

WHITE PAPER

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Operating System Support for Compaq Portable Platforms

The purpose of this White Paper is to present operating system features supported on Compaq portable computers. Compaq supports Microsoft DOS 6.2x, Windows 3.1x, Windows for Workgroups 3.1x, Windows 95, Windows 98, Windows NT 4.0, and IBM OS/2 Warp. In addition to features inherently supported in the operating system itself, Compaq also provides software to enhance the user experience and usability of the mobile PC. Specific Compaq software deliverables are reviewed here as well as information about the various ways customers can obtain these components.

Features supported through Compaq software include:

- *Software to manage and extend battery life*
- *Software to enhance the ease of use and configuration of PC Cards*
- *Intelligent Manageability software to provide Asset Control, Fault Prediction, and Security*
- *Multibay support to enable warm and hot swapping of IDE devices*
- *Programmable Keys utility to support four special keyboard keys*
- *Infrared support for ease of use in wireless transfers of speeds up to 4Mbps*
- *Communications software to provide telephony capabilities and enhance ease of use*

This is the third edition of the document. This edition includes a new section outlining the Compaq support commitment to Windows 98 and updates to existing sections to include the Armada 1700 and Armada 7400.

This document is intended for external audiences with a need for information about operating system support for Compaq commercial portables.

COMPAQ

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Operating System Support for Compaq Portable Platforms

Fourth Edition (August 1998)

Third Edition (June 1998)

Second Edition (February 1998)

First Edition (September 1997)

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HIGHLIGHTS

This edition includes operating support information for the Armada 1700 as well as a new section on Windows 98. The following briefly highlights changes:

- (1) The Armada 1700 is the latest addition to the Armada family of notebook computers. Relative to its predecessor, the Armada 1500, it will continue to feature support for Windows 95 and Windows NT 4.0.
- (2) To coincide with the recent Microsoft Windows 98 announcement, Compaq is communicating its commitment to provide support for the operating system across the entire Armada family of notebooks computers as well as the LTE 5000.

DEFINING SUPPORT

Compaq supports all operating systems that are currently preinstalled by Compaq on its portable computers. Today, the preinstalled operating systems are Windows 98, Windows 95 OSR2.1/2.5 and Windows NT 4.0 with Service Pack 3. These operating systems support all hardware features. For legacy operating systems such as Windows 3.1x, Windows 95 OSR1, Windows NT 3.51 or IBM OS/2 Warp 3.0 & 4.0, Compaq provides support; however, in some cases, limitations in the operating system prevent enabling of new hardware functionality included on newer hardware platforms.

SUPPORT SOFTWARE

Compaq software support is available to customers in a number of different ways including various support CD-ROM (CD) disks, individual SoftPaq diskettes and the Compaq Web site.

Compaq QuickRestore CD

The Compaq QuickRestore CD is provided with Armada 7800, 7400, 4200 (in selected regions), 1700, and 1500 notebooks. The CD provides an easy to use and complete restore solution. The pre-installed operating system (i.e. Windows 95, Windows 98 or Windows NT 4.0) and all Compaq software enhancements are provided on the CD. The solution allows customers to perform a complete restore by reformatting the hard drive, and restoring the image to its original pre-install state.

Compaq Software CD

The Compaq Software CD is made available for each portable product at the time of announcement beginning with products introduced in 1997. The Software CD contains all drivers and Compaq software for all supported operating systems including those that may have been preinstalled. The Software CD does not include the operating system itself. Customers can purchase the Software CD by contacting Compaq Customer Service & Support.

NOTE:

In this White Paper, all references to Microsoft Windows NT 4.0 should be taken to mean Windows NT Workstation 4.0.

NOTE:

On some platforms, Compaq provides the System Enhancements diskette. This deliverable is available as a SoftPaq on the Compaq Web site or on the Compaq Support Software CD. This deliverable features an automated install and includes all operating system fixes from Microsoft, registry modification and INF changes included on the hard drive image pre-installed by Compaq. For customers who create their own hard drive image, it is important that this deliverable be installed.

Beginning with new products announced 2Q98, the Compaq Software CD will no longer be made available. The Compaq QuickRestore CD includes all software included on the factory installed hard drive image as well as the operating system itself. Together these two aspects provide a more comprehensive recovery solution than was previously provided by the Compaq Software CD.

Compaq Support Software CD

The Compaq Support Software CD set is yet another way for customers to get access to the latest drivers and software for their computer. This set of three CDs is updated monthly with new files also made available on the Compaq Web site. This CD contains support files for not only Compaq portables, but desktop and workstation computers as well. It is the ideal tool for the corporate MIS professional responsible for maintaining a number of different types of Compaq personal computers. The Software Support CD set can be purchased via an annual subscription or as a one-time purchase.

Customers who do not need the additional convenience of having all drivers and other support software on single CD can download individual software drivers and utilities, called SoftPaqs, from the Compaq Web site at www.compaq.com.

Unless otherwise noted, all Compaq software deliverables referenced in this White Paper are available through all three mediums of distribution.

PREINSTALLED OPERATING SYSTEMS

Compaq currently gives customers the choice of Microsoft Windows 95, Windows 98 or Windows NT 4.0 as the preinstalled operating system. Windows 95 is available as the preinstalled operating system for the Armada 1500, Armada 4100, Armada 4200 and Armada 7000 families. Windows NT 4.0 is available on select models in the Armada 1500¹ and Armada 7000 families. Table 1 summarizes the various combinations of operating systems available for preinstall by portable product family.

PREINSTALLED OPERATING SYSTEMS

Operating Systems	LTE 5000	Armada 1500	Armada 1700	Armada 4100	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
DOS/Windows 3.1x and Windows 95 OSR1 Dual Installation	YES	NO	NO	NO	NO	NO	NO
Windows 95 OSR 2.1 and Windows NT 4.0 (with Service Pack 2) Dual Installation	NO	YES ²	NO	NO	NO	YES ³	NO
Windows 95 OSR1	NO	NO	NO	YES ⁴	NO	NO	NO

¹ Currently shipping Armada 1500 models including the Armada 1560DM, 1571DM, 1573DM, 1590DMT, 1592DMT and the 1598DMT only offer Windows 95 as the pre-installed operating system.

² Compaq will discontinue dual installed on the Armada 1530DM, 1550DMT and 1580DMT beginning in 3Q97.

³ Compaq will discontinue dual installed on the Armada 7710MT, 7730MT, 7750MT, 7330MT and 7350MT beginning in 3Q97.

⁴ Windows 95 OSR1 was preinstalled on the Armada 4100, 4110, 4115, 4110D, 4120, 4125D, 4120T, 4125T, 4130T, 4136T, 4135T, 4131T only.

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Operating Systems	LTE 5000	Armada 1500	Armada 1700	Armada 4100	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
Windows 95 OSR2.1	NO	YES	YES	YES ⁵	YES	YES	YES
Windows 98 ⁶	NO	YES	YES	NO	YES	NO	YES
Windows NT 4.0 with Service Pack 3	NO	NO	NO	NO	NO	YES	YES

Table 1 - Preinstalled Operating Systems

SUPPORTED OPERATING SYSTEMS

In addition to supporting preinstalled operating systems, Compaq offers standard feature support for legacy operating systems that are not preinstalled. Table 2 summarizes support offered for each operating system by product family.

SUPPORTED OPERATING SYSTEMS

Operating Systems	LTE 5000	Armada 1500	Armada 1700	Armada 4100	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
DOS/Windows 3.1x	Supported	Supported	Not Supported	Supported	Supported	Supported	Not Supported
Windows 95 OSR1	Supported	Supported	Supported	Supported ⁷	Supported	Supported	Supported
Windows 95 OSR2.x	Not Supported	Supported	Supported	Supported ⁸	Supported	Supported	Supported
Windows 98	Support in 3Q98	Support in 3Q98	Support in 3Q98	Support in 3Q98	Support on 6/25/98	Support on 6/25/98	Support on 6/25/98
Windows NT 3.51	Supported	Supported	Not Supported	Supported	Not Supported	Supported	Not Supported
Windows NT 4.0 with Service Pack 2	Supported	Supported	Supported	Supported	Supported	Supported	Supported
Windows NT 4.0 with Service Pack 3	Supported	Supported	Supported	Supported	Supported	Supported	Supported
OS/2 Warp 3.0 & 4.0	Supported	Not Supported	Not Supported	Supported	Not Supported	Supported	Not Supported

Table 2 – Supported Operating Systems

⁵ Windows 95 OSR2 was single installed on the Armada 4150, 4150T and 4160T.

⁶ Windows 98 will be made available on select models within the notebook families noted. Availability of Windows 98 as a pre-installed operating system is planned for early 3Q98 on the 1500 and 1700 families and late 3Q98 for the 7800 family.

⁷ Standard Windows 95 OSR1 feature support is offered for the Armada 4150, 4150T and 4160T. Extended feature support for Windows 95 OSR1 on all other Armada 4100 models.

⁸ Extended feature support for Windows 95 OSR2 on the Armada 4150, 4150T and 4160T.

The following sections list major Compaq software deliverables for each supported operating system. Customers should refer to the Compaq Web site or Compaq Support Software CD for the latest revisions and information regarding these software components.

SUPPORTED FEATURES BY OPERATING SYSTEM

Table 3 summarizes major software functionality and hardware support by operating system on Compaq portable computers. Some of this support is provided through Compaq device drivers and utilities, while other support is inherent to the operating system. The list is not intended to be exhaustive; only a high level review of functional areas found to be of most interest to Compaq portable customers are noted.

SUPPORTED FEATURES⁹

	DOS & Windows 3.1x	Windows 95	Windows 98	Windows NT 3.51	Windows NT 4.0	OS/2 Warp 3.0 & 4.0
Compaq Audio Drivers	CC	CC	CC	CC	CC	CC
Compaq Video Drivers	CC	CC	CC	CC	CC	CC
Power Management						
Standby	CC	CC	CC	CC	CC	CC
Hibernation	CC	CC	CC	CC	CC	CC
Power conservation timers ¹⁰	CC	CC	CC/OS	CC	CC	CC
ACPI Support	NA	NA	CC/OS	NA	NA	NA
APM Support ¹¹	OS	OS	CC/OS	NA	CC/OS	NA
Programmable Keys	CC	CC	CC	CC	CC	CC
PC Card Support						
PC Card 16 Support	CC	OS	OS	OS	CC/OS	OS
CardBus (32-bit) Support	CC ¹²	OS	OS	NA	CC	NA
Plug 'n Play Support	CC	OS	OS	NA	CC ¹³	NA
Compaq Ethernet Network Drivers	CC	CC	CC	CC	CC	OS

NOTE:

“CC” represents functionality provided through a specific Compaq software or firmware component.

“OS” represents functionality provided by the operating system itself.

“CC/OS” represents functionality that is supported by the native operating system but which is enhanced through additional software components provided by Compaq.

“NA” represents functionality that is not available on Compaq portable platforms.

⁹ Some features are not supported on all platforms where limitations in the hardware prevent a feature from being enabled.
¹⁰ Includes all activity based timers that power down used components after a user defined period of inactivity.
¹¹ Microsoft Windows 3.1x does support APM version 1.1. Customers interested in power management support under IBM OS/2 Warp should contact IBM directly for more information.
¹² Armada 1500 and Armada 7000 families only.
¹³ For Plug 'n Play support, some limitations exist with some PC Cards and is dependent on the PC Card drivers. Contact your PC Card vendor for more information about Plug 'n Play support under Windows NT 4.0.

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	DOS & Windows 3.1x	Windows 95	Windows 98	Windows NT 3.51	Windows NT 4.0	OS/2 Warp 3.0 & 4.0
Compaq Intelligent Manageability	NA	CC	CC	NA	CC	NA
Multibay Hot Swapping Support ¹⁴	NA	NA	CC	NA	CC	NA
Infrared Support						
1.15 Mbps Transfer	CC	OS	OS	NA	NA	NA
4 Mbps Transfer	NA	CC	CC	NA	NA	NA
Compaq Software MPEG Support	NA	CC/OS	OS	NA	CC	NA
Communications						
Data Support	OS	OS	OS	OS	OS	OS
Facsimile Support	OS ¹⁵	OS	NA	NA	CC ¹⁶	OS ¹⁷

Table 3 – Supported Features

Windows 98

Beginning 3Q98 Compaq will offer Windows 98 as a pre-installed operating system on select models within the Armada 1500, Armada 1700, Armada 7400 and Armada 7800 families. (Refer to Table 2 for information on preinstalled operating systems by portable family). In support of the Microsoft announcement of Windows 98, Compaq will offer full support on all models within the Armada 4200, 7300, 7700, 7400 and Armada 7800 families. Refer to Table 4 for information on specific Compaq software deliverables for Windows 98 by product family.

Although Compaq will support customers that upgrade to Windows 98 on the Armada 1500, Armada 1700, Armada 4100 and LTE 5000 families, Compaq has not yet made software deliverables available and does not recommend customers upgrade at this time. Compaq software for Windows 98 for these platforms will be made available 3Q98. These deliverables will be posted to the web site and this document will be updated to reflect the change.

¹⁴ Multibay Exchange refers to warm swapping support for CDROM, floppy drive and batteries in the Compaq MultiBay.

¹⁵ Requires third-party software application not provided by Compaq.

¹⁶ Compaq provides the Trio Communications Suite for Windows NT 4.0 on the Armada 7700 and 7300 families. This application was removed from the Armada 7800 Windows NT 4.0 pre-install image because it is a 16-bit application. Microsoft logo certification requirements with which the Armada 7800 complies do not allow any 16-bit software to be included on the pre-install image. Compaq is currently working to qualify a 32-bit data/fax application for inclusion on future platforms.

¹⁷ Requires third-party software application not provided by Compaq.

WINDOWS 98 SOFTWARE DELIVERABLES

Windows 98 ¹⁸	Armada 1500	Armada 1700	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
Enabling Audio Hardware	ESS 1878 Audio Driver Support	ESS 1869 Audio Driver Support	Native Audio Support	ESS 1878 Audio Driver Support	ESS 1879 Audio Driver Support
Enabling Video Hardware	C&T Display Driver Support	C&T Display Driver Support	C&T Display Driver Support	S3 Display Drivers	S3 Display Driver/Utility Support
Enhanced Video Functionality				External CRT Configuration Utility	External CRT Configuration Utility
Enabling Networking	Intel Ethernet Drivers	Intel Ethernet Drivers	Armada 4200 Ethernet Drivers	NetFlex 3 Ethernet Drivers	NetFlex 3 Ethernet Drivers
Unique Compaq Software Functionality	Intelligent Manageability Insight Agents				
	Programmable Keys Utility				
Power Management and Extended Security Features	Compaq Power Management				
	Security 32				
Enhanced Operating System Support	DOS Real Mode Support	DOS Real Mode Support	DOS Real Mode Support	DOS Real Mode Support	DOS Real Mode Support
Setup & Diagnostics	Compaq Diagnostics	Compaq Diagnostics	Compaq Diagnostics	Compaq Diagnostics	Compaq Diagnostics
	F10 Computer Setup				
	F10 Computer Diagnostics				

Table 4 - Windows 98 Software Deliverables

Windows 98 Feature Considerations

In addition to providing enhanced performance and a more stable 32-bit operating environment Windows 98 provides many new features and support for new hardware technologies over its predecessor, Windows 95. Refer to Table 5 for more information on what is new in Windows 98.

¹⁸ For the most up-to-date drivers, applications and patches refer to the Compaq Web site at www.compaq.com or the latest Compaq Software Support CD.

NEW FEATURE & HARDWARE SUPPORT UNDER WINDOWS 98

Feature	Description
Windows Update	Includes the Update Manager. This feature keeps users' systems up-to-date by providing easy access to the latest drivers and operating system files on an on-going basis.
Dial-Up Networking Improvements	Includes Multilink Channel Aggregation enabling users to combine all available dial-up lines for higher transfer speeds. Supports Dial-up scripting, which can automate the process of connecting to bulletin boards and online services. User interface enhancements simplify setting up and using dial-up connections.
Client Support for Virtual Private Networking (VPN)	Networking support tool for remote users to access their corporate network via a secure connection. Utilizes the Point-to-Point Tunneling Protocol (PPTP).
Universal Serial Bus (USB)	Allows for Plug-N-Play and daisy-chaining of up to 127 devices off of a single port. USB also offers greater speed over traditional serial buses (up to 12 Mbs). The connector also provides power across the bus.
Setup Enhancements	Enhancements decrease setup time while increasing setup reliability. The setup interface shows the user how far along in the setup process they are.
Faster Shutdown	The shutdown time has been dramatically reduced from Windows 95 to Windows 98.
FAT32 Conversion Utility	A graphical utility which can quickly and safely convert a hard drive from the original version of FAT to FAT32.
Power Management	Windows 98 is the first Microsoft operating system to feature ACPI (Advanced Configuration and Power Interface). ACPI is an open industry specification that is an integral part of the Microsoft OnNow initiative.
Win32® Driver Model (WDM)	A new, unified driver model for Windows 95 and Windows NT that will enable new devices to have a single driver for both operating systems. It allows Windows 98 to maintain full legacy device driver support while adding support for new WDM drivers.
Windows Maintenance Wizard	Allows users to schedule regular maintenance for their systems. The Windows Maintenance Wizard includes: Disk Defragmenter; ScanDisk; and Disk Cleanup.
Version Conflict Manager	This feature will detect file version conflicts with installed programs and will install the Windows version of the driver.
Remote Access Server	Enables the users' desktop to act as a dial-up server. Allows dial-up clients to remotely connect to a Windows 98 machine for local resource access.
Support for Intel MMX Processors	This feature provides support for third parties to build software that exploits the Intel Pentium Multimedia Extensions (MMX).
Multiple Display Support	Allows the user to display different images on multiple monitors using multiple graphics adapters on a single PC. This feature effectively expands the size the Windows desktops extending beyond a single monitor.
Support for New Generation of Hardware	Expanded array of hardware support including, but not limited to, Universal Serial Bus (USB), IEEE 1394, Accelerated Graphics Port (AGP), Advanced Configuration and Power Interface (ACPI), and DVD.

Table 5 - New Feature & Hardware Support Under Windows 98

Some of the new features and hardware support introduced with Windows 98 has particular appeal to some commercial notebook users. However, all features of Windows 98 are not supported across all Compaq notebook families. As well, Compaq unique features such as Intelligent Management are not supported across all notebook families under Windows 98. Refer to Table 6 for more information on which notebooks support key Compaq unique and Windows 98 features.

NOTE:

● = Windows 98 feature supported without requiring additional hardware or software.

◐ = Windows 98 feature supported with additional optional hardware or software. Refer to the footnotes for more information.

○ = Windows 98 feature not supported on the specified notebook family.

KEY WINDOWS 98 FEATURE SUPPORT BY COMPAQ PORTABLE FAMILY

Notebook Family	Compaq Intelligent Manageability	Multilink ¹⁹	USB ²⁰	Multiple Monitor Support ²¹	ACPI
Armada 4200	●	◐	◐	○	●
Armada 7300	●	◐	◐	◐	○
Armada 7700	●	◐	◐	◐	○
Armada 7400	●	◐	●	◐	●
Armada 7800	●	◐	●	◐	●

Table 4 – Key Windows 98 Feature Support by Compaq Portable Family

Windows 95

Windows 95 is currently being preinstalled on the Armada 1500, Armada 1700, Armada 4100, Armada 4200, Armada 7700, 7300, 7400 and 7800 families. The version being used is the OEM Service Release 2 (OSR2) which has been enhanced over the previous Windows 95 OSR1 release and the currently shipping retail version of Windows 95. Windows 95 OSR2 enables key hardware in the latest portable products and provides support for Compaq software that is not available under OSR1. For customers who choose to downgrade to OSR1 or the retail version of Windows 95, Compaq only supports those features inherently supported in the operating system. Table 4 lists new features and hardware support introduced with Windows 95 OSR2 and which are not supported under Windows 95 OSR1.

NEW FEATURE & HARDWARE SUPPORT UNDER WINDOWS 95 OSR2

Feature	Description
FAT32	Enhancements to the Windows 95 FAT file system designed to efficiently support large hard disks, up to 2 Terabytes in size. Includes updates to FDISK, Format, Scandisk, and Defrag disk utilities to support FAT32 partitions.
DriveSpace Update	Windows 95 DriveSpace compression utility now supports compressed volumes up to 2 GB in size. Note: DriveSpace compression is not supported on FAT32 volumes.

¹⁹ Multilink requires multiple modems. Some Armada notebooks include an integrated modem while others do not. At a minimum a second PC Card or serial modem is required to take advantage of Multilink.

²⁰ Currently, the only Armada notebook to ship with integrated USB is the Armada 7800. All others require optional USB hardware such as the Compaq USB PC Card.

²¹ Multiple Monitor Support requires multiple video controllers. Only the Armada 7300, 7700 and 7800 feature a dual video controller architecture that enables this feature. In the case of the Armada 7800, as of this printing, the video drivers shipped by Microsoft with the operating system and those shipped by Compaq do not support this feature. Compaq will release specific Windows 98 video drivers for the Armada 7800 that will support this feature. All other Compaq notebook families listed as not supporting Windows 98 multiple monitor features may support it using a second video card in a docking station. For the purposes of this table, only those notebooks capable of supporting the feature without a second video card were noted as such.

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Feature	Description
Power Management Improvements	Support for Advanced Power Management (APM) 1.2 BIOS, wake-on-ring for modems, multi-battery PC's, drive spin down, and powering down of inactive PCMCIA modems.
Storage Enhancements	Support for IDE Bus Mastering, 120M Floptical disk drives, removable IDE media, Zip drives, and CD Changers. Also adds the SMART predictive disk failure API's.
PC Card Enhancements	Adds support for new PC Card 32 (CardBus) bridges, PCMCIA cards that operate at 3.3 volts rather than 5 volts, multifunction PCMCIA network/modem cards, and PCMCIA Global Positioning Satellite (GPS) devices.
CDFS Enhancements	Support for ISO 9660 disks up to 4 GB in size, and CD-I format CD-ROMs.
PCI Bridging & Docking	Support for PCI devices for use in PCI docking stations.
IRQ Routing	Support for new PCI interrupt routers.
Intel MMX Support	Support for third parties to build software that exploits the Intel Pentium Multimedia Extensions (MMX) for fast audio and video support on the next generation of Intel Pentium processor.
NDIS 4.0 Support	Adds support for new NDIS 4.0 network interface card drivers.
Automatic Scandisk On Boot	In situations where the PC was not shut down normally, Scandisk will automatically run at the next reboot in order to check for damaged files.
Online Service Folder	Client software for America Online 3.0, CompuServe 3.0, CompuServe WOW!, and AT&T Worldnet.

Table 6 - New Feature & Hardware Support Under Windows 95 OSR2

Refer to Table 5 for information on specific Compaq software deliverables for Windows 95 by product family.

Besides meeting stringent internal criteria for Windows 95 compatibility, all Compaq portable products have passed the rigorous Microsoft Windows Hardware Compatibility Test. Information on Compaq portable computer certifications can be found on the Microsoft Web site at <http://www.microsoft.com>.

WINDOWS 95 SOFTWARE DELIVERABLES

		Armada 1500	Armada 1700	Armada 4100	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
Windows 95²²	LTE 5000						

Tip:

If you are viewing this document online, clicking on a software deliverable will take you to the appropriate support page on the Compaq Web site. Always refer to the Compaq Web site or the Compaq Support Software CD for the latest revisions of drivers, utilities and other software from Compaq.

²² For the most up-to-date drivers, applications and patches refer to the Compaq Web site at www.compaq.com or the latest Compaq Software Support CD.

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	LTE 5000	Armada 1500	Armada 1700	Armada 4100	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
Windows 95²²							
Enabling Audio Hardware	ESS 688/1688 Audio Driver Support for Windows 95 ESS Direct Sound Support for Windows 95	ESS 1878 Audio Driver Support for Windows 95	ESS 1869 Audio Driver Support for Window 95	ESS Direct Sound Support for Windows 95	Armada 4200 ESS Audio Drivers for Windows 95	ESS 1878 Audio Driver Support for Windows 95	ESS 1878 Audio Driver Support for Windows 95
Enhanced Audio Functionality				ESS 1788 Audio Rack Drivers for Windows 95			
Enabling Video Hardware	Cirrus Logic GD7543 Display Driver for Windows 95	Cirrus Logic GD7548 Display Driver for Windows 95 ²⁴	C&T 65555 Display Driver Support for Windows 95	Cirrus Logic GD7548 Display Driver for Windows 95	C&T Display Driver Support for Windows 95	S3 Display Drivers for Windows 95	S3 Display Drivers for Windows 95
	Cirrus Logic GD7548 Display Driver for Windows 95 ²³	C&T 68554 Display Driver for Windows 95 ²⁵					
Enhanced Video Functionality		Microsoft-DirectX 3 MediaMatics MPEG Player Support for Windows 95	Intel 82558 Ethernet Drivers 3.1x/ MS-DOS	Microsoft-DirectX 3 MediaMatics MPEG Player Support for Windows 95	Armada 4200 DirectX 5 Drivers MediaMatics Arcade MPEG Player	Microsoft-DirectX 3 S3 Display Utility for Windows 95	Microsoft-DirectX 5.0 S3 Display Utility for Windows 95
Enabling Networking		Integrated Netflex-3 Ethernet Drivers for Windows 3.1x/ MS-DOS			Armada 4200 Ethernet Drivers	Integrated Netflex-3 Ethernet Drivers	Integrated Netflex-3 Ethernet Drivers

²³ For the LTE 5380 only.

²⁴ For Armada 1510, 1520, 1530, 1535, 1550, 1580, and 1585 models.

²⁵ For Armada 1540, 1560, 1570, 1571, 1572, 1573, 1574, 1590, 1592, 1594, 1595, 1597, and 1598 models.

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	LTE 5000	Armada 1500	Armada 1700	Armada 4100	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
Windows 95 ²²							
Enabling PC Card Hardware						True Flash File System for Windows 95	True Flash File System for Windows 95
Unique Compaq Software Functionality	Intelligent Manageability Insight Agents for Windows 95	Intelligent Manageability Insight Agents for Windows 95	Intelligent Manageability Insight Agents for Windows 95	Intelligent Manageability Insight Agents for Windows 95	Intelligent Manageability Insight Agents for Windows 95	Armada 4200 IM Agents for Windows 95 and NT 4.0	Intelligent Manageability Insight Agents for Windows 95 Programmable Keys Utility Carbon Copy
Enabling Input Device Hardware	Microsoft Infrared Drivers for Windows 95	Compaq Fast IR drivers for Portables Armada 1500/4100 ALPS Glidepoint Drivers Japanese		Microsoft Infrared Drivers for Windows 95 Armada 1500/4100 ALPS Glidepoint Drivers Japanese		Programmable Keys Utility	
Power Management, Extended Security Features, Hibernation, Multibay Interchange and Compaq Hot Keys	Supplemental Programs for Windows 95 ²⁶	Supplemental Programs for Windows 95		Supplemental Programs for Windows 95	Compaq Power Management for Windows 95 Armada 4200 Security 32 Support	Supplemental Programs for Windows 95	Power Management for Windows 95 Security 32 for Windows 95
Enabling Communications Hardware	Support for Compaq Portable Telephony Modem ²⁷	Support for Compaq Portable Telephony Modem				Compaq NetMeeting DSVD Enabler Applet	

²⁶ For all LTE models except the 5380.

²⁷ For the LTE 5150, 5250, 5280, 5380 and 5400 only.

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Windows 95 ²²	LTE 5000	Armada 1500	Armada 1700	Armada 4100	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
Enhanced Operating System Support	DOS Real Mode Support for Windows 95	DOS Real Mode Support	Universal Serial Bus Support		Notebook Universal Serial Bus Support DOS Real Mode Support	System Enhancements for Windows 95 DOS Real Mode Support	System Enhancements for Windows 95 Notebook Universal Serial Bus Support DOS Real Mode Support
Setup & Diagnostics	Compaq Diagnostics for Windows 3.1x /Windows 95 Computer Setup and Diagnostics for Portables	Compaq Diagnostics for Windows 3.1x /Windows 95 F10 Computer Setup for Armada 1500, 7300, and 7700	Compaq Diagnostics for Windows 95	Compaq Diagnostics for Windows 3.1x /Windows 95 Compaq Diagnostics for Armada 4100 Family - Ethernet Base Computer Setup for Armada 4160T	Compaq Diagnostics for Windows 95 Armada 4200 Personal Computer Diagnostics	Compaq Diagnostics for Windows 95 F10 Computer Setup	Compaq Diagnostics for Windows 95 F10 Computer Setup

Table 7 - Windows 95 Software Deliverables

Microsoft Windows NT 4.0

Windows NT 4.0 with Service Pack 3 (SP3) is currently being preinstalled on select models within the Armada 1500 and Armada 7000 families. (Refer to Table 2 for information on preinstalled operating systems by portable family). It is a supported operating system on all models within the LTE 5000, Armada 1500, Armada 4100 and Armada 7000 families. Compaq software deliverables extend functionality or enhance the overall user experience. Refer to Table 8 for information on specific Compaq software deliverables for Windows NT 4.0 by product family.

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NOTE:

Each version of a Microsoft Service Pack includes all necessary upgrades, patches and functionality enhancements included in prior releases. In order to have the latest update from Microsoft it is only necessary to install the latest Service Pack.

Microsoft periodically releases updates to the Windows NT 4.0 operating system in the form of Microsoft Service Packs. To date, there have been three Service Packs released. Each Service Pack includes upgrades, patches and new software components that introduce new functionality. Once a Service Pack has been installed it is integrated into the operating system.

On portable platforms where Windows NT 4.0 is the preinstalled operating system, Service Pack 3 is also preinstalled. All Compaq portable products that support Windows NT 4.0 support Service Pack 2. Compaq does not support Service Pack 1 or the retail version of Windows NT 4.0. Compaq strongly recommends an upgrade to Service Pack 3 for customers who have not installed any Service Pack or who are using an earlier Service Pack version.

Besides meeting stringent internal criteria for Windows NT 4.0 compatibility, all Compaq portable products have passed the rigorous Microsoft Windows Hardware Compatibility Test. Information on Compaq portable computer certifications can be found on the Microsoft Web site at <http://www.microsoft.com>.

WINDOWS NT 4.0 SOFTWARE DELIVERABLES

Windows NT 4.0 ²⁸	LTE 5000	Armada 1500	Armada 1700	Armada 4100	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
Enabling Audio Hardware	ESS 688/1688/1788 Audio Drivers for Windows NT 4.0	ESS 1878 Audio Driver for Windows NT 4.0	ESS 1869 Audio Driver for Windows NT 4.0	ESS 688/1688/1788 Audio Drivers for Windows NT 4.0		ESS 1878 Audio Drivers for Windows NT 4.0	ESS 1879 Audio Drivers for Windows NT 4.0
Enabling Video Hardware	Cirrus Logic GD7543/GD7548 Display Drivers for Windows NT 4.0	Cirrus Logic GD7543/GD7548 Display Drivers for Windows NT 4.0 ²⁹	C&T 65555 Video Driver for Windows NT 4.0	Cirrus Logic GD7543/GD7548 Display Drivers for Windows NT 4.0	Chips and Technologies Video Driver for Windows NT 4.0	S3 Aurora Display Driver Support Windows NT 4.0	S3 Aurora Display Driver Support Windows NT 4.0
Enhanced Video Functionality						S3 Display Utility for Windows NT 4.0	S3 Display Utility for Windows NT 4.0
Enabling Networking		Integrated Netflex-3 Ethernet Drivers for Windows NT 4.0	Intel 82558 Ethernet Drivers	Convenience Base Ethernet Drivers for Windows NT 4.0	Armada 4200 Ethernet Drivers	Integrated Netflex-3 Ethernet Drivers for Windows NT 4.0	Integrated Netflex-3 Ethernet Drivers for Windows NT 4.0

²⁸ For the most up-to-date drivers, applications and patches refer to the Compaq Web site at www.compaq.com or the latest Compaq Software Support CD.

²⁹ For Armada 1510, 1520, 1530, 1535, 1550, 1580, and 1585 models.

³⁰ For Armada 1540, 1560, 1570, 1571, 1572, 1573, 1574, 1590, 1592, 1594, 1595, 1597, and 1598 models.

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Windows NT 4.0 ²⁸	LTE 5000	Armada 1500	Armada 1700	Armada 4100	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
Unique Compaq Software Functionality		Intelligent Manageability Insight Agents for Windows NT 4.0	Intelligent Manageability Insight Agents for Windows NT 4.0	Intelligent Manageability Insight Agents for Windows NT 4.0	Armada 4200 IM Agents for Windows 95 and NT 4.0	Intelligent Manageability Insight Agents for Windows NT 4.0	Intelligent Manageability Insight Agents for Windows NT 4.0
		Programmable Keys Utility for Windows NT 4.0	Programmable Keys Utility for Windows NT 4.0	Programmable Keys Utility for Windows NT 4.0			
Enabling PC Card Hardware ³¹	CardWare NT for Windows NT 4.0 ³²	CardWare NT for Windows NT 4.0 ³³	CardWare for Windows NT 4.0	CardWare NT for Windows NT 4.0 ³⁴	Compaq PC Card Support for Windows NT 4.0	CardWare NT for Windows NT 4.0 ³⁵	CardWare NT for Windows NT 4.0
Power Management, Extended Security Features, Hibernation, Multibay Interchange and Compaq Hot Keys	Supplemental Programs for Windows NT 4.0	Supplemental Programs for Windows NT 4.0		Supplemental Programs for Windows NT 4.0	Notebook Management for Windows NT 4.0 Armada 4200 Security 32 Support Armada Multibay Drivers for Windows NT 4.0 (Service Pack 3)	Support Diskette for Windows NT 4.0 Power Management for Windows NT 4.0 ³⁶	Multibay Interchange Support

³¹ CardWare NT v2.08 will not be available on the Compaq Web site. It is available on the Armada 1500 Software CD v1.0, the Armada 7000 Software CD v1.1 or on diskette.

³² Available 4Q97.

³³ Available late 3Q97 on the Armada 7000 Software CD.

³⁴ Available 4Q97.

³⁵ Available late 3Q97.

³⁶ Provides hibernation support only. This version will not work with Service Pack 3. An updated power management utility will be released early 4Q97. In the meantime customers should be aware that they will lose existing power management functionality should they upgrade to Service Pack 3.

Windows NT 4.0 ²⁸	LTE 5000	Armada 1500	Armada 1700	Armada 4100	Armada 4200	Armada 7700 & 7300	Armada 7800 & 7400
Setup & Diagnostics	Computer Setup and Diagnostics for Portables	F10 Computer Setup for Armada 1500, 7300, and 7700	Compaq Diagnostics for Windows NT	Computer Setup for Armada 4100 Computer Setup and Diagnostics for Portables Compaq Diagnostics for Armada 4100 Family - Ethernet Base Computer Setup for Armada 4160T		F10 Computer Diagnostics for Armada 7300 and 7700 Series F10 Computer Setup for Armada 1500, 7300, and 7700	F10 Computer Diagnostics F10 Computer Setup

Table 8 - Windows NT 4.0 Support Matrix

DOS 6.2x & Windows 3.1x

Although Microsoft does not plan to continue development for DOS or Windows 3.1x, both operating systems still account for a small share of the installed user base. Some corporate customers have opted to stay with Windows 3.1x until Windows 98 or Windows NT 5.0. For this reason Compaq will continue to provide support for DOS 6.2x and Windows 3.1x. Support for DOS 6.2x and Windows 3.1x means that the operating systems install correctly and enable all hardware supported by Microsoft with the native operating system. In addition to functionality inherently supported by the base operating system, software deliverables are provided to extend functionality or enhance the overall user experience. However, Compaq does not support new hardware features and functionality that is not supported by the operating system. Examples of unsupported hardware features include 32-bit CardBus PC Cards and high-speed infrared (i.e. transfer speeds up to 4Mbps). Customers who encounter difficulties that are not directly related to a Compaq provided driver or utility should contact Microsoft directly. Refer to Table 9 for information on specific Compaq software deliverables for DOS 6.2x and Windows 3.1x by product family.

Compaq software deliverables are available as individual SoftPaqs and can be obtained by contacting Compaq Customer Service & Support or on the Compaq Web site at www.compaq.com. For additional convenience Compaq software deliverables are also available on CD. See the section titled *Support Software* for more information.

Standard feature support for Microsoft DOS 6.2x and Windows 3.1x will continue to be provided for products announced in 1Q98.

DOS/WINDOWS 3.1X SOFTWARE DELIVERABLES

DOS/Windows 3.1x ³⁷	LTE 5000	Armada 1500	Armada 4100	Armada 4200	Armada 7700 & 7300
Enabling Audio Hardware	ESS 688 Audio Drivers for Windows 3.1x / MS-DOS ³⁸	ESS 1878 Audio Drivers for Windows 3.1x/MS-DOS	ESS 1788 Audio Drivers for Windows 3.1x / MS-DOS	Armada 4200 ESS Audio Drivers for Windows 3.1	ESS 1878 Audio Drivers for Windows 3.1x/MS-DOS
	ESS 1688 Audio Drivers for Windows 3.1x / MS-DOS ³⁹				
Enhanced Audio Functionality		ESS 1878 Audio Rack Drivers for Windows 3.1x/MS-DOS	ESS 1878 Audio Rack Drivers for Windows 3.1x/MS-DOS		
Enabling Video Hardware	Cirrus Logic GD7543 Video Drivers for MS-DOS ⁴⁰	Cirrus Logic GD7548 Video Drivers for Windows 3.1	Cirrus Logic GD7548 Video Drivers for Windows 3.1	Chips and Technologies Video Support for Windows 3.1	S3 Video Drivers for Windows 3.1x
	Cirrus Logic GD7543 Video Drivers for Windows 3.1x ⁴¹	Cirrus Logic GD7548 Video Drivers for Windows 3.1	Cirrus Logic GD7548 Video Drivers for Windows 3.1		
	Cirrus Logic GD7548 Video Drivers for Windows 3.1 ⁴²				
Enhanced Video Functionality		MediaMatics MPEG Player Support for Windows 3.1x	MediaMatics MPEG Player Support for Windows 3.1x		
		Microsoft Video for Windows 3.1x	Microsoft Video for Windows 3.1x ⁴³		
Enabling Networking	Network Support Drivers for LTE 5000 for Windows 3.1x and MS-DOS 6.x	Integrated Netflex-3 Ethernet Drivers for Windows 3.1x/ MS-DOS	Ethernet Drivers for Armada 4100 Convenience Base Network Support Drivers for Windows 3.1x	Ethernet Drivers for Armada 4000 Convenience Base	Integrated Netflex-3 Ethernet Drivers for Windows 3.1x/ MS-DOS

³⁷ For the most up-to-date drivers, applications and patches refer to the Compaq Web site at www.compaq.com or the latest Compaq Support Software CD.

³⁸ For the LTE 5000, 5100 and 5200 only.

³⁹ For the LTE 5150, 5250, 5280, 5300, 5380 and 5400 only.

⁴⁰ For the LTE 5000, 5100, 5150, 5200, 5250, 5280, 5300 and 5400 only.

⁴¹ For the LTE 5000, 5100, 5150, 5200, 5250, 5280, 5300 and 5400 only.

⁴² For the LTE 5380 only.

⁴³ For the Armada 4110, 4120, 4125 and the 4130 only.

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DOS/Windows 3.1x ³⁷	LTE 5000	Armada 1500	Armada 4100	Armada 4200	Armada 7700 & 7300
Enabling Storage Devices	IDE CD-ROM Drivers for MS-DOS/Windows 3.1x	IDE CD-ROM Drivers for MS-DOS/Windows 3.1x	IDE CD-ROM Drivers for MS-DOS/Windows 3.1x		IDE CD-ROM Drivers for MS-DOS/Windows 3.1x
Unique Compaq Software Functionality		Programmable Keys Utility for Windows 3.1x	Programmable Keys Utility for Windows 3.1x		Programmable Keys Utility for Windows 3.1x
Enabling Input Device Hardware		Glide Point Touchpad Drivers for Windows 3.1x	Glide Point Touchpad Drivers for Windows 3.1x		Armada 7000 Counterpoint IR Drivers
		Armada 1500/4100 ALPS Glidepoint Drivers Japanese	Armada 1500/4100 ALPS Glidepoint Drivers Japanese		
Enhanced PC Card Functionality ⁴⁴	CardWizard for Windows 3.1x	CardWizard for Windows 3.1x	CardWizard for Windows 3.1x	CardWizard for Windows 3.1	CardWizard for Windows 3.1x
Power Management, Extended Security Features and Compaq Hot Keys		Supplemental Programs for Windows 3.1x	Supplemental Programs for Windows 3.1x		Supplemental Programs for Windows 3.1x
		Supplemental Programs for MS-DOS	Supplemental Programs for MS-DOS		Supplemental Programs for MS-DOS
Enabling Communications Hardware	Support for Compaq Portable Telephony Modem ⁴⁵		Support for Compaq Portable Telephony Modem		Support for Compaq Portable Telephony Modem

⁴⁴ CardWizard v3.14 and CardWizard v5.31 are not available on the Compaq Web site. It is available on the Armada 1500 Software CD v1.0, the Armada 4100 Software CD v1.1, the Armada 7000 Software CD v1.1 or on diskette.

⁴⁵ For the LTE 5150, 5250, 5280, 5380 and 5400 only.

DOS/Windows 3.1x ³⁷	LTE 5000	Armada 1500	Armada 4100	Armada 4200	Armada 7700 & 7300
Setup & Diagnostics	Compaq Diagnostics for Windows 3.1x /Windows 95	Compaq Diagnostics for Windows 3.1x /Windows 95	Compaq Diagnostics for Windows 3.1x /Windows 95	Armada 4200 Personal Computer Diagnostics	F10 Computer Diagnostics for Armada 7300 and 7700 Series
	Computer Setup and Diagnostics for Portables	F10 Computer Setup for Armada 1500, 7300, and 7700	Computer Setup and Diagnostics for Portables	Computer Setup for Armada 4200	F10 Computer Setup for Armada 1500, 7300, and 7700
			Computer Setup and Diagnostics for Portables		
			Compaq Diagnostics for Armada 4100 Family - Ethernet Base		
			Computer Setup for Armada 4160T		

Table 9 - DOS/Windows 3.1x Software Deliverables

Microsoft Windows NT 3.51

Although no longer sold by Microsoft, Compaq continues to support Windows NT 3.51 on the LTE 5000, Armada 1500, Armada 4100 and Armada 7000 families. Windows NT 3.51 installs correctly and fully enables all hardware supported by Microsoft under the native operating system. Given that hardware technology has advanced since Windows NT 3.51 was first released, some features of the hardware will not be available. Examples of unsupported hardware features include 32-bit CardBus PC Cards, Plug 'n Play device support and Infrared. In addition to functionality inherently supported by the operating system, Compaq software deliverables are provided to extend functionality or enhance the overall user experience. Refer to Table 10 for information on specific Compaq software deliverables for Windows NT 3.51 by product family.

Windows NT 3.51 software deliverables from Compaq are not preinstalled on any portable. Software deliverables are available as individual SoftPaqs and can be obtained by contacting Compaq Customer Service & Support or on the Compaq Web site at www.compaq.com. For additional convenience Compaq software deliverables are also available on CD. See the section titled *Support Software* for more information.

Compaq will continue to offer support for Windows NT 3.51 support on product families where support is currently offered. This support will continue to be provided on new products within these families announced 1Q98 and earlier.

WINDOWS NT 3.51 SOFTWARE DELIVERABLES

Windows NT 3.51 ⁴⁶	LTE 5000	Armada 1500	Armada 4100	Armada 7700 & 7300
Enabling Audio Hardware	ESS 1688 Audio Driver for Windows NT 3.51	ESS 1878 Audio Driver for Windows NT 3.51	ESS 1788 Audio Driver for Windows NT 3.51	ESS 1878 Audio Drivers for Windows NT 3.51
Enabling Video Hardware	Cirrus Logic GD7548 Display Driver Support for Windows NT 3.51 ⁴⁷ Cirrus Logic GD7543 Display Driver Support for Windows NT 3.51 ⁴⁸	Cirrus Logic GD7548 Display Driver Support for Windows NT 3.51	Cirrus Logic GD7548 Display Driver Support for Windows NT 3.51	S3 Aurora Display Driver Support Windows NT 3.51
Unique Compaq Software Functionality		Programmable Keys for Windows NT 3.51	Programmable Keys for Windows NT 3.51	Programmable Keys for Windows NT 3.51
Power Management, Extended Security Features and Compaq Hot Keys				Supplemental Programs for Windows NT 3.51
Enabling Storage Devices	CD-ROM Driver for Windows NT 3.51			
Enabling Networking		Armada Netflex-3 Ethernet Drivers for Windows NT 3.51	Convenience Base Ethernet Drivers for Windows NT 3.51	Armada Netflex-3 Ethernet Drivers for Windows NT 3.51
Setup & Diagnostics	Computer Setup and Diagnostics for Portables	F10 Computer Setup for Armada 1500, 7300, and 7700	Computer Setup and Diagnostics for Portables Computer Setup and Diagnostics for Portables Compaq Diagnostics for Armada 4100 Family - Ethernet Base Computer Setup for Armada 4160T	F10 Computer Diagnostics for Armada 7300 and 7700 Series F10 Computer Setup for Armada 1500, 7300, and 7700

Table 10 - Windows NT 3.51 Software Deliverables

IBM OS/2 Warp 3.0 & 4.0

Although OS/2 accounts for a small percentage of installed operating systems worldwide, it continues to maintain a significant presence within the financial services and insurance sector and in Europe in particular. Large banks and other financial services firms are using OS/2 for business-critical applications. In order to satisfy this important market segment, Compaq provides support for OS/2 Warp 3.0 & 4.0 on select portable computer platforms.

⁴⁶ For the most up-to-date drivers, applications and patches refer to the Compaq Web site at www.compaq.com or the latest Compaq Support Software CD.

⁴⁷ For the Compaq LTE 5380 only.

⁴⁸ For the entire Compaq LTE 5000 family except the LTE 5380.

NOTE:

Compaq does not support OS/2 Warp on the Armada 1500 family given that the performance and mobility characteristics of this platform are not ideally suited to an OS/2 environment.

NOTE:

Compaq does not support all features of OS/2 on all portable products. These features are listed in the Supported Feature table as not being provided by Compaq. Customers who require these features under OS/2 Warp should contact IBM for more information.

Support for OS/2 Warp is provided for the LTE 5000, Armada 4100 and Armada 7000 families. Compaq supports basic audio, video and networking functionality. In addition, Compaq provides software to enable Programmable Keys and power management functionality such as standby and hibernation. Customers who encounter difficulties that are not directly related to a Compaq provided driver or utility should contact IBM directly. Refer to Table 11 for information on specific software deliverables by product family.

OS/2 Warp software deliverables from Compaq are not preinstalled on any portable platform. Software deliverables are available as individual SoftPaqs and can be obtained by contacting Compaq Customer Service & Support or on the Compaq Web site at www.compaq.com. For additional convenience Compaq software deliverables are also available on CD. See the section titled *Support Software* for more information.

For product families that currently support OS/2 Warp this support will continue to be provided on new products within these families announced 1Q98.

OS/2 WARP SOFTWARE DELIVERABLES

OS/2 Warp ⁴⁹	LTE 5000	Armada 1500	Armada 4100	Armada 7700 & 7300
Enabling Audio Hardware	ESS 1688 Audio Driver Support for OS/2 Warp 3.0	No Support	ESS 1688 Audio Driver Support for OS/2 Warp 3.0	ESS 1878 Audio Driver Support for OS/2 Warp 3.0
			ESS 1788 Audio Driver Support for OS/2 Warp 3.0	
Enabling Video Hardware	Cirrus Logic GD7548 Display Driver Support for OS/2 Warp 3.0 ⁵⁰	No Support	Cirrus Logic GD7548 Display Driver Support for OS/2 Warp 3.0	S3 Aurora Display Driver Support for OS/2 Warp 3.0
	Cirrus Logic GD7543 Display Driver Support for OS/2 Warp 3.0 ⁵¹		QVision Display Drivers for OS/2 Warp 3.0 (V2.39 Rev A)	
	QVision Display Drivers for OS/2 Warp 3.0 (V2.39 Rev A)			
Power Management and Programmable Keys ⁵²		No Support	Supplemental Programs for OS/2 Warp 3.0	Supplemental Programs for OS/2 Warp 3.0

⁴⁹ For the most up-to-date drivers, applications and patches refer to the Compaq Web site at www.compaq.com or the latest Compaq Software Support CD.

⁵⁰ For the Compaq LTE 5380 only.

⁵¹ For the entire Compaq LTE 5000 family except the LTE 5380.

⁵² The Supplemental Programs Diskette for OS/2 Warp 3.0 includes the Programmable Keys utility.

OS/2 Warp ⁴⁹	LTE 5000	Armada 1500	Armada 4100	Armada 7700 & 7300
Setup & Diagnostics	Computer Setup and Diagnostics for Portables	No Support	Computer Setup and Diagnostics for Portables Computer Setup and Diagnostics for Portables Compaq Diagnostics for Armada 4100 Family - Ethernet Base Computer Setup for Armada 4160T	F10 Computer Diagnostics for Armada 7300 and 7700 Series F10 Computer Setup for Armada 1500, 7300, and 7700

Table 11 - OS/2 Warp Software Deliverables

FREQUENTLY ASKED QUESTIONS

What is the difference between ACPI and APM?

Windows 98 supports the Advanced Configuration and Power Interface (ACPI) specification. ACPI places the power management functionality inside of the operating system architecture. Advanced Power Management (APM) utilized the BIOS for power management. When using ACPI-aware software application and hardware devices, ACPI may provide more efficient power management over APM.

ACPI is also a key element of the Microsoft OnNow initiative, which promises to make computers more responsive. ACPI may provide more efficient power management, faster program startup and shutdown times, and quicker computer boot and shutdown to name just a few features of ACPI technology.

What is Compaq's "Near-Term" strategy for Power Management?

ACPI (Advanced Configuration and Power Interface) represents a significant innovation in power and configuration management that allows operating systems and applications to manage power based on activity and usage. Compaq worked closely with Microsoft and Intel on the implementation of ACPI, and provided Microsoft with one of the first notebook test platforms with ACPI hardware, the Armada 4200.

The Armada 4200, the Armada 7800 and the newly announced Armada 1700 and Armada 7400 are all ACPI-hardware ready. All new Armada platforms will also be ACPI-hardware ready.

Compaq remains committed to ACPI and firmly believes ACPI will become the preferred model for power and configuration management in the long term. As with introduction of any new technological innovation, it takes time for it to be adopted by the industry at large. In order to gain the full benefit of ACPI, the operating system, applications and hardware must all be ACPI aware. Windows 98 is the first ACPI-aware operating system. At this time, no ACPI-aware applications have been developed. It is also important to note that once ACPI has been enabled it is not possible to switch back to APM without reinstalling the operating system. For these reasons, Compaq anticipates that, in the near term, many customers will not want to switch from the current power management standard, APM (Advanced Power Management).

Compaq continues to work closely with Microsoft to extensively test ACPI to ensure Compaq customers get comparable battery life under ACPI as they experienced under APM. We will

release ACPI support for each Compaq platform only after we complete our testing and are comfortable with the battery performance under ACPI.

Compaq's ACPI strategy for Armada notebooks has been designed to allow customers to continue using APM until Compaq's ACPI testing is complete, then allow customers to choose for themselves the power management model that best suits their particular requirements. In order to accomplish this, for all ACPI-aware notebooks will be set up to use APM as the default power management model. Then, anytime after the initial setup, customers will be able to convert their factory installed version of Windows 98 to ACPI using an easy-to-use tool to be provided by Compaq. This tool will be available as a SoftPaq on Compaq's web site and Support Software CD.

Is Windows 98 a major upgrade to Windows 95?

Windows 98 is an evolutionary enhancement to Windows 95 that includes some new feature and support for new hardware technologies. Windows 98 features an integrated operating system and browser, faster launch and shutdown times, expanded driver support and update, updated system tools for corporate support, and troubleshooting wizards. With these enhancements, Windows 98 "works better" and "plays better" according to Microsoft. This upgrade is designed to provide the best Internet experience, deliver higher quality computing, make computing more entertaining, and unlock the power of the PC and its accessories.

Should I upgrade to Windows 98, Windows NT 4.0 or wait for Windows NT 5.0?

Windows NT is the operating system of choice for many commercial users. That said, Windows 98 may still be appropriate for other commercial users who require new features or hardware support in Windows 98, but who have decided against Windows NT in the near term. Compaq is committed to supporting Windows 98 on the Armada family of notebooks. This commitment is based on the premise that customers should be able to choose the operating system that is most appropriate for them and rest assured that Compaq will support their decision.

What is the next step for Microsoft on Consumer OS Platforms?

Windows 98 is to be the last development for the Windows 9x line. Microsoft has stipulated that the next development beyond the Windows 9x line will utilize NT technologies. Compaq will continue to support Windows 95 and Windows 98 on the Armada family of notebooks for the foreseeable future.

What features are supported under Microsoft Windows 95 OSR1?

Compaq only supports those hardware features inherently supported under Windows 95 OSR1. New types of hardware supported under Windows 95 OSR2, such as 32-bit CardBus PC Cards, cannot be supported under Windows 95 OSR1. For customers who require access to the latest hardware functionality it is recommended that they keep the version of Windows 95 OSR2 preinstalled by Compaq.

Why is OS/2 Warp not supported on the Armada 1500 family?

OS/2 Warp is supported on the Armada 7000 and Armada 4100 families. For Compaq customers using OS/2 on portable platforms, these products offer performance and mobility features that are better suited to an OS/2 environment than the Armada 1500 family.

Does IBM offer support for OS/2 Warp on Compaq portable products?

Yes, IBM does offer support for OS/2 on Compaq portable products. Customers with questions that relate to specific IBM OS/2 upgrades, enhancements or patches should contact IBM directly.

For questions about enabling basic hardware functionality inherently supported by OS/2 Warp 3.0 or questions regarding Compaq software deliverables for OS/2 Warp 3.0, customers should contact Compaq Customer Service & Support.

Does Compaq support UNIX on any portable platforms?

Compaq does not support any version of UNIX on its portable computers. Customers who wish to use UNIX on a Compaq portable should contact the operating system vendor directly for support.