| Operating System Support | DOS/Windows NT/OS/2** | DOS/Windows/ NT/OS/2 | DOS/Windows/ NT/OS/2 |
| External SCSI Connector* | 50-pin Centronics | 50-pin Centronics | 50-pin Centronics |

* See Adaptec cable kit chart

** Supports Windows NT 3.51 and OS/2 WARPNoly

Wireless Solutions

Infrared technology offers freedom to users who want to take advantage of powerful mobile computing devices by unchaining users from their desktops and network cables.

With Adaptec wireless solutions, portable PC users now have the convenience of cordless connectivity and mobility with the power of a desktop computer. These solutions provide simple, quick file synchronization, file transfer and printing with stand alone or networked systems without connecting any cables.

Benefits of Adaptec infrared solutions for wireless computing include:

- ▶ Easy to use; just point the notebook's infrared port at the infrared adapter, and click to transfer files.
 - ▶ IrDA-compliant for compatibility with virtually all infrared-enabled PCs.
 - ▶ Supports speeds of 9.6K up to 115K bps.
 - ▶ Includes TranXit™ file transfer and synchronization software for easy data exchange.
 - ▶ Connects to PC serial port for simple installation.
 - ▶ Custom lens and advanced power options increase operating range from 1 to 2 meters.
 - ▶ Enables wireless printing for greater flexibility.
- Provides an infrared connection to other IrDA-compliant infrared enabled devices (i.e. printers).

Infrared Adapter Kits:

AIRport 1000 (APA-9310 Kit)

Pocket-sized infrared adapter for notebook PCs

- Serial (COM) port-to-Infrared (wireless) port.
- Transfer data up to one meter between systems using power from the serial port.

AIRport 2000 (APA-9320 Kit)

External infrared adapter for desktop PCs, complete with file transfer and synchronization software, for easy, wireless file transfer with infrared-enabled, portable computers.

- Serial (COM) port-to-Infrared (wireless) port.
- Three power options for flexibility - serial port, AC adapter, or battery.
- Dual-position design for maximum convenience - straight or flat.
- Double the data transfer range to two meters by adding batteries or an AC adapter.

AIRport 2500 (APA-9320/9310 Kit)

All-in-one desktop and notebook infrared kit.

- All the features and benefits of AIRport 1000 and AIRport 2000 kits.

| FEATURES | AIRport 1000 | AIRport 2000 | AIRport 2500 |
|-----------------------------------|---------------|---------------------|----------------------|
| Infrared-enabled | Notebooks | Desktops | Notebooks & Desktops |
| IrDA-standard | Yes | Yes | Yes |
| 9.6K to 115.2K bps | Yes | Yes | Yes |
| Power options | Com Port only | Com, AC and Battery | Com, AC and Battery |
| 9 to 25-pin serial port converter | No | Yes | Yes |
| Included Software | TranXit | TranXit | TranXit |

MACINTOSH SOLUTIONS

Power Macintosh™ users can now take full advantage of the benefits of Fast and Wide SCSI-2 peripherals and RAID solutions with Adaptec's hardware and software created exclusively for the Power Macintosh with PCI.

Benefits of Adaptec hardware and software for the Power Macintosh include:

- ▶ Increased performance and storage capacity for publishing, prepress, digital video, multimedia, and other data- and graphics-intensive applications.
- ▶ Easy-to-use and install.
- ▶ Hardware and software solutions to optimize performance and flexibility.

Power Macintosh Kits:

PowerDomain™ 2940W (AHA-2940W MAC Kit)

A Fast and Wide PCI-to-SCSI accelerator for the Power Macintosh with PCI.

- Supports any combination of up to 15 SCSI-1, SCSI-2, or SCSI-3 devices.
- Independent negotiation of high-speed data transfers with each peripheral device.
- Bus mastering data transfer methodology allowing the system to offload I/O processing to the accelerator, freeing the system's CPU and accelerating application access and information handling.

Remus™ and Remus Lite (ASW-Remus and ASW-Remus Lite)

RAID Disk Array Software for the Macintosh O/S combines multiple hard drives into a disk array, providing greater speed for disk-intensive applications such as desktop publishing and digital video. The perfect software solution for keeping critical data safe from drive failures.

- Supports RAID levels 0, 1, 4 and 5 for full data protection.
- Works with any combination of SCSI hard drives
- Improves performance and data integrity.
- Lite version supports RAID level 0 and 1 only.

Adaptec Cable Kits

Adaptec adapters support different levels of SCSI including SCSI-1, SCSI-2, Fast SCSI-2, Wide and differential. Our optional cable kits offer numerous connectivity solutions with our adapters and a wide variety of peripherals.

| CABLE TYPE | ADAPTEC PART NUMBER |
|--|---------------------|
| EXTERNAL 50-Pin Centronics to Centronics SCSI Cable. (Low to Low or SCSI 1 style) 1 meter (approx. 3 ft) | ACK-L2L |
| EXTERNAL 50-Pin High Density to 50 Pin Centronics SCSI Cable. (SCSI 2 to SCSI 1 style) 1 meter (approx. 3 ft) | ACK-H2L |
| EXTERNAL 68-Pin High Density Wide SCSI Cable 1 meter (approx. 3 ft) | ACK-W2W-E |
| EXTERNAL 68-Pin High Density Wide to 50 Pin High Density SCSI Adapter ONLY - No Cable (male to female) | ACK-68P-50P-E |
| INTERNAL 68-Pin High Density Wide SCSI Cable 5 position (4 16 bit internal disk drives & 1 adapter) 1.8 meter (5 ft) | ACK-W2W-5I |
| INTERNAL 50-Pin SCSI Plug-and-Play Ribbon Cable for SCAM compliant drives ONLY with termination on the cable. 3 position (2 devices & 1 adapter) 1.0 meter (3 ft) | ACK-INT3-PNP |
| INTERNAL 50-Pin SCSI Ribbon Cable 5 positions (4 devices & 1 adapter) 1.8 meter (5 ft) | ACK-INT5 |
| EXTERNAL 50-Pin High Density to 50 Pin Centronics SCSI Adapter ONLY - No Cable (male to female) | ACK-GCH2L |
| EXTERNAL 50-Pin High Density SCSI Cable 1 meter (approx. 3 ft) FOR THE APA-1460 ONLY | ACK-1460H |

All cable and adapter kits are male-to-male unless otherwise stated

| ADAPTEC SCSI CONNECTORS | SCSI DEVICE CONNECTORS | | | | | | |
|----------------------------------|------------------------|------------------------|-----------------------|-----------------|-----------------------|------------|------------|
| | Ext-DB 25 | Ext-50-Pin Cent. | Ext-50-Pin HD | Ext-68-Pin Wide | Ext-68 Pin Wide/Diff. | Int 68-Pin | Int 50-Pin |
| Ext-DB 25 | * | * | * | N/A | N/A | N/A | * |
| Ext-50-Pin Cent. (APA-1460 only) | * | N/A | ACK-1460H | N/A | N/A | N/A | N/A |
| Ext-50-Pin Cent. | * | ACK-L2L | ACK-H2L/ ACK-GCH2L | N/A | N/A | N/A | * |
| Ext-50-Pin HD | * | ACK-H2L / ACK-GCH2L | * | N/A | N/A | N/A | * |
| Ext-68-Pin Wide | N/A | * | ACK-68P-50P-E | ACK-W2W-E | ACK-W2W-E | * | * |
| Ext-68-Pin Wide Differential | N/A | N/A | N/A | N/A | ACK-W2W-E | N/A | N/A |
| Int-50-Pin | * | * | * | N/A | N/A | N/A | ACK-INT5 |
| Int-68-Pin Wide | N/A | * | * | * | N/A | ACK-W2W-5I | * |
| Int 68-Pin Wide Differential | N/A | N/A | N/A | * | * | ACK-W2W-5I | N/A |

*Call Adaptec for third party solutions

Glossary of Key Terms

Bus Mastering: Direct Memory Access (DMA) is a high performance method of data transfer in which the host adapter's on-board processor handles the transfer of data directly to and from the computer's memory with very little intervention from the CPU. This is the fastest method for data transfer available for multitasking environments. Bus Master DMA transfers leave the CPU free to continue working while the data transfers are taking place in the background.

EIDE: An umbrella term used to describe all of the emerging specifications, features and technologies that stem from the original IDE interface.

EISA (Extended Industry Standard Architecture Bus): A computer bus standard compatible with ISA; a 32-bit data path. Up to 33 MB/sec data transfer rate.

Fast SCSI-2: Provides for performance and compatibility enhancements to SCSI-1, including a 16- or 32-bit data path. Also referred to as SCSI-2 or Fast SCSI, Fast SCSI-2 can increase SCSI's original synchronous data transfer speed up to 10 MB/sec.

I/O (Input/Output): Refers to an operation, program, or device whose purpose is to enter data into or to extract data from a computer.

IRDA (Infrared Data Association): An association for development of standards for interoperability of infrared technology for use in computers.

ISA (Industry Standard Architecture) Bus: IBM PC and compatible bus architecture with a 16-bit data path, up to 3 MB/sec data transfer rate with PIO and up to 10 MB/sec data transfer rate with bus mastering (DMA).

MCA (Micro Channel Architecture) Bus: IBM PS/2 (models 50-95) and compatible computers. Can be driven by multiple independent bus master processors. Up to 8 MB/sec data transfer rate.

Multichannel: A configuration where multiple SCSI channels on a single host adapter operate simultaneously in a single computer system. Useful to increase the performance and fault tolerance of a system.

PCI (Peripheral Component Interconnect) Local Bus: Bus developed by Intel for attaching high speed peripheral devices to a computer system. 133 MB/sec data transfer rate.

PCMCIA (Personal Computer Memory Card International Association): Standard developed by an association for credit-card sized memory and I/O cards for portable computers.

PIO (Programmed Input/Output): A method of data transfer in which the host microprocessor transfers data to and from memory via the computer's I/O ports. PIO enables very fast data transfer rates, especially in single-tasking operating systems like DOS/Windows.

Plug and Play: A hardware and software mechanism that provides an automatic way for the system to self-configure and optimally allocate system resources such as memory, I/O ports, IRQ, and DMA channels between Plug-and-Play cards and other devices in the system.

RAID (Redundant Array of Inexpensive Disks): The architecture which determines how redundancy is achieved and how data is distributed across the disk drives in a disk array.

SCSI (Small Computer System Interface): A standard, intelligent, fast and multitasking I/O bus for connecting PCs and peripheral devices.

UltraWide: Provides performance up to 40 MB/sec, based on a 16-bit data bus.

VL-Bus (VESALocal Bus): A specification for a local-bus developed by the VESA (Video Electronics Standards Association) local bus committee. Up to 40 MB/sec data transfer rate.

Wide SCSI: Provides performance up to 20 MB/sec, based on a 16-bit data bus. Also known as SCSI-3.

Copyright © 1993, 1994, 1995 Adaptec, Inc. All rights reserved.

Adaptec, the Adaptec logo, IOWare, the IOWare logo, Adaptec EZ-SCSI, SCSI Backup SCSI*Tutor*, Altra, SCSI*Select*, Adaptec CI/O, TotalCD, AVA, TotalConnect, TotalAdvantage, FLEXI-Driver, SCSI Direction, AHA, PCI SCSI Master, PCI Wide SCSI, PhaseEngine, P C I Ultra Wide SCSI M a s t e r, MultiChannel, EISA SCSI Master, TwinChannel, EISA Wide SCSI, SCSI Master, SCSI Channel, SlimSCSI, A P A, MiniSCSI, AIRport, and PowerDomain are trademarks of Adaptec, Inc., which may be registered in some jurisdictions. Future Domain, PowerIDE, VALU E PAK and Enhanced IDE-VLVA L U E P A K are trademarks of Future Domain, an Adaptec Company which may be registered in some jurisdictions. Windows is a trademark of M i c r o s o f t Corporation used under license. Photo CD is a trademark of Kodak Corporation used under license. PowerMacintosh is a trademark of Apple Computer, Inc. used under license. All other trademarks used are owned by their respective owners.

Information supplied by Adaptec, Inc. is believed to be accurate and reliable, at the time of printing, but Adaptec, Inc. assumes no responsibility for any errors that may appear in this document. Adaptec, Inc. reserves the right, without notice, to make changes in product design or specifications.

ORTH AMERICA

erature Hotline

)-934-2766 (U.S.A. and Canada only)
) 732-3829

eractive Fax

) 957-7150

ftware Upgrades and Ordering

)-442-SCSI (U.S.A. and Canada only)
) 957-7274

chnical Support and Sales Hotline

)-959-SCSI (U.S.A. and Canada only)
) 945-2550

chnical Support Fax Hotline

) 945-6776

JAPTEC USABULLETIN BOARD (BBS):

) 945-7727 (up to 28,800 bps, using 8 bits,
top bit, no parity)

gium (32) 2-352-3454 **Germany** (49) 89-45640618

nce (33) 1-3060-9539 **UK** (44) 252-811956

orld-Wide Web: <http://www.adaptec.com>

ternet ftp server: <ftp.adaptec.com>

mpuserve Worldwide: Go Adaptec

icrosoft Network: Go Adaptec

pan Nifty SERVE Adaptec Forum: FADAPTEC

uthorized Adaptec Distributor

EUROPE

Belgium

Dreve Richelle 161
Bldg A., 2nd Floor
Waterloo Office Park
B-1410 Waterloo-Belgium
Office: (32) 2-352-3411
FAX: (32) 2-352-3400

ASIA

Japan

Kioicho Hills, 4F
3-32 Kioicho
Chiyoda-ku, Tokyo, 102 Japan
Office: (81) 3-5276-9882
Fax: (81) 3-5276-9884

Singapore

Block 1002 Jalan Bukit Merah
#06-07
Singapore 159456
Office: (65) 278-7300
Fax: (65) 273-0163

ADDITIONALSALES OFFICES

France

Office: (33) 1-3452-3434
FAX: (33) 1-3452-3432

United Kingdom

Office: (44) 252-811200
FAX: (44) 252-811212

Germany

Office: (49) 89-4564060
FAX: (49) 89-45640615

Latin America (Miami)

Office: (305) 789-6696
FAX: (305) 372-0189

The Adaptec logo features a stylized 'A' inside a square, followed by the word 'adaptec' in a bold, lowercase, sans-serif font.

Adaptec, Inc.
691 South Milpitas Boulevard
Milpitas, CA95035