NEXTSTEP RELEASE 3.2 FOR INTEL PROCESSORS HARDWARE COMPATIBILITY GUIDE



NEXTSTEP DEVICE SUPPORT OVERVIEW

	This document describes in general terms the types of PC-compatible hardware that is supported by NEXTSTEP Release 3.2 for Intel Processors. This guide is divided into three general sections:
	 Certified Systems - These are PC-compatible systems that have been thoroughly tested by NeXT for the highest level of compatibility with NEXTSTEP.
	 Listed Systems - These are PC-compatible systems that have been tested by a third party and reported to be compatible with NEXTSTEP.
	 Other Devices and Adapters - This section lists various devices, adapters and peripherals that have been tested with NEXTSTEP, or reported to be compatible with NEXTSTEP.
	Please refer to the specific section for details on testing, compatibility and support of any of the listed items.
	Each of these sections refers to specific NeXTanswers documents available for some listed items. To ensure the greatest possible compatibility and support, NeXT recommends reviewing any available NeXTanswers document before purchase.
TABLE OF CONTENTS	Systems Requirements
	Certified Systems
	Listed Systems
	Other Devices and Adapters
	NeXTanswers [™] : This guide and many other kinds of information are available from NeXTanswers, NeXT's free information-retrieval system. For NeXTanswers documents by fax, call (415) 780-3990 from a touch-tone phone. For NeXTanswers by Internet mail, send e-mail to nextanswers@next.com with the two-word subject: INDEX HELP.
	Driver Updates: NeXT and third parties continuously develop and enhance drivers for NEXTSTEP. New drivers or updates to existing drivers can be downloaded from the Internet via e-mail or ftp. NeXTanswers provides an easy method to obtain drivers by e-mail. As described above, follow the instructions for obtaining a document via return e-mail. (Note: You must be able to receive NeXT Mail in order to receive a driver through e-mail) To obtain drivers by ftp, use ftp to access ftp.next.com, log in as 'anonymous' with any password and cd to pub. In that directory, there is a README file that explains how to download drivers and other NeXTanswers information. The drivers are located under NeXTanswers/Files/ Drivers. If you have any further questions about how to obtain a Driver Update contact NeXT Technical Support at 1-800-955-NeXT.
	For current device support, please request the latest edition of this NEXTSTEP Hardware Compatibility Guide from NeXTanswers or by calling 1-800-TRY-NeXT (or your local NeXT representative).
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OVERVIEW

GENERAL REQUIREMENTS FOR DESKTOP SYSTEMS

СРU	i486 [®] -based or Pentium [™] -based PC Systems using processors without a coprocessor, or upgrade to a 486 or	a built-in floating-point coprocesso	EP requires a floating-point coprocessor. r require an add-on floating-point tt support.
EXPANSION BUS	ISA, EISA, VL-Bus or PCI expansio	n bus.	
AVAILABLE HARD DISK SPACE		lisk. Larger local disks are recomm	er to install and boot several operating nended for stand-alone systems or for
	User Environment 120 MB partition	on minimum, 200 MB recommend	ed for stand-alone systems.
	User + Developer Environments	330 MB partition minimum, 400 N	1B recommended.
RAM REQUIREMENTS	RAM requirements vary depending	upon your selection of graphics a	dapter and imaging model.
	Graphics System / Imaging Model	Minimum RAM Required	Recommended RAM
	32-bit color	24 MB	32 MB
	16-bit color	16 MB	24 MB
	8-bit grayscale	12 MB	16 MB
	2-bit grayscale	8 MB	12 MB
GRAPHICS ADAPTERS	See the "Graphics" section in this g	uide for details on graphics suppo	rt.
DISK INTERFACES	IDE and several SCSI hard disk inte	erfaces are supported.	
	Note: A SCSI adapter and SCSI CE	ROM are required for installation	of NEXTSTEP.
POINTING DEVICES	Microsoft [®] - and Logitec [®] - compatib	le PS/2 [®] and serial mice. Logitec	bus mouse.
PRINTERS			g the NeXT Color Printer (connected via cript Level II for proper color support.
NETWORKING	Several Ethernet and Token Ring n	etworking adapters are supported	. A networking adapter is optional.
SOUND	NEXTSTEP can support certain PC	sound cards for both playback ar	nd recording. A sound card is optional.

OVERVIEW

GENERAL REQUIREMENTS FOR PORTABLE SYSTEMS

CPU	coprocessor. Systems using	ased PC compatible portable computer. I g processors without a built-in floating-poi or upgrade to a 486 or Pentium with built-	nt coprocessor require an add-on
AC-POWERED PORTABLES	AC-powered portables requ ROM.	ire at least one ISA or EISA slot for a SCS	SI adapter to install NEXTSTEP from CD-
BATTERY-POWERED PORTABLES AND DOCKING STATIONS		require a docking station with at least one D-ROM drive. Once NEXTSTEP is install	
AVAILABLE HARD DISK SPACE		ble partitioned hard disks, allowing the use al hard disk. Larger local disks are recome EXTSTEP partition.	
	User Environment 120 M	3 partition minimum, 200 MB recommend	led for stand-alone systems.
	User + Developer Environ	ment 330 MB partition minimum, 400 M	B recommended.
RAM REQUIREMENTS	RAM requirements vary de	pending upon the user's selection of grap	hics adapter.
	Graphics System	Minimum RAM Required	Recommended RAM
	32-bit color	24 MB	32 MB
	16-bit color	16 MB	24 MB
	8-bit grayscale	12 MB	16 MB
	2-bit grayscale	8 MB	12 MB
		olor and 8-bit grayscale support require Lo portables with EISA slots can support 32	
GRAPHICS ADAPTERS	NEXTSTEP requires for col grayscale at 640 x 480. Acti ISA systems (AC-powered	in popular portable PC-compatibles does or or 8-bit grayscale. Therefore, NEXTST ve matrix or plasma panels are recomme or through a docking station) can support k-based AC-powered portables can support cs adapter.	EP supports these systems with 2-bit nded for better cursor tracking response. add-on, high-resolution 2-bit grayscale
DISK INTERFACES		n SCSI hard disk interfaces are supported	d. Battery-powered portables require a
	Note: A SCSI adapter and S	SCSI CDROM are required for installation	of NEXTSTEP.
POINTING DEVICES	Microsoft- and Logitec-com	patible PS/2 and serial mice are supporte	ed.
PRINTERS		ected via a serial or parallel port, including nends color PostScript printers with PostS	
NETWORKING		etworking adapters are supported. Battery g adapter. A networking adapter is option	
SOUND		rtain PC sound cards for both playback a install a sound card. A sound card is opti	

TABLE LEGEND	Ð																				
Vondor Model			0							0		Mode								Co#DC	*
	Bus -		Architecture	2-bit Grayscale	ale		8-bit Grayscale	scale		-	16-bit Col	16-bit Color					32-bit Color				
				640 x 10: 480 7	1024 x 800 x 768 600	x 1024 x) 768	x 1120 x 832	x 1280 x 1024	< 1600 x 1200	800 x 600	1024 x 768	1120 x 832	1280 x 1024	1600 x 1200	800 x 600	1024 x 768	1120 x 832	1280 x 1024	1600 x 1200	Mode	
VENDOR	Vendor, n	nanufac	turer, or sys	Vendor, manufacturer, or system provider	<u>.</u>																
MODEL	Model nu	mber or	name of s	Model number or name of system or series of systems tested with NEXTSTEP.	ies of sys	stems te	sted wit	h NEXT:	STEP.												
EXPANSION BUS	Standard	expans	ion buses s	Standard expansion buses supported. ISA, EISA, VL-Bus (VESA LocalBus), and PCI. Note: EISA si	SA, EISA,	, VL-Bu	; (VESA	LocalB	us), and I	°CI. Not	e: EISA	system	ystems are compatible with ISA add-on cards.	ompatib	le with I	SA add	on carc	<u>Is</u>			
CPU	Available	CPUs (Available CPUs (i486 or Pentium).	ntium).																	
GRAPHICS ARCHITECTURE	Graphics graphics	architec adapter	cture of the s, see "NE)	Graphics architecture of the built-in or add-on graphics adapter. Includes interface (LocalBus, VL-Bus, PCI, EISA) and graphics controller. For systems tested with add-on graphics adapters, see "NEXTSTEP for Intel Processors Graphics" in this guide for additional information on supported adapters.	ld-on gra	phics ac	lapter. Ir Graphic	ncludes s" in this	interface s guide fo	(LocalBi r additio	us, VL-E nal infor	Bus, PCI mation of	, EISA) on supp	and gra	aphics c dapters	ontrolle	r. For sy	stems	tested wi	th add-c	Я
SUPPORTED GRAPHICS MODES	Supporte required t	d resolu	ition of the I ort that resc	Supported resolution of the built-in or add-on graphics adapter. Gray areas indicate supported resolution required to support that resolution. In some cases, additional numbers indicate a specific supported	d-on grap me cases	ohics ad s, additic	apter. G onal nun	ray area nbers inc	as indicate dicate a s	e suppo	ted result		and nui Ition.	nber in	dicates	video fra	ame but	ffer size	utions and number indicates video frame buffer size (in megabytes) resolution.	abytes)	
SoftPC FULL-SCREEN MODE	Insignia's S=Suppo NS=Not s If this ent	SoftPC rted; thi supporte ry is left	will run in ; s configura ad; this con blank, Nex	Insignia's SoftPC will run in a seperate window on all supported configurations. For maximum performance, you can flip SoftPC into full-screen mode S=Supported; this configuration has been verified by NeXT to support SoftPC in full-screen mode. NS=Not supported; this configuration has been verified by NeXT not to support SoftPC in full-screen mode. If this entry is left blank, NeXT has not verified this configuration to support SoftPC in full-screen mode.	in verified so verified so been ve	1 all sup 1 by Ne) erified b s config	ported c (T to sup y NeXT uration t	onfigura oport So not to su	utions. Fo httPC in fu upport Sc rt SoftPC	r maxim III-scree oftPC in tull-s	um perfi n mode. full-scre creen m	ormance en mode ode.	e, you c	an flip S	oftPC i	nto full-	screen r	node.			
Nextanswer Document Number	NeXTans	wer Doc	cument Nur	NeXTanswer Document Number providing detailed setup and configuration information	ng detaile	9d setup	and co	nfiguratio	on inform	ation.											
NEXTSTEP CERTIFIED SYSTEMS OVERVIEW	In order to e NEXTSTEP * Each spec * A detailed * Because o * A system p specific cert	EP. EP. ecific sy ed NeX e of the ertified of	In order to ensure the highest I NEXTSTEP. * Each specific system configu * A detailed NeXTanswer supp * Because of the detailed inform * Because of the detailed inform * A system platform is loosely is specific certified configuration.	In order to ensure the highest level of compatibility and support, NeXT has developed a process to comprehensively test specific PC-Compatible system configurations with NEXTSTEP. * Each specific system configuration has been subjected to a suite of compatibility tests by the NeXT Quality Assurance group. * A detailed NeXTanswer support document is available listing the specific configuration tested, and any setup information required to configure the system for NEXTSTEP * Because of the detailed information available to customers and NeXT's Customer Support personnel, NeXT delivers the best technical support on certified configurations * A system platform is loosely referred to as "certified" if it has one or more certified configurations, but all the benefits of certification are available only to users of the specific certified configuration.	npatibility been su nent is av ailable to as "certi	/ and su bjected ailable li custom fied" if it	pport, N to a suit sting the ers and has one	eXT has e of con e specific veXT's v veXT's or mor	s develop npatibility c configu Custome e certifiec	ed a pro tests by ration te: r Suppo d configu	cess to the Ne sted, an rt person rt person	comprei KT Qual Any se nnel, Ne but all t	nensive ity Assu ≱tup infc XT deli he ben	ly test s Irance (Irrnation ormation Wers the sfits of c	pecific F group. n requir best te	°C-Com ed to co chnical ion are	patible nfigure support availabl	system the sys on cer	Imprehensively test specific PC-Compatible system configurations with F Quality Assurance group. any setup information required to configure the system for NEXTSTEP, lel, NeXT delivers the best technical support on certified configurations. ut all the benefits of certification are available only to users of the	ations w JEXTST figuratic of the	
	* Only the specific revisic NeXTanswer to ensure the * NeXT certification does for the latest information.	 specifi wer to e ertificati est infor 	c revisions insure the s on does no mation.	* Only the specific revisions of a system unit and its add-on cards listed in the NeXTanswer are certified. Always refer to the latest version of this guide, and the associated NeXTanswer to ensure the specific version of a system is fully certified by NeXT. * NeXT certification does not necessarily mean "error free". Certified systems may contain detected or undetected compatibility problems, please refer to the NeXTanswer for the latest information.	unit and i on of a sy / mean "e	its add-c /stem is 9rror free	on cards fully ce 9". Certif	ilisted ir rtified by ïed syst	1 the NeX 1 NeXT. ems may	contain	r are cei detecte	tified. A d or unc	lways re letectec	efer to the standard company	ne lates atibility p	t versio problem	n of this s, pleas	guide, e refer	ied. Always refer to the latest version of this guide, and the associated or undetected compatibility problems, please refer to the NeXTanswer	associat)XTansv	/er
NEXTSTEP Hardware Compatibility Guide: Release 3.2 for Intel Processors	npatibility (Guide : 1	Release 3.2	2 for Intel P	rocessor	<i>S</i> .		R	Revised: September 27, 1994	Septemb	er 27, i	994									ω

Certified Desktop Systems

NEXTSTEP Hardware Compatibility Guide: Release 3.2 for Intel Processors

Revised: September 27, 1994

. To contact NeXTanswers, see page one (1) for instructions.

When considering a complete system or add-on card, please refer to any available NeXTanswers before purchasing equipment

Vendor	Model	Expansion	СРИ	Graphics								Supporte	Supported Graphics Modes	s Modes									and the second division of the second divisio
refer to footnote					2-bit Grayscale	nyscale		8-b	8-bit Grayscale	æ			_	16-bit Color				<u>د</u>	32-bit Color			Somec	-
below 1,2					640 x 480	1024 x 768	800 x	1024 x 768	1120 x 832	1280 x 1024	1600 x 1200	800 x	1024 x 768	1120 x 832	1280x 1024	1600 x 1200	640x 480	600 x	1024x 768	1120x 832	1280x 1024	Screen Mode	NA #
Canon	object.station 41	VL-Bus ISA	486 DX4	LocalBus Wingine				2MB	2MB	2MB	2MB 1152x 900	2MB	see NA	2MB	2MB 1152x 900		2MB	2MB				S	1683
COMPAQ	XE 466	ISA	486	LocalBus QVision			2MB	2MB		2MB		2MB	2MB				2MB					S	1671
	XE 560	ISA	Pentium	LocalBus QVision			2MB	2MB		2MB		2MB	2MB				2MB					SN	1672
DEC	XL 560	ISA PCI	Pentium	PCI Diamond Viper PCI			1MB	1MB	1MB 1152x 900	2MB	2MB	1MB	2MB	2MB 1152x 900			2MB	2MB				SN	1559
	XL 590	ISA PCI	Pentium	PCI	Planned t	Planned for certification by NeXT Computer, Inc for NEXTSTEP 3.3 ONLY	tion by Ne	XT Comp	uter, Inc fo	or NEXTS	TEP 3.3 O	NLY											
	XL EISA Server 66,90 MHz	EISA PCI	Pentium	PCI	Planned f	Planned for certification by NeXT Computer, Inc for NEXTSTEP 3.3 ONLY	tion by Ne	XT Comp	uter, Inc fo	or NEXTS	TEP 3.3 O	NLY											
	MTE 466d2	EISA	486	LocalBus S3-805				1MB				2MB										S	1459
	MTE 466d2	EISA	486	LocalBus S3-928				1MB		2MB		2MB	2MB		4MB			4 MB	4MB			S	1459
	LPx 466	ISA	486	LocalBus S3-805				1MB														S	1581
	LPx+ 466	ISA	486	LocalBus S3-805	Planned f	Planned for certification by NeXT Computer, Inc for NEXTSTEP 3.3 ONLY	tion by Ne	XT Comp	uter, Inc fo	or NEXTS	TEP 3.3 O	NLY											
Elonex	WS466		486		Planned f	Planned for certification by NeXT Computer, Inc for NEXTSTEP 3.3 ONLY	tion by Ne	XT Comp	uter, Inc fo	or NEXTS	TEP 3.3 O	NLY											
	WS4100		486 DX4		Planned f	Planned for certification by NeXT Computer, Inc for NEXTSTEP 3.3 ONLY	tion by Ne	XT Comp	uter, Inc fo	or NEXTS	TEP 3.3 O	NLY											
HEWLETT PACKARD	Vectra XM-Series	ISA	486	LocalBus S3-928				1MB		2MB		2MB	2MB									S	1464
	Vectra XP- Series	ISA PCI	Pentium	LocalBus S3-928			2MB	2MB	2MB 1152x 819	2MB	2MB	2MB	2MB	2MB 1152x 819	4MB		2MB	2MB	4MB			S	1665
	XM2				Planned t	Planned for certification by NeXT Computer, Inc., for NEXTSTEP 3.3 ONLY	tion by Ne	XT Comp	uter, Inc.,	for NEXTS	STEP 3.3 (VINC											

Certified Desktop Systems PC MANUFACTURERS

Certified Desktop Systems (continued)

Vendor

Model

Expansion CPU Bus

Graphics Architecture

Supported Graphics Modes

		B.		Architecture								:										,	
refer to footnote		tuo			2-bit Grayscale	ayscale		8	8-bit Grayscale	ale				16-bit Color	эr				32-bit Color	Уľ		Full-	
below 1,2					640 x 480	1024 x 768	800 x 600	1024 x 768	1120 x 832	1280 x 1024	1600 x 1200	800 x 600	1024 x 768	1120 x 832	1280x 1024	1600 x 1200	640x 480	800x	1024x 768	1120x 832	1280x 1024	Screen Mode	NA#
Intel	Premiere	ISA	Pentium	LocalBus	Planned	Planned for certification by NeXT Computer, Inc.	ation by N	eXT Com	puter, Inc.														
		PCI		ATI 68800																			
	Premiere	ISA	Pentium	LocalBus	Planned	Planned for certification by NeXT Computer, Inc.for NEXTSTEP 3.3 ONLY	ation by N	eXT Com	puter, Inc.f	for NEXTS	STEP 3.3 (NILY											
		PCI		CirrusLogic 5434																			
NEC	Image 466es	VL-Bus	486	LocalBus			1MB	1MB	2MB	2MB		1MB	2MB									S	1466
		ISA		ET4000 W32i									interla ced										
	Image 4100es	VL-Bus ISA	486 DX4	LocalBus ET4000 W32i	Planned	Planned for certification from NeXT Computer, Inc.	ation from	NeXT Co	mputer, In	<u>,</u>											·		
	PowerMate	VL-Bus ISA	486	LocalBus Wingine	Planned	Planned for certification from NeXT Computer, Inc. for NEXTSTEP 3.3 ONLY	ation from	NeXT Co	mputer, In	c. for NEX	(TSTEP 3	.3 ONLY											
	Express/II P60ST	EISA PCI	Pentium	Diamond Viper PCI 2MB VRAM			1MB	1MB		2MB	2MB	1MB	2MB	2MB 1152x 900			2MB	2MB				S	1467

Certified Portable Systems

TABLE LEGEND

Vendor	Model	Power Source	Built-in Panel Type	Built-in Expan- sion	Docking Station Expansion	CPU	Max DISK/ RAM	Supp	oorted Grap 2-bit Gra		ution	NeXTanswer Document Number
								Built-in Panel	Ext	ernal Moni	tor	
								640 x 480	640 x 480	800 x 600	1024 x 768	

VENDOR	Vendor, manufacturer, or system provider.
MODEL	Model number or name of system (or series of systems) tested with NEXTSTEP.
POWER SOURCE	Standard power source: AC or battery.
BUILT-IN PANEL TYPE	Built-in display panel technology: passive matrix, active matrix, or plasma.
BUILT-IN EXPANSION	For AC-powered portables: Fax/Modem, etc., + ISA or EISA slots. For battery-powered portables: Fax/ Modem, PCMCIA, etc. This is reference information only, and does not represent supported devices.
DOCKING STATION EXPANSION	For battery-powered portables, ISA, Mass Storage (MS), Keyboard + Mouse + Monitor Port (KMM). NA indicates not applicable to AC-Powered portables.
CPU	Available CPUs (486 or Pentium).
MAX DISK/RAM	Maximum hard disk and RAM supported by this system. Contact manufacturer for current sizes supported.
SUPPORTED GRAPHICS RESOLUTION 2-BIT GRAYSCALE	Supported resolution of the built-in graphics adapter. Gray areas indicate supported resolutions. "Built-in Panel" indicates resolution supported by built-in graphics display panel. "External Monitor" indicates resolution supported by the built-in graphics adapter when connected to an external monitor.
Nextanswer Document Number	NeXTanswer Document Number providing detailed setup and configuration information
NEXTSTEP CERTIFIED SYSTEMS OVERVIEW	In order to ensure the highest level of compatibility and support, NeXT has developed a process to comprehensively test specific PC-Compatible system configurations with NEXTSTEP.
	* Each specific system configuration has been subjected to a suite of compatibility tests by the NeXT Quality Assurance group.
	* A detailed NeXTanswer support document is available listing the specific configuration tested, and any setup information required to configure the system for NEXTSTEP.
	* Because of the detailed information available to customers and NeXT's Customer Support personnel, NeXT delivers the best technical support on certified configurations.
	* A system platform is loosely referred to as "certified" if it has one or more certified configurations, but all the benefits of certification are available only to users of the specific certified configuration.
	* Only the specific revisions of a system unit and its add-on cards listed in the NeXTanswer are certified. Always refer to the latest version of this guide, and the associated NeXTanswer to ensure the specific version of a system is fully certified by NeXT.
	* NeXT certification does not necessarily mean "error free". Certified systems may contain detected or undetected compatibility problems, please refer to the NeXTanswer for the latest information.

Certified Portable Systems

PC MANUFACTURERS

	Model	Power Source	Built-in Panel Type	Built-in Expan- sion	Docking Station Expansion	CPU	Max DISK/ RAM	Supp	oorted Grap 2-bit Gr		ution	NeXTanswer Document Number
note below								Built-in Panel	Ex	ternal Moni	itor	Number
1,2,0								640 x 480	640 x 480	800 x 600	1024 x 768	
COMPAQ	LTE Lite4/25c	Battery	Active Matrix Color	Fax/Modem	ISA, MS, KMM	486SL	200/20					1472
NEC	UltraLite Versa C	Battery	Active Matrix Color	PCMCIA	ISA, MS, KMM	486SL	340/20					1477

Listed Desktop Systems

TABLE LEGEND

		Vendor
		Model
	1	Expansion Bus
		CPU
		Graphics Architecture
640 x 480	2-bit Gra	
1024 x 768	yscale	
800 x		
1024 x 768	8-	
1120 x 832	8-bit Grayscal	
1280 x 1024	ale	
1600 x 1200		
600 x		Gn
1024 x 768	-1	Graphics Mode
1120 x 832	16-bit Color	les
1280 x 1024		
1600 x 1200		
800 x		
1024 x 768	63	
1120 x 832	32-bit Color	
1280 x 1024	-	
1600 x 1200		
		Release
Mode	Screen	SoftPC Full-
		NA #

VENDOR	Vendor, manufacturer, or system provider.
MODEL	Model number or name of system or series of systems tested with NEXTSTEP.
EXPANSION BUS	Standard expansion buses supported. ISA, EISA, VL-Bus (VESA LocalBus), and PCI. Note: EISA systems are compatible with ISA add-on cards.
CPU	Available CPUs (1486 or Pentium).
GRAPHICS ARCHITECTURE	Graphics architecture of the built-in or included graphics adapter. Includes interface (LocalBus, VL-Bus, PCI, EISA) and graphics controller. For systems tested with add-on graphics, see "Graphics" in this guide for choice of supported adapters.
GRAPHICS MODES	The resolution of the built-in or included graphics adapter. Gray areas indicate supported resolutions and number indicates video frame buffer size (in megabytes) required to support that resolution. "Built-in VGA" indicates resolution supported by built-in standard VGA graphics; higher resolution support may require an add-on graphics adapter.
RELEASE TESTED	The Release of NEXTSTEP for Intel Processors used to test this system.
SoftPC FULL-SCREEN MODE	Insignia's SottPC will run in a seperate window on all supported configurations. For maximum performance, you can flip SottPC into full-screen mode. S=Supported; This configuration has been reported to support SottPC in full-screen mode. If this entry is left blank, this configuration has not been reported to support SottPC in full-screen mode.
NA #	NeXTanswer Document Number providing detailed setup and configuration information.
NEXTSTEP LISTED SYSTEMS OVERVIEW	Listed systems are those whose NEXTSTEP compatibility has been reported by a third party, not determined by NeXT's Quality Assurance department. NeXT lists these systems for informational purposes only, as a convenience to our customers. NeXT does not warrant or monitor the accuracy or completeness of the information provided on Listed systems.

NEXTSTEP Hardware Compatibility Guide: Release 3.2 for Intel Processors

2. A SCSI adapter and SCSI CDROM are required for installation of NEXTSTEP.

To cor		LAN Co Service			JCIS	ne invi require a Adapted in order NEXTS	IBM Please	Dell			Data Net		CONTI	AST	below 1,2	refer to footnote	Vendor
ntact NeXTa	.ight re	LAN Computer Services, Inc.				require an Adaptec 1542B In order to install NEXTSTEP 3.2	IBM Please note that				역		CONTINENTAL			footnote	
g a complete sy answers, see pa	ST486NX	Micro Intl. G.A-486TA	JC/NX 480/2C	JC/NX 466/2N	JC/NX 466/2C		6472-xxx 6482-xxx 6492-xxx	OptiPlex MXV Series	Eclipse 850e	Eclipse 850e	Eclipse 535e	3800 NeXT ISA	3800 NeXT EISA	Premmia 4/d			Model
age one (1) for	ISA VL-Bus	EISA VL-Bus	ISA VL-Bus	ISA VL-Bus	ISA VL-Bus	ISA VL-Bus	ISA VL-Bus	ISA VL-Bus	ISA PCI	ISA VL-Bus	ISA VL-Bus	ISA VL-Bus	EISA VL-Bus	EISA			Expansion Bus
r instruction	486	486	486	486	486	486 DX/33	486 DX2	486	P54C	Pent.	486	486	486	486			CPU
when considering a complete system or add-on card, please refer to any available Nex Tanswers before purchasing equipment. To contact NeXTanswers, see page one (1) for instructions.	ATI Graphics Ultra Pro	VL-Bus ATI Ultra Pro	C&T Wingine	C&T Wingine	C&T Wingine	VL-Bus Number 9 GXE -Level 12	VL-Bus Number 9 GXE- Level 12	Number 9 GXE Level 12	Diamond Stealth 64	Number 9 GXE Level 12	Number 9 GXE Level 11	VL-Bus ATI 68800	VL-Bus ATI 68800	LocalBus ATI 68800			Graphics Architecture
' avallable	-														640 x 480	2-bit Grayscale	
NeXiansw															1024 x 768	iyscale	
iers beiore	-														800 x		
purchasin	-														1024 x 768	8-bi	
ng equipme															1120 x 832	8-bit Grayscale	
ant.															1280 x 1024		
															1600 x 1200		
												1MB	1MB	1MB	600 x		Grap
		2MB	2MB	2MB	2MB	2MB	2MB	2MB	4MB	2MB	2MB	2MB	2MB		1024 x 768	16-	Graphics Modes
	2MB														1120 x 1 832	16-bit Color	
															1280x1 1 024		
1															1600 x 8 1200		
															800 x 10 600		
-															1024 x 1120 x 768 832	32-bit Color	
															x 1280 x 1024	olor	
															x 1600 x 1200		
-	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2			Release
												ა	s	S	Mode		
	1569	1663				1612	1611	1462	1673	1571	1572					_	NA#

Listed Desktop Systems PC MANUFACTURERS

Revised: September 27, 1994

Listed Portable Systems

TABLE LEGEND

Vendor	Model	Power Source	Built-in Panel Type	Built-in Expan- sion	Docking Station Expansion	CPU	Max DISK/ RAM	Graphics Resolution 2-bit Grayscale			NeXTanswer Document Number	
								Built-in Panel	External Monitor			
								640 x 480	640 x 800 x 1024 x 480 600 768			

VENDOR	
VENDOR	Vendor, manufacturer, or system provider.
MODEL	Model number or name of system (or series of systems) tested with NEXTSTEP.
POWER SOURCE	Standard power source: AC or battery.
BUILT-IN PANEL TYPE	Built-in display panel technology: passive matrix, active matrix, or plasma.
BUILT-IN EXPANSION	For AC-powered portables: Fax/Modem, etc., + ISA or EISA slots. For battery-powered portables: Fax/ Modem, PCMCIA, etc. This is reference information only, and does not represent supported devices.
DOCKING STATION EXPANSION	For battery-powered portables, ISA, Mass Storage (MS), Keyboard + Mouse + Monitor Port (KMM). NA indicates not applicable to AC-Powered portables.
CPU	Available CPUs (i486 or Pentium).
MAX DISK/RAM	Maximum hard disk and RAM supported by this system. Contact manufacturer for current sizes supported.
GRAPHICS RESOLUTION 2-BIT GRAYSCALE	The resolution of the built-in graphics adapter. Gray areas indicate supported resolutions. "Built-in Panel" indicates resolution supported by built-in graphics display panel. "External Monitor" indicates resolution supported by the built-in graphics adapter when connected to an external monitor.
NeXTANSWER DOCUMENT NUMBER	NeXTanswer Document Number providing detail setup and configuration information.
NEXTSTEP LISTED SYSTEMS OVERVIEW	<i>Listed</i> systems are those whose NEXTSTEP compatibility has been reported by a third party, not determined by NeXT's Quality Assurance department. NeXT lists these systems for informational purposes only, as a convenience to our customers. NeXT does not warrant or monitor the accuracy or completeness of the information provided on <i>Listed</i> systems.

Listed Portable Systems

PC MANUFACTURERS

Vendor	Model	Power Source	Built-in Panel Type	Built-in Expan- sion	Docking Station Expansion	CPU	Max DISK/ BAM			Resolution ayscale		NeXTanswer Document Number	
Refer to foot- note below 1,2,3								Built-in Panel			tor		
-,_,_								640 x 480	640 x 480	800 x 600	1024 x 768		
AST	PowerExec 4SL	Battery	Passive Mono or Color	Fax/Modem	ISA, MS, KMM	486SL	200/32						
	PowerExec 4SL	Battery	Active Matrix Mono	Fax/Modem	ISA, MS, KMM	486SL	200/32						
COMPAQ	Portable 486/M	AC	Passive Matrix Mono	Fax/Modem EISA	NA	486	525/32						
	Portable 486/C	AC	Active Matrix Color	Fax/Modem EISA	NA	486	525/32						
NEC	Prospeed 486C	AC	Active Matrix Color	Fax/Modem EISA	NA	486SX	200/20						
	UltraLite Versa M	Battery	Passive Matrix Mono	PCMCIA	ISA, MS, KMM	486SL	340/20					1477	
TOSHIBA	T6400DX	AC	Passive Mono or Plasma	Fax/Modem ISA	NA	486	200/32					1116	
	T6400DXC	AC	Active Matrix Color	Fax/Modem ISA	NA	486	200/32					1116	
	T4400SX	Battery	Passive Mono or Plasma	Fax/Modem	ISA, MS, KMM	486SX	120/20						
	T4400SXC	Battery	Active Matrix Color	Fax/Modem	ISA, MS, KMM	486SX	120/20						
	T4400C	Battery	Active Matrix Color	Fax/Modem	ISA, MS, KMM	486	200/20						

1. When considering a complete system or add-on card, please refer to any available NeXTanswers before purchasing equipment. To contact NeXTanswers, see page one (1) for instructions.

- 2. A SCSI adapter and SCSI CDROM are required for installation of NEXTSTEP.
- 3. A docking station, SCSI adapter and SCSI CDROM are required for installation of NEXTSTEP.

NEXTSTEP's Display Postscript graphics system supports such advanced capabilities as scalable fonts, unified imaging model for both screen display and printing, image transparency (also known as alpha channel), Pantone color matching, and Pixar Interactive Renderman 3D imaging.

NEXTSTEP's window server composites multiple layers of images, and allows the user to work with images of any quality with any supported imaging model, in other words users can work with a 32-bit color image even on a 2-bit grayscale system!

In order to provide these sophisticated capabilities NEXTSTEP requires a "workstation"-style linear frame buffer graphics system and a high performance 32-bit data path to the frame buffer. The number of colors or shades of gray, depth of transparency, etc., varies depending on the image model supported.

Imaging Model	Colors or Shades of Gray	Transparency (alpha channel)
32-bit color	24-bit (16M colors)	8-bit (256 levels)
16-bit color	12-bit (4,096 colors)	4-bit (16 levels)
8-bit grayscale	8-bit (256 shades of gray)	8-bit (256 levels)
2-bit grayscale	2-bit (4 shades of gray)	2-bit (4 levels)

	Overview NEXTSTEP supports 32-bit color on a variety of graphics controller chips that support linear frame buffer access. Due to the performance requirements of 32-bit color, these graphics adapters must be connected via LocalBus, VESA LocalBus (VL-Bus), PCI or EISA. The ISA expansion bus does not provide the 32-bit data path, or adequate performance to support NEXTSTEP 32-bit color. Refer to the Desktop Systems and Add-on Graphics Adapter charts for specific adapter support.
16-BIT COLOR	Overview NEXTSTEP supports 16-bit color on a variety of graphics controller chips that support linear frame buffer access. Due to the performance requirements of 16-bit color, these graphics adapters must be connected via LocalBus, VESA LocalBus (VL-Bus), PCI or EISA. The ISA expansion bus does not provide the 32-bit data path, or adequate performance to support NEXTSTEP 16-bit color. Refer to the Desktop Systems and Add-on Graphics Adapter charts for specific adapter support.
8-BIT GRAYSCALE	Overview NEXTSTEP supports 8-bit grayscale on a variety of graphics controller chips that support linear frame buffer access. Due to the performance requirements of 8-bit grayscale, these graphics adapters must be connected via LocalBus, VESA LocalBus (VL-Bus), PCI or EISA. The ISA expansion bus does not provide the 32-bit data path, or adequate performance to support NEXTSTEP 8-bit grayscale. Refer to the Desktop Systems and Add-on Graphics Adapter charts for specific adapter support.
2-BIT GRAYSCALE	Overview NeXT has developed a special driver that simulates the linear frame buffer required by NEXTSTEP's graphics system on segmented frame buffer graphics adapters such as standard VGA and Super VGA cards. This allows NEXTSTEP to support most standard VGA cards as well as certain Super VGA cards. Refer to the Desktop Systems and Add-on Graphics Adapter charts for specific adapter support. These graphics adapters can be connected via LocalBus, VESA LocalBus (VL-Bus), PCI, EISA or ISA.

Other	
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		Graphics Controller Vendor I	
		Model	
		Expansion Bus/Interface	
640 x 480	2-bit Gra		
1024 x 768	ayscale		
800 x			
1024 x 768	8-bit Grayscale 16-bit Colo		
1120 x 832		bit Graysc	
1280 x 1024			
1600 x 1200			
800 x		Gra	
1024 x 768		Graphics Resolution	
1120 x 832		16-bit Colc	olutions
1280 x 1024	4		
1600 x 1200			
800 x			
1024 x 768			
1120 x 832	32-bit Colo		
1280 x 1024	bit Color		
1600 x 1200			
		Driver Name	
		Avail	
		NA #	
	_		

GRAPHICS CONTROLLER	Graphics controller used by the add-on graphics adapter.
VENDOR	Vendor, manufacturer, or system provider of the graphics adapter.
MODEL	Model number or name of the add-on adapter.
EXPANSION BUS/ INTERFACE	Expansion Bus or Interface used by this graphics adapter: LocalBus, VL-Bus (VESA Standard LocalBus), PCI, ISA, or EISA.
GRAPHICS RESOLUTIONS	The resolution of the graphics adapter. Gray areas indicate supported resolutions and number indicates video frame buffer size (in megabytes) required to support that resolution.
DRIVER NAME	Name of graphics driver used by NEXTSTEP for Intel Processor' Configure application (Video Devices section).
Avail.	Availability indicates the current distribution status of any device driver. <i>CD-ROM</i> - indicates this driver is included on the latest release of NEXTSTEP for Intel Processors CD-ROM disc; <i>Planned</i> - Indicates this driver is planned by NeXT or a 3rd party (if available an approximate date is given for availability of the driver); <i>Avail.</i> - Indicates this driver is available from either NeXT or a 3rd party. For drivers available from NeXT, see page 1 for distribution of driver updates.
SoftPC FULL-SCREEN MODE	Insignia's SoftPC will run in a seperate window on all supported controllers. For maximum performance, you can flip SoftPC into full-screen mode. S=Supported; this controller has been verified by NeXT to support SoftPC in full-screen mode. NS=Not supported; this controller has been verified by NeXT not to support SoftPC in full-screen mode. If this entry is left blank, NeXT has not verified this controller to support SoftPC in full-screen mode.
NA #	NeXTanswer Document Number providing detailed setup and configuration information.
APPROVED	An add-on adapter or peripheral is said to be <i>approved</i> when it has been tested as a component of one or more NeXT certified configurations. Note that one piece of approved hardware may be incompatible with another; to ensure compatibility, chose a certified configuration and review any available NeXTanswers.

Other Devices and Adapters
rs - Graphics

GRAPHICS ADAPTERS

1. When considering a complete system or add-on card, please refer to any available NeXTanswers before purchasing equipment <i>NEXTSTEP Hardware Compatibility Guide: Release 3.2 for Intel Processors</i>	STANDARD VGA	TSENG LABS ET-4000 W32i	TSENG LABS ET-4000 AX	JAWS	Cirrus Logic 5434	CIRRUS LOGIC GD542X			COMPAQ QVISION	Canon	ATI 88800GX		ATI 68800 AX		ATI 68800 Rev 3, 6		see tootnote 1	Graphics Controller				
a complete sy ⁵ Hardwar	Various	Several		DELL		STB	Compaq	Compaq	Compaq	Canon	ATI	ATI	ATI	ATI	ATI			Vendor				
stem or add-or e Compati	Various	Several		450DE/2 DGX		Horizon	Qvision 1280?E Update	QVision 1280/E	QVision 1024/E	Wingine		Intel Premiere on-board		Graphics UltraPro EISA	Graphics UltraPro VL-Bus			Model				
n card, please bility Gui	ISA	VL-Bus	ISA	LocalBus		ISA	EISA	EISA	EISA	LocalBus	VL Bus	LocalBus	VL-Bus, PCI	EISA	VL-Bus		Interface	Expansion Bus /				
refer to a de:Re		See rea			See rea		Update				See re		See rea			640 x 480	2-bit Gr					
any availe <i>Lease</i>		adme file included	.5 MB		adme file	.5 MB) will supp				adme file		adme file			1024 × 768	2-bit Grayscale					
ble NeXT 3.2 for			included w			included		ort AT&T				included	1MB	included			800 x					
answers t Intel P		with the d			with the d		RAMDAC	1MB	1 MB	2MB	with the d	1MB	with the d	1MB	1MB	1024 x 768						
pefore pur		river or a t			river or a t		C. See rea			2MB	river or a t	1MB	river or a t			1120 x 832	8-bit Grayscale					
chasing e		future vers			future vers		dme file ir	2MB		2MB	future vers	2MB	future vers	2MB	2MB	1280 x 1024	cale					
quipment.		See readme file included with the driver or a future version of this guide for supported modes	sion of this guide for	sion of this guide for :	sion of this guide for s	sion of this guide for			See readme file included with the driver or a future version of this guide for supported modes		ncluded wi			2MB 1152x 900	See readme file included with the driver or a future version of this guide for supported modes		See readme file included with the driver or a future version of this guide for supported modes			1600 x 1200		
							guide for	; guide for	guide for			guide for		th the driv	1MB	1MB	2MB	guide for	1MB	guide for	1MB	1MB
Revis		supported			supported		er or a futu	2MB		see cert. NA	supported	2MB	supported	2MB	2MB	1024 x 768		Graphics Resolutions				
Revised: September		modes.		2MB	modes.		Update will support AT&T RAMDAC. See readme file included with the driver or a future version of this guide for supported modes			2MB	modes.	2MB	modes.	2MB Rev 6 only	2MB Rev 6 only	1120 x 832	16-bit Color	solutions				
tember							of this gu			2MB 1152x 900						1280 x 1024	<u> </u>					
27, 1994			-					ide for sup									1600 x 1200					
94							ported mo	2 MB 640 x 480		2MB	:					800 x						
							odes.			2MB						1024 x 768						
																1120 x 832	32-bit Color					
																1280 x 1024	<u></u>					
																(1600 x 1200						
	Default VGA Adapter	Tseng Labs ET4000 W32i	Tseng Labs ET- 4000	Dell Jaws DGX	Planned Q494	Cirrus Logic GDX542X		Compaq Qvision Update	Compaq Qvision	Canon object.stt ion Display driver	,	Intel Premier Display Driver		ATI Ultra Pro	ATI Ultra Pro			Driver				
	CD-ROM	Beta Avail.	CD-ROM	CD-ROM		CD-ROM	Q494	Nxt Ans.	CD-ROM	Nxt. Ans		BETA Avail.	Planned Q494	CD-ROM	CD-ROM			Avail.				
		S		s		S	BETA for 3.2			s (see Cert. NA for details)	'			v	s	Mode	Full- Screen	SoftPC				
14		1621 1622						1590 1591		1632 1674		1664		1122	1122			NA#				
1	YES	BETA	YES	YES		YES		YES	YES	YES	YES	BETA	YES	YES	YES			Appr.				

Other Devices and Adapters - Graphics (continued)

GRAPHICS ADAPTERS

Graphics Controller	Vendor	Model	Expansion								Gra	Graphics Resolutions	olutions								Driver	Avail.	0	NA #	Appr.
see footnote 1			Interface	2-bit Grayscale	ayscale		œ	8-bit Grayscale	ale				16-bit Color					32-bit Color			Name		Full- Screen		
				640 x 480	1024 × 768	800 x 600	1024 x 768	1120 x 832	1280 x 1024	1600 x 1200	800 x	1024 x 768	1120 x 832	1280 x 1024	1600 x 1200	640x 480	800x	1024x 768	1120x 832	1280x 1024			Mode		
S3-805	miro Computer Products AG	miro Crystal 8S	VL-Bus ISA			1MB	1MB				1MB										S3	CD-ROM		1485	
S3-805i	ELSA	Winner 1000	ISA			1MB	1MB	1MB 1152x 864	2MB	2MB	1MB	2MB	2MB								ELSA_ WINNER	ELSA GMbH		1660	Third Party
S3-928	Number Nine	GXE-VL Level 11 or 12	VL-Bus			1 MB	1 MB	2 MB 1152 x 819	2 MB		1 MB	2 MB									#9GXE	CD-ROM	v		YES
		GXE-VL Level 14, 16	VL-Bus	See rea	adme file	See readme file included with the driver or a future version of this guide for supported modes	vith the dri	iver or a fu	iture versi	on of this g	juide for s	upported r	nodes.									Beta Avail.		1617 1618	BETA
	STB	Pegasus- VL	VL-Bus	See rea	adme file	See readme file included with the driver or a future version of this guide for supported modes	vith the dri	iver or a fu	iture versi	on of this g	juide for si	upported r	nodes.									Beta Avail.		1619 1620	BETA
	ELSA	Winner 1000	VL-Bus			1MB	1MB				1MB										ELSA_ WINNER	ELSA GMbH		1657	Third Party
		Winner 2000				2MB 4MB	2MB 4MB	2MB 4MB	2MB 4MB	2MB 4MB 1408x 1024	2MB 4MB	2MB 4MB	2MB 4MB	4MB		2MB	4MB		4MB 1152x 864		ELSA_ WINNER	ELSA GMbH		1659	Third Party
	miro Computer Products AG	miro Crystal 32S	PCI VL-Bus EISA			1MB	1MB	2MB 1152 x 864	2MB	2MB 1408 x 1024	1MB	2MB	2MB 1152 x 864	4MB	4MB 1408 x 1024		4MB				miro928	miro Comp. Prod. AG		1486	Third Party
	÷	Vectra XP-Series	Local Bus ISA PCI			2MB	2MB	2MB 1152x 819	2MB	2MB	2MB	2MB	2MB 1152x 819	4MB		2MB	2MB	4MB			HPXP Display	NXTAns		1588 1589	YES
S3 864	ELSA	Winner 1000 PRO				1MB 2MB	1MB 2MB	2MB	2MB 1408x 1024		1MB	2MB	2MB			2MB					ELSA_ WINNER	ELSA GMbH		1656	Third Party

Graphics Controller Vendor Model Expansion Graphics Resolutions	2-bit Grayscale 8-bit Grayscale	640 x 1024 800 x 1024 x 1120 x 1280 x 1600 x 800 x 1024 x 1120 x 480 x 600 768 832 1024 1200 600 768 832 1024 1200 600 768 832	3us 2MB 2MB 2MB 2MB 2MB 2MB 2MB 2MB	PCI 4MB	ELSA GmbHWinner 2000PROPCI2MB VL-Bus2MB 4MB2MB 4MB2MB 4MB2MB 4MB4MB 4MB4MB 4MB4MB 4MB2MB <br< th=""><th>Number GXE 64 PCI 2MB 2</th><th>Weitek Power 9000 Diamond V/per-VL VL-Bus, PCI 1MB 1MB 1MB 2MB 2MB 1MB 1152x 900 900 0n/y) 900 900 0n/y) 900</th><th></th></br<>	Number GXE 64 PCI 2MB 2	Weitek Power 9000 Diamond V/per-VL VL-Bus, PCI 1MB 1MB 1MB 2MB 2MB 1MB 1152x 900 900 0n/y) 900 900 0n/y) 900	
tions	16-bit Color	1280 x 1600 x 1024 1200	4MB 4MB	×	2MB 4MB 4MB 4MB 41152x 864	× 4MB 4MB	×	2MB 1152x 900
	32-bit Color	640x 800x 1024x 1120x 480 600 768 832	2MB 4MB	4MB 4MB 1152 x864	2MB 4MB 4MB 4MB 1152x 864	2MB 2MB 4MB 4MB 4MB 4MB 1152 x864	2MB 2MB	2MB 2MB
Driver Avail. SoftPC	Full-	1280x Mode 1024	Diamond NXT	Stealuro+ Aris.	ELSA_ ELSA WINNER GMbH	Number9 Nxt GXE64 Ans.	Weitek 1557, NS P9000 1558	Weitek 1557, NS P9000 1558
tPC NA # Appr.	een	de	1586 YES	1907	1658 Third Party	1584 YES 1585	1573 YES	1560

Weitek Power9100 Diamond

Viper Pro

PCI

See readme file included with the driver or a future version of this guide for supported modes.

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ADDITIONAL DEVICE SUPPORT

NEXTSTEP DEVICE SUPPORT

	NEXTSTEP supports a variety of additional devices and add-on adapters.
DISK INTERFACES	Both IDE and several SCSI hard disk interfaces are supported.
POINTING DEVICES	Microsoft [®] - and Logitec [®] -compatible PS/2 [®] and serial mice. Logitec bus mouse.
PRINTERS	Any PostScript printer connected via a serial or parallel port, including the NeXT Color Printer (connected via a SCSI port). NeXT recommends PostScript printers with PostScript Level II for proper color support.
NETWORKING	Several Ethernet and Token Ring networking adapters are supported. A networking adapter is optional.
SOUND	NEXTSTEP can support certain PC sound cards for both playback and recording. A sound card is optional.
ADDITIONAL DEVICES	Other popular PC peripherals such as FAX/Modems are supported.

DRIVERKIT

NEXTSTEP for Intel Processors incorporates a newly developed object-oriented driver architecture called DriverKit. DriverKit allows the quick development of device drivers for new peripherals and add-on cards for Intel-based PCs running NEXTSTEP. DriverKit's architecture allows drivers to be loaded at run-time, thereby allowing users to add additional cards or devices to their systems without re-installing the main operating system. Loadable device drivers also allow NeXT and third parties to easily distribute additional drivers as they become available. In order to promote the availability of drivers for NEXTSTEP, NeXT includes the Driver Kit development tools, and source code examples of several drivers on the NEXTSTEP Developer CDROM. NeXT is actively working with hardware manufacturers and third parties to provide additional drivers for NEXTSTEP for Intel Processors.

Developers interested in becoming a registered driver developer, should contact NeXT Developer Relations (1-800-TRY-NeXT) and join the registered developer program.

ADDITIONAL DEVICE SUPPORT LEGEND

Device Type	Vendor	Model	Expansion Bus/Interface	Features	Driver Name	Avail.	NA #	Approved
DEVICE TYPE		Class of device or ad	apter suppor	ted.				
VENDOR		Vendor, manufacture	r, or system p	provider of the suppor	ted device or adap	ter.		
MODEL		Model number or nar	me of the sup	ported device or adap	oter.			
EXPANSION BUS/ INTERFACE				by this device: CPU B s), PCI, ISA, or EISA.				
FEATURES		Features of the devic this device or adapte		devices. This include des any limitations of			r protocols	supported by
DRIVER NAME		Name of driver used	by NEXTSTE	EP's Configure applica	ation.			
NA #		NeXTAnswer Docum	ent Number p	providing detailed setu	up and configuratic	on informatio	on.	
APPROVED		An add-on adapter of more NeXT certified another; to ensure co	configuration	s. Note that one piece	of approved hard	ware may b	e incompa	tible with

ADDITIONAL DEVICE SUPPORT PRODUCTS

Device Type	Vendor	Model	Expansion Bus/Interface	Features	Driver Name	Avail.	NA #	Approved
1								
FLOPPY DISK		3.5in 1.44MB Floppy			Floppy Disk Controller	CD-ROM		
IDE HARD DISK INTERFACE		IDE			IDE Disk Controller	CD-ROM		
	Maxtor, Conner	Maxtor Model No's 7135A 135 MB 7270A 270 MB 7273A 270 MB 7405A 405 MB 7540A 540 MB 7546A 540 MB		Update to support Adaptec 8265	IDE8265Driver	Nxt Ans.	1693 1694	BETA
SCSI HARD DISK INTERFACE	Adaptec	1540 B, C or CF	ISA		Adaptec 1542B	CD-ROM 1520, 1521- update	1107 - B 1108 - C	YES
		1542 B, C or CF	ISA	Includes a floppy controller.	Adaptec 1542B	CD-ROM 1520, 1521- update	1107 - B 1108 - C	YES
		1740	EISA	Supported in 1540 compatibility mode only	Adaptec 1542B	CD-ROM 1520, 1521- update	1475	YES
		1742	EISA	Includes a floppy controller. Supported in 1540 compatability mode only	Adaptec 1542B	CD-ROM 1520, 1521- update	1475	YES
		274x/284x	EISA VL-Bus	The 2742 has a floppy drive interface	Adaptec 2740 Adaptec 2742 (floppy) Adaptec 2840	Nxt Ans.	1691 1692	BETA
		2940	PCI	This will be a NEXTSTEP 3.3 driver ONLY	Adaptec 2940	Planned Q494		3.3
		6x60	EISA		Adaptec 6x60	NeXTAns.	1675 1676	YES
		7770	EISA		Adaptec 7770	Planned		

1. When considering a complete system or add-on card, please refer to any available NeXTanswers before purchasing equipment. Note: Floppy controllers on add-on SCSI adapters are not currently supported.

ADDITIONAL DEVICE SUPPORT PRODUCTS (CONTINUED)

Device Type	Vendor	Model	Expansion Bus/Interface	Features	Driver Name	Avail.	NA #	Approved
refer to footnote below 1								
	Bus Logic	542B	ISA		Adaptec 1542B	CD-ROM 1520, 1521- update	1362	YES
		747S	EISA		Adaptec 1542B	CD-ROM 1520, 1521- update	1118	YES
		445S	VL-Bus		Adaptec 1542B	1520, 1521- update		YES
		44xC	VL-Bus, ISA, EISA	PCI support will not be availble until NS 3.3	Bus Logic 44xC	Nxt. Ans	1685 1686	YES
	DPT	2021/90	ISA	1MB-64MB Cache upgradable.	DPT 2012-B EISA	CD-ROM	1476	YES
		2021/95	ISA	1MB-64MB Cache upgradable. Includes a floppy controller.	DPT 2012-B EISA	CD-ROM	1476	YES
		2012/90	EISA	512K-16.5MB Cache upgradable.	DPT 2012-B EISA	CD-ROM	1358	YES
		2012/95	EISA	512K-16.5MB Cache upgradable. Includes a floppy controller.	DPT 2012-B EISA	CD-ROM	1358	YES
		2022 /90	EISA	1MB-64MB Cache upgradable.	DPT 2012-B EISA	CD-ROM	1457	YES
		2022 /95	EISA	1MB-64MB Cache upgradable. Includes a floppy controller.	DPT 2012-B EISA	CD-ROM	1457	YES
		2122/90	EISA	1MB-64MB Cache upgradable	DPT 2012-B EISA	CD-ROM		YES
		2122 /95	EISA	512K-16.5MB Cache upgradable. Includes a floppy controller.	DPT 2012-B EISA	CD-ROM		YES
		2000 Series Driver Update	EISA		DPT 2000	Nxt. Ans.	1625 1626	YES
		Зххх	PCI	will be available for NS 3.3 ONLY		Planned Q494		
	NCR	8xx	PCI			Planned Q494		
SCSI TAPE		SCSI Tape			SCSI Tape Driver	CD-ROM		
PARALLEL PORT		Standard Parallel Port			On-Board Parallel Port	CD-ROM	1330	
SERIAL PORTS		Standard Serial Ports		Supports COM1 & COM2	On-Board Serial Ports	CD-ROM	1208	

1. When considering a complete system or add-on card, please refer to any available NeXTanswers before purchasing equipment.

Other Devices and Adapters (continued)

Device Type	Vendor	Model	Expansion Bus/Interface	Features	Driver Name	Avail.	NA#	Approved
refer to footnote below 1								
LOCAL AREA NETWORK ADAPTERS	3COM	EtherLink III (3C509)	ISA	Thick and Thin Ethernet, and twisted pair support	3COM EtherLink III Ethernet Adapter	CD-ROM	1482	YES
		EtherLink III(3C579)	EISA	Thick and Thin Ethernet and Twisted Pair support	3COM EtherLink III Ethernet Adapter	Nxt. Ans	1653, 1654	YES
	Cogent	EM935, EM932	EISA	Thick coax and thin coax, and thick coax and twisted pair cabling	Cogent EM935, EM932	NXT Ans	1564, 1565	YES
		EM960	PCI	32-bit	CogentEM960	Beta Avail.	1667,1668	BETA
		PCMCIA	PCMCIA	NEXTSTEP 3.3 ONLY		Planned Q494		
	SMC	EtherCard PLUS Elite 16 (8013)	ISA	Thick and Thin Ethernet and Twisted Pair support	SMC 16 Ethernet Adapter	CD-ROM	1110	YES
		SMC EtherCard Elilte Ultra16	ISA			Planned Q4		
	Canon	AMDPCnet-32	Local Bus	Twisted Pair support, thick and thin ethernet	AMDPCnet32_ NetworkDrivewr	NXT Ans	1687 1688	YES
	HP	Vectra XP and XM	ISA	HP Vectra XP and XM support of AMD 79C960 chipset	HPVectra_XM_XP_L ANDriver	NXT Ans	1623, 1624	YES
	Intel	EtherExpress 16 (TP, Coax or Combo)	ISA	Ethernet Coax or Twisted Pair	Intel EtherExpress Ethernet Adapter	CD-ROM	1206	YES
		Intel TokenExpress ISA Token Ring Adapter Update	ISA	Token Ring	Intel TokenExpress ISA Token Ring Adapter UPDATE	NXTAns	1613 1614	YES
		Intel Ether Express Flash 32	EISA	32-bit Bus Master EISA		Planned		
		Intel EtherExpress PRO	ISA	16-bit Bus Master ISA adapter		Planned		
		Intel EtherExpress PRO/ 100	EISA PCI	10/100 Mbps fast Ethernet PCI and EISA adapters. Fast Ethernet requires special hub.		Planned		
	IBM	Token-Ring 16/4 Adapter	ISA	16/4 Mbps 8 bit I/O 64k Buffer Share RAM	IBM Token-Ring 16/4 Adapter	NXT Ans	1515 1523 1524	YES
POINTING DEVICES	Microsoft	MS Mouse or Compatible	Serial or PS/2 Mouse Port		Serial Mouse or PS/ 2-Style Mouse	CD-ROM	1360	YES
	Logitech	Mouse Man (Right or Left)	Serial or PS/2 Mouse Port		Serial Mouse or PS/ 2-Style Mouse	CD-ROM	1360	YES
		Mouse Man Bus	Bus Mouse Adapter		Bus Mouse	CD-ROM	1360	YES
		PS2 Keyboard and Mouse		UPDATE to support newer Logitech Mouse		BETA	1669 1670	3.2 BETA

Other Devices and Adapters (continued)

Device Type	Vendor	Model	Expansion Bus/Interface	Features	Driver Name	Avail.	NA #	Approved
refer to footnote below 1								
AUDIO DEVICES	Media Vision	ProAudio Spectrum 16	ISA	Up to CD Quality Stereo Record & Playback	ProAudioSpectrum 16	CD-ROM	1158	YES
		Pro Studio 16	ISA	Up to CD Quality Stereo Record & Playback	ProAudioSpectrum 16	CD-ROM		YES
		Jazz				Under Considera- tion		
	Creative Labs	SoundBlaster 16	EISA, ISA	NEXTSTEP 3.2 Beta ONLY	SoundBlaster 16	Planned Q4 94	1695 1696	Beta
	Intel	GX/Professional CPU- Board Audio Support	CPU Board	Up to CD Quality Stereo Record & Playback	IntelGXAudio	Nxt Ans. UPDATE	1651, 1652	YES
	Compaq	Business Audio	CPU Board	Up to CD Quality Stereo Record & Playback		CD-ROM		YES
	Microsoft	Sound System	ISA	Up to CD Quality Stereo Record & Playback		CD-ROM	1471	YES
	Canon Sound Driver		LocalBus			Nxt Ans	1689 1690	YES
	Various	Standard PC Speaker Support	CPU Board	System Audio Alerts only	System Beep Driver	CD-ROM		YES
PRINTERS	NeXT	NeXT Color Printer	SCSI					YES
	Various	Standard Adobe PostScript Printers	Serial or Parallel					
CD-ROM DRIVES	NEC	CDR-74	External					YES
	NeXT	Sony-541	External					YES
TAPE BACKUPS	Archive	Viper 150		QIC, 512-byte blocks				YES
	Archive	Python		DAT, 512-byte blocks				YES