

NEC Versa® LX/SX Series of Notebook Computers

VERSA LX & VERSA SX

PRODUCT GUIDE

NEC

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NEC VERSA LX SERIES

NEC VERSA SX SERIES

Product Guide

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NEC COMPUTER SYSTEMS DIVISION

Packard Bell NEC, Inc.

1414 Massachusetts Avenue

Boxborough, MA 01719-2298

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Overview

With the Versa LX Series and Versa SX Series, NEC Computer Systems Division provides a family of notebook computers to fill the needs of a variety of users in your company—from the telecommuter to the sales rep and all the way up to the CEO.

In addition, to lower your total cost of ownership, all accessories for these notebooks (except the primary batteries) are compatible across both product lines and will work with the next generation of Versa offerings. Other features include:

- Choice of the new mobile Pentium II processors or a Pentium processor with MMX™ technology
- 14.1" XGA, 13.3" XGA or 12.1" SVGA active-matrix color display supporting up to 16.8 million colors
- User-expandable storage and memory
- VersaBay III slot to hold a variety of plug-in storage and power computing tools
- Three years of UltraCare Essential service, including, with product registration, one free year of UltraCare Preferred service

A NOTEBOOK FOR EVERY USER

The NEC Versa LX Series is designed to be a corporate standard, with models that cover the spectrum from high-end to value. For example, your power users and presenters can opt for the blazing speed of a mobile Pentium II processor, giant 14.1" display and uncompromised functionality of the Versa Dock for the office.

Versa LX performance models are ideal for any employee who uses a computer because they eliminate the need for two systems—notebook and desktop. No computing compromises are necessary with the Versa LX. Whether working in the office, at home or around the corporate campus, your users benefit from a powerful processor, large color display, choice of storage devices and fast communications capability. Plus something desktops can't provide—portability.

The NEC Versa SX Series is designed for road warriors who place a high premium on portability—i.e., size, weight and inclusive design—but at the same time refuse to sacrifice power and functionality. The Versa SX is under five pounds, even with a 14.1" XGA display. Back at the office, users can share the same Versa Dock, Versa PortBar and other accessories used by the Versa LX.

PENTIUM PROCESSING POWER

The new NEC Versa notebook family offers a choice of mobile Pentium processors, as shown on the chart below. The super-charged Pentium II with MMX technology is for users who require what is currently the fastest possible performance from a mobile processor—30 to 35 percent faster, according to Intel, than the Pentium processor with MMX technology. All processors feature 32KB internal cache, 512KB Level 2 cache, 32-bit PCI 2.1 (peripheral component interconnect) bus architecture and 64-bit CPU architecture.

Overview

	NEC Versa LX Series	NEC Versa SX Series
266MHz mobile Pentium II	X	X
233MHz mobile Pentium II	X	X
233MHz mobile Pentium MMX	X	

The NEC Versa LX and Versa SX, as well as NEC PowerMate® desktops, support the **Wired for Management 1.1A (WfM)** initiative. This means the systems are compatible with industry-standard and proprietary system management technologies without sacrificing performance.

Coupled with the **LANDesk® Client Manager 3.2** software that comes with the notebooks and compliance with the **Desktop Management Interface 2.0 (DMI)**, WfM enables the systems to be centrally managed over the corporate network. That means reduced operating costs because all of these essential tasks can be handled remotely:

- Asset management and inventory control
- Service, support and maintenance functions
- System setup and software distribution
- Support for wake on LAN remote boot and remote control capabilities via the Versa Dock and 10/100 Versa Dock PCI Card

NEW NEC DISPLAY TECHNOLOGY

Both the Versa LX and Versa SX boast the new thin and light active-matrix color displays from NEC Corporation. At just one-quarter inch thick, the screens are 33 percent thinner than previous LCDs, and they weigh up to 20 percent less. Other features of this new display technology:

- **Low power consumption** promotes longer battery life.
- **Fast refresh rate** allows multimedia presentations to be viewed without the skips and jumps typical of slow-refreshed screens.
- **Wide viewing angle** enables side-angle viewing for presentations and small group discussions.
- **Integrated backlight** and **high contrast ratio** allow for easier viewing in a variety of lighting conditions.

The NEC Versa LX and Versa SX Series come with a choice of display sizes and, with the Versa LX, a choice of resolutions:

O v e r v i e w

	NEC Versa LX Series	NEC Versa SX Series
	4MB SGRAM 16.8 million colors	2MB DRAM 64K colors
14.1" XGA (1024 x 768)	X	X
13.3" XGA (1024 x 768)	X	X
12.1" SVGA (800 x 600)	X	

To help make these notebooks the equivalents of desktop computers, the new NEC Versa models incorporate up to 4MB of video RAM and high-speed graphics accelerators with power management features for extended battery life.

The NEC Versa LX has an ATI 3D RAGE™ LT PRO graphics accelerator, and the Versa SX includes a Trident® Cyber9388™. These graphics accelerators support Zoomed Video, DVD playback (with optional DVD Drive Accelerator PC Card), videoconferencing (ProShare® videoconferencing kit from Intel required) and dual image display on one LCD or two separate display devices (Windows® 98 models). In addition, the Versa LX includes hardware wavetable support and three-image display capability for the LCD, CRT and TV (S-Video and NTSC/PAL).

BUILT TO SUIT

In their standard configurations the NEC Versa LX and Versa SX come with 32MB of memory and a 2.1GB SMART (Self Monitoring and Reporting Technology) hard disk drive (HDD). The drive is "SMART" because it warns users of possible hard drive failure, thus giving them time to back up their data.

Of course, standard configurations won't suit everyone. That's why users can have their notebooks built to their own specifications and, as their needs change, easily expand the systems themselves via VersaBay III (see page 4) and the slide-in memory card slots.

	NEC Versa LX Series	NEC Versa SX Series
Pre-installed HDD	6.0GB (available July 1998), 5.0GB, 4.0GB (available July 1998), 3.2GB or 2.1GB	4.0GB (available July 1998), 3.2GB or 2.1GB
Maximum HDD	12.0GB with 6.0GB primary HDD (available July 1998) and optional 6.0GB HDD (available August 1998) in VersaBay III slot	10.0GB with 4.0GB primary HDD (available July 1998) and optional 6.0GB HDD (available August 1998) in VersaBay III slot
Pre-installed memory	128MB, 96MB, 64MB or 32MB	128MB, 96MB, 64MB or 32MB
Maximum memory	Via 128MB Memory Card (available September 1998) up to 256MB on Pentium II models, 192MB on Pentium MMX model	Via 128MB Memory Card (available September 1998) up to 256MB

ULTIMATE CONVENIENCE VIA VERSABAY III

NEC was the first notebook computer vendor to offer a modular device bay—called VersaBay—and has been expanding on its capabilities ever since. For the multitasking demanded in today's workplace, VersaBay III offers the ultimate in flexibility and convenience. Users can swap devices to perform various jobs and, when they travel, keep luggage weight down by carrying only the essentials.

The VersaBay III slot on the front of the NEC Versa LX and right side of the Versa SX is home to any one of the VersaBay III Paks described below. The CD-ROM is standard, but users can opt for the DVD drive instead. All the devices (except the CD-ROM) are available as options. The Paks can be warm swapped on the NEC Versa LX, hot swapped on the Versa SX.

1. The 24X maximum variable-speed **CD-ROM drive**, currently the fastest available for notebook computers, allows users to give multimedia presentations, load software, access large databases and reference tools or listen to music CDs.
2. The **DVD drive** promises to deliver exciting new multimedia applications for business with MPEG-2 decoding, 3-D graphics, TV-quality video and Dolby® digital sound when coupled with the DVD Drive Accelerator PC Card. DVD (for digital video or versatile disk) holds seven times as much data as a CD-ROM, making it ideal for archiving massive files. In addition, the drive is backward compatible with users' existing CD-ROMs.
3. The **SuperDisk™ LS-120 drive** can read and write to conventional 1.44MB floppies as well as to 120MB diskettes that store up to 80 times more data. This backward compatibility means there's no obsolescence, no conversion costs and no learning cycle. When 120MB diskettes are used, access is five times faster than with a standard floppy disk drive. With 1.44MB diskettes, the SuperDisk drive is three times faster.
4. Because the **Zip Built-In™ drive** (available September 1998) is a new standard for high-capacity storage, it allows users to easily share information with their customers and vendors. The 100MB Zip diskettes hold 70 times more data than a 1.44MB floppy. This new Zip drive for notebooks is a full 40 percent faster than the original desktop or external parallel Zip drive in Windows 95.
5. The 6.0GB (available August 1998) or 5.0GB **Hard Disk Drive with Cradle Pak** allows users to easily expand storage capacity (see chart on page 3) or to access two different operating systems, one on the primary hard drive, another on the VersaBay III hard drive.
6. The **lithium ion battery** for VersaBay III supplements the one that comes with the system, providing an extra power source for long trips.

A **weight-saving module**, included with each notebook, covers the VersaBay III slot when no device is installed. This module reduces the total travel weight by almost half a pound.

Overview

The NEC Versa LX comes with a 1.44MB diskette drive or SuperDisk LS-120 drive pre-installed internally (i.e., not in the VersaBay III slot). The NEC Versa SX ships with a **1.44MB diskette drive** in the VersaBay III slot. An optional SuperDisk drive can be ordered for the VersaBay III slot on both notebooks.

All the VersaBay III devices, except the Versa SX diskette drive, can also be used in the **Versa Dock** equipped with the optional **VersaBay III Adapter** (see page 7). The VersaBay III battery is recharged when placed in the Versa Dock.

OPERATING SYSTEMS—NOW AND FOR THE FUTURE

The emphasis on user choice and versatility continues with the software that comes with the Versa LX and Versa SX. NEC Computer Systems Division does not dictate the operating system and software that MIS managers and individual users must accept on their notebooks.

One of these three operating systems is specified when the notebook is ordered and installed at the factory:

- **Windows 95** (A coupon redeemable for an upgrade to Windows 98 for \$29.95 U.S. is included with Windows 95 systems shipped between June 1 and September 30, 1998.)
- **Windows 98** (available after July 15, 1998)
- **Windows NT® Workstation 4.0**

Agaté® Tioman™ is pre-installed on all NEC Versa LX and Versa SX models to enable swapping of VersaBay III devices without shutting down the system.

Models with the Windows NT operating system have this software pre-installed: **SystemSoft® CardWizard™** for PC Card plug and play capability and **SystemSoft PowerProfiler™** for power management.

The NEC Versa LX and Versa SX are compliant with the **PC98** and **ACPI** (Advanced Configuration and Power Interface) standards. ACPI is the basis for **OnNow**, an industry initiative for “instantly available” computer systems, systems which appear off but are always on and responding to user or network commands. What this means for users is that the NEC Versa LX or Versa SX they purchase today will be able to take full advantage of features built into upcoming Microsoft® operating systems (i.e., Windows 98 and Windows NT Workstation 5.0).

TO INSTALL OR NOT TO INSTALL

The software included with the NEC Versa LX and Versa SX, aside from that mentioned above, comes on a CD-ROM. This saves MIS departments and individual users the trouble of removing software they don't want.

A complete list of the software that comes with the Versa LX and Versa SX is on page 22, but here are a few of the titles:

Overview

- **Intellisync® for Notebooks** for sending and receiving via the infrared port
- **LANDesk Client Manager 3.2** (see page 2)
- **McAfee® VirusScan™** to protect the notebook against computer viruses
- **Microsoft Internet Explorer 4.0** and **Netscape™ Navigator 3.0** for easy web browsing
- **PartitionMagic® for NEC** to reclaim wasted disk space, organize and protect data and manage partitions and file structure

ULTRACARE WARRANTY PROTECTION

The UltraCare service program is designed to keep downtime to a minimum, protect the user's notebook investment and promote optimum system performance.

The NEC Versa LX and Versa SX come with a three-year return-to-factory limited warranty on all parts and labor. This warranty, called **UltraCare Essential** service, provides in the U.S. and Canada:

- Toll-free hardware support number, 24 hours a day, seven days a week
- Transferable warranty
- Same-country, next-city forwarding
- Overnight parts exchange
- Virus detection and notification
- Five-year limited warranty on CPU chip, graphics accelerator chip and main memory
- Repair within three business days and return prepaid freight

In addition, by completing and submitting the Versa LX or Versa SX product registration, users receive **one free year of UltraCare Preferred** service, which offers:

- International coverage
- Free door-to-door courier pickup and return
- Repair within one business day in the U.S. and Canada after arrival at the service depot, within two business days in other countries where coverage is provided

Users can extend their UltraCare Preferred service for up to five years or upgrade to other service plans. The top-of-the-line program is **UltraCare Premium Plus**, which provides all of the features listed above plus three years of **No-Fault Screen Assurance**. This entitles users to two screen replacements per year, if needed, and subsequent replacements at a 50 percent discount.

Full details on all the UltraCare service plans and pricing are available by calling **1-800-632-4525**, or users can go to **http://support.neccsdeast.com/warranty/versa_ultra_s2.asp**.

More information on Versa notebooks is available from your NEC Computer Systems reseller or by calling **1-888-863-2669**. For detailed, up-to-the-minute product information, visit our website at **www.nec-computers.com**.

The accessories for the NEC Versa LX and Versa SX notebooks are compatible across both product lines and will work with the next generation of Versa offerings. The only exceptions to this rule—because the Versa SX requires a thin form factor—are the primary lithium ion batteries.

Cross compatibility lowers the total cost of ownership because:

- Accessories can be shared among many individuals no matter which notebook they're using.
- There's no more confusion as to whether this option will work with that notebook.
- The MIS department has just one family of accessories to maintain.
- When the next generation of NEC Versa notebooks arrives, the existing accessories can still be used.

All the accessories available for the NEC Versa LX and Versa SX are listed on page 9. Here's a rundown on some of the major ones. VersaBay III Paks are described on page 4.

VERSA DOCK

With the Versa Dock, the NEC Versa LX or Versa SX becomes the basis for a desktop multimedia system. This docking solution, like the notebooks, includes PCI architecture for faster data throughput and provides:

- Two easy-access PCI slots (one full length, one half length)
- Two external half-height bays to hold industry-standard add-ons or VersaBay III Paks (optional VersaBay III Adapter required)
- Motor-assisted docking with manual override for ease of use
- Keylock protection from “undocking” to help prevent notebook theft
- Hot docking of NEC Versa LX and Versa SX Windows 95/Windows 98 models
- Full port replication (printer, serial, monitor, mouse and keyboard) plus a MIDI/game port and combination USB and PS/2® port.
- Three audio ports—line in/out, headphone and microphone
- When coupled with the 10/100 Versa Dock PCI Card, support for wake on LAN remote boot and remote control capabilities
- Integrated monitor stand that supports up to 55 pounds

VERSA PORTBAR

The Versa PortBar offers one quick connection to peripheral resources. Users keep a monitor, keyboard, printer, etc. attached to it, and when they're in the office, they have only one hookup to make to the NEC Versa LX or Versa SX. Designed to look like part of the notebook when connected, the Versa PortBar has an easy, mechanically supported locking mechanism and supports warm docking.

Versa Tools: Accessories & Solutions

EXTERNAL DISKETTE KIT

This option for the NEC Versa SX allows users to access the 1.44MB diskette drive while another device is in the VersaBay III slot. The NEC Versa LX comes with a 1.44MB diskette drive or SuperDisk LS-120 drive pre-installed internally (i.e., not in the VersaBay III slot) and, therefore, does not require this kit.

PC CARD MODEM

A 56Kbps-capable PC Card modem is available so that users can send and receive faxes and e-mail messages at the fastest speed currently available.

DC AIRPLANE AND AUTO ADAPTER

The DC Airplane and Auto Adapter is a must-have accessory for users who often work out of their cars or on airline tray tables. With it the notebook can be powered from a vehicle's cigarette lighter or from the outlets more and more airlines are providing on armrests.

CARRYING CASES

The three carrying cases are newly designed with enhanced interior protection for the Versa notebook and custom-fit VersaBay III pockets.

V e r s a T o o l s : A c c e s s o r i e s & S o l u t i o n s

Upgrades	32MB Memory Card	OP-410-69001
	64MB Memory Card	OP-410-69002
	128MB Memory Card (available September 1998)	OP-410-69003
	5.0GB Hard Disk Drive with Cradle Pak	OP-810-69001
	6.0GB Hard Disk Drive with Cradle Pak (available August 1998)	OP-810-69002
	Expansion	Versa Dock
Versa PortBar		OP-560-69001
NEC Versa SX External Diskette Kit		OP-560-69001-1
NEC C700 17" Monitor (16" viewable)		TX-D7F53NP
NEC C900 19" Monitor (18" viewable)		KM-810
Monitor Stand		OP-560-62004-1
NEC Microsoft PS/2 2-Button Mouse		OP-100-62002
104-Key Keyboard		OP-100-69001
Y-Adapter		OP-510-1201
VersaBay III		NEC SuperDisk LS-120 Drive Pak
	NEC Zip Built-In Drive Pak (available September 1998)	OP-230-69001
	DVD Drive Pak	OP-270-69001
	Secondary LiION Battery with Tray Pak	OP-570-69003
	5.0GB Hard Disk Drive with Cradle Pak	OP-810-69001
	6.0GB Hard Disk Drive with Cradle Pak (available August 1998)	OP-810-69002
	VersaBay III Adapter Kit	OP-560-69002-1
	PC Cards	NEC/U.S. Robotics® x2™ Technology 56Kbps* Modem with XJACK® Connector
NEC Xircom® 10Base-T Network Card		OP-720-1201
NEC Xircom® 10/100 CardBus Network Card		OP-720-1202
10/100 Versa Dock PCI Card		OP-560-69002-2
DVD Drive Accelerator Card		OP-270-69001-1
Power		NEC Versa LX LiION Battery
	NEC Versa SX LiION Battery	OP-570-69002
	Secondary LiION Battery and Tray Pak	OP-570-69003
	AC Adapter	OP-520-69001
	Battery Charger with AC Adapter	OP-570-69004
	DC Airplane and Auto Adapter	OP-520-69002
Carrying Cases	Versa Nylon Briefcase	OP-580-69001
	Versa Leather Briefcase	OP-580-69002
	Versa Portfolio Case	OP-580-69003

* x2 products are capable of 56Kbps downloads. However, the download speeds you experience may go lower due to varying line conditions. Uploads from end-user to service provider travel at speeds up to 28.8Kbps. An x2-compatible analog phone line and an x2-capable service provider are required for high-speed downloads. See www.usr.com/x2 for details.

Features & Benefits

NEC Versa LX/SX Feature	How It Benefits the User
Integrated product line	All users in the corporation are covered by one family of notebooks and accessories, making it easier for the MIS department to manage and maintain company resources.
266MHz or 233MHz Pentium II processor	Intel estimates that the Pentium II processors offer a 30 to 35 percent performance increase over Pentium processors with MMX technology, enabling the best ever business presentations.
New display technology	The displays are 33 percent thinner and up to 20 percent lighter than previous LCDs for a lower travel weight. The integrated backlight allows for easier viewing in a variety of lighting conditions. Low power consumption promotes longer battery life. The fast refresh rate and wide viewing angle contribute to better presentations.
14.1" TFT XGA color display	Largest display available on a notebook is combined with 1024 x 768 resolution to give users a viewing experience comparable to a desktop monitor. More windows can be opened simultaneously to manage more information. Huge spreadsheets, graphic presentations, even CAD/CAM applications can be handled effortlessly.
User-specified, user-expandable hard drives and memory	Users can order a notebook matched to their needs and can expand capacity themselves via the two memory card slots and, for storage, the VersaBay III slot. Maximum hard drive capacity is 12.0GB on the NEC Versa LX, 10.0GB on the Versa SX. Maximum memory is 256MB on Pentium II models, 192MB with Pentium MMX.
User-specified software	A user-specified operating system is pre-installed. Almost all the other software comes on a CD-ROM. This saves MIS departments and individual users the trouble of removing software they don't want.
Wired for Management 1.1A (WfM) compliance	Coupled with the LANDesk Client Manager 3.2 software that comes with the notebooks and compliance with the Desktop Management Interface 2.0 (DMI), WfM enables the notebooks to be centrally managed over the corporate network, resulting in reduced operating costs.

Features & Benefits

NEC Versa LX/SX Feature	How It Benefits the User
Advanced Configuration and Power Interface (ACPI) compliance	The NEC Versa LX or Versa SX purchased today will be able to take full advantage of features built into upcoming Microsoft operating systems (i.e., Windows 98 and Windows NT Workstation 5.0).
Year-2000 compliance	Users have a notebook ready for the next century.
VersaBay III slot	Offers the ultimate in flexibility and convenience by allowing users to swap these devices: 24X maximum variable-speed CD-ROM drive, 120MB SuperDisk LS-120 drive, 100MB Zip Built-In drive (available September 1998), DVD drive, second lithium ion battery or second hard disk drive. The VersaBay III slot on the Versa SX can also hold a 1.44MB diskette drive.
120MB SuperDisk LS-120 drive	No obsolescence, no conversion costs, no learning cycle. The drive can read and write to conventional 1.44MB floppies as well as to 120MB diskettes that store up to 80 times more data. (The Versa LX comes with a 1.44MB diskette drive <i>or</i> SuperDisk LS-120 drive pre-installed internally. An optional SuperDisk drive can be ordered for the Versa LX and Versa SX VersaBay III slot.)
100MB Zip Built-In drive	Because this optional drive (available September 1998) is a new standard for high-capacity storage, it allows users to easily share information. The 100MB Zip diskettes hold 70 times more data than a 1.44MB floppy.
DVD drive	Business people will be able to deliver exciting new multimedia presentations with MPEG-2 decoding, 3-D graphics and Dolby digital sound. Holds seven times as much data as a CD-ROM, making it ideal for archiving massive files, but is backward compatible with existing CD-ROMs. (The Versa LX and Versa SX can be ordered with a CD-ROM <i>or</i> DVD drive.)
“Universal” options compatibility	Lowers the total cost of ownership. The accessories are compatible across both the Versa LX and Versa SX product lines (with the exception of the primary batteries) and will work with the next generation of Versa offerings.

Features & Benefits

NEC Versa LX/SX Feature	How It Benefits the User
Versa Dock	The NEC Versa LX or Versa SX becomes the basis for a desktop multimedia system when plugged into this option. Its features include motor-assisted docking, acceptance of VersaBay III Paks (when equipped with an optional adapter), PCI slots, all the standard ports, three audio ports and a MIDI/game port.
Versa PortBar	This option provides the convenience of a one-touch connection to peripheral resources—printer, monitor, mouse, keyboard and serial port.
56Kbps-capable PC Card modem	Optional modem allows users to send and receive faxes and e-mail messages at the fastest speed currently available.
UltraCare Essential service	Keeps downtime to a minimum, protects the user's notebook investment and promotes optimum system performance. The NEC Versa LX and Versa SX come with a three-year return-to-factory limited warranty—UltraCare Essential—on all parts and labor.
UltraCare Preferred service	Expands on UltraCare Essential and is free for one free year with product registration. Includes international coverage, free door-to-door courier pickup and return and repair within one business day in the U.S. and Canada after arrival at the service depot.
Lithium ion battery	Provides more power for its weight than nickel metal hydride batteries. Warning alarm sounds when power is running low. For extended trips a secondary battery can be inserted in the VersaBay III slot.
USB port	USB (Universal Serial Bus) is a new standard that makes connecting peripherals to a PC as simple as plugging in a lamp. As USB peripherals become available, users can take instant advantage of them.

Questions & Answers

THE BASICS

What processors power the NEC Versa LX and Versa SX?

Users have a choice of these mobile Pentium processors:

	NEC Versa LX Series	NEC Versa SX Series
266MHz mobile Pentium II	X	X
233MHz mobile Pentium II	X	X
233MHz mobile Pentium MMX	X	

All processors feature 32KB internal cache, 512KB Level 2 cache, 32-bit PCI 2.1 (peripheral component interconnect) bus architecture and 64-bit CPU architecture.

Does the mobile Pentium II processor offer higher performance?

Intel estimates that it offers 30 to 35 percent faster performance than the Pentium processor with MMX technology.

Why should users be interested in the Wired for Management 1.1A (WfM) initiative supported by the NEC Versa LX and Versa SX?

WfM makes the new Versa notebooks, as well as NEC PowerMate desktops, compatible with industry-standard and proprietary system management technologies without sacrificing performance.

Coupled with the **LANDesk Client Manager 3.2** software that comes with the notebooks and compliance with the **Desktop Management Interface 2.0** (DMI), WfM enables the systems to be centrally managed over the corporate network. That means reduced operating costs because asset management and inventory control; service, support and maintenance functions; and system setup and software distribution can all be handled remotely.

What size and resolution displays are available on the NEC Versa LX and Versa SX, and how many colors are supported?

Three sizes and two resolutions are available:

	NEC Versa LX Series	NEC Versa SX Series
	4MB SGRAM 16.8 million colors	2MB DRAM 64K colors
14.1" XGA (1024 x 768)	X	X
13.3" XGA (1024 x 768)	X	X
12.1" SVGA (800 x 600)	X	

What's special about these displays?

They are the new thin and light active-matrix color displays from NEC Corporation. At just one-quarter inch thick, the screens are 33 percent thinner than previous LCDs, and they weigh up to 20 percent less. Other features of this new display technology:

Q u e s t i o n s & A n s w e r s

- **Low power consumption** promotes longer battery life.
- **Fast refresh rate** allows multimedia presentations to be viewed without the skips and jumps typical of slow-refreshed screens.
- **Wide viewing angle** enables side-angle viewing for presentations and small group discussions.
- **Integrated backlight** and **high contrast ratio** allow for easier viewing in a variety of lighting conditions.

What graphics accelerators are used in these notebooks, and what do they offer?

The NEC Versa LX has an ATI 3D RAGE LT PRO graphics accelerator, and the Versa SX includes a Trident Cyber9388. These graphics accelerators support Zoomed Video, DVD playback (with optional DVD Drive Accelerator PC Card), videoconferencing (ProShare videoconferencing kit from Intel required) and dual image display on one LCD or two separate display devices (Windows 98 models). In addition, the Versa LX includes hardware wavetable support and three-image display capability for the LCD, CRT and TV (S-Video and NTSC/PAL).

What are the hard drive and memory capacities of the NEC Versa LX and Versa SX?

In their standard configurations the NEC Versa LX and Versa SX come with 2.1GB SMART hard disk drives (HDD) and 32MB of memory. However, users can have their notebooks built to their own specifications and, as their needs change, easily expand the systems themselves via VersaBay III (see page 16) and the slide-in memory card slots.

	NEC Versa LX Series	NEC Versa SX Series
Pre-installed HDD	6.0GB (available July 1998), 5.0GB, 4.0GB (available July 1998), 3.2GB or 2.1GB	4.0GB (available July 1998), 3.2GB or 2.1GB
Maximum HDD	12.0GB with 6.0GB primary HDD (available July 1998) and optional 6.0GB HDD (available August 1998) in VersaBay III slot	10.0GB with 4.0GB primary HDD (available July 1998) and optional 6.0GB HDD (available August 1998) in VersaBay III slot
Pre-installed memory	128MB, 96MB, 64MB or 32MB	128MB, 96MB, 64MB or 32MB
Maximum memory	Via 128MB Memory Card (available September 1998) up to 256MB on Pentium II models, 192MB on Pentium MMX model	Via 128MB Memory Card (available September 1998) up to 256MB

How is the hard disk drive “SMART”?

It warns users of possible drive failure, giving them time to back up their data. SMART stands for Self Monitoring and Reporting Technology.

What operating systems are available on the NEC Versa LX and Versa SX?

Any one of the following is pre-installed:

- **Windows 95** (A coupon redeemable for an upgrade to Windows 98 for \$29.95 U.S. is included with Windows 95 systems shipped between June 1 and September 30, 1998.)
- **Windows 98** (available after July 15, 1998)
- **Windows NT Workstation 4.0**

Q u e s t i o n s & A n s w e r s

Is any other software pre-installed on the NEC Versa LX and Versa SX?

Agaté Tioman is pre-installed on all NEC Versa LX and Versa SX models to enable swapping of VersaBay III devices without shutting down the system. Models with the Windows NT operating system have this software pre-installed: **SystemSoft CardWizard** for PC Card plug and play capability and **SystemSoft PowerProfiler** for power management.

Is any software included with the NEC Versa LX and Versa SX?

A complete list of the software shipped with each notebook on a CD-ROM is on page 22. Here are a few of the titles:

- **Intellisync for Notebooks** for sending and receiving via the infrared port
- **LANDesk Client Manager 3.2** (see page 13)
- **McAfee VirusScan** to protect the notebook against computer viruses
- **Microsoft Internet Explorer 4.0** and **Netscape Navigator 3.0** for easy web browsing
- **PartitionMagic for NEC** to reclaim wasted disk space, organize and protect data and manage partitions and file structure

The NEC Versa LX and Versa SX are compliant with the PC98 and ACPI (Advanced Configuration and Power Interface) standards. Why are they important?

ACPI is the basis for **OnNow**, an industry initiative for “instantly available” computer systems, systems which appear off but are always on and responding to user or network commands. What this means for users is that the NEC Versa LX or Versa SX they purchase today will be able to take full advantage of features built into upcoming Microsoft operating systems (i.e., Windows 98 and Windows NT Workstation 5.0).

V E R S A B A Y I I I

What is VersaBay III, and what does it provide to users?

For the multitasking demanded in today’s workplace, VersaBay III, the slot on the front of the NEC Versa LX and right side of the Versa SX, offers the ultimate in flexibility and convenience. Users can swap devices to perform various jobs and, when they travel, keep luggage weight down by carrying only the essentials. The VersaBay III slot accommodates any one of the VersaBay III Paks described in the next question. The CD-ROM is standard, but users can opt for the DVD drive instead. All the devices (except the CD-ROM) are available as options.

What VersaBay III Paks are available, and what are their advantages?

1. The 24X maximum variable-speed **CD-ROM drive**, currently the fastest available for notebook computers, allows users to give multimedia presentations, load software, access large databases and reference tools or listen to music CDs.
2. The **DVD drive** promises to deliver exciting new multimedia applications for business with MPEG-2 decoding, 3-D graphics, TV-quality video and Dolby digital sound when coupled with the DVD Drive Accelerator PC Card. DVD (for digital video or versatile disk) holds seven times as much data as a CD-ROM, making it ideal for archiving massive files. In addition, the drive is backward compatible with users’ existing CD-ROMs.

Q u e s t i o n s & A n s w e r s

3. The **SuperDisk LS-120 drive** can read and write to conventional 1.44MB floppies as well as to 120MB diskettes that store up to 80 times more data. This backward compatibility means there's no obsolescence, no conversion costs and no learning cycle. When 120MB diskettes are used, access is five times faster than with a standard floppy disk drive. With 1.44MB diskettes, the SuperDisk drive is three times faster.
4. Because the **Zip Built-In drive** (available September 1998) is a new standard for high-capacity storage, it allows users to easily share information with their customers and vendors. The 100MB Zip diskettes hold 70 times more data than a 1.44MB floppy. This new Zip drive for notebooks is a full 40 percent faster than the original desktop or external parallel Zip drive in Windows 95.
5. The 6.0GB (available August 1998) or 5.0GB **Hard Disk Drive with Cradle Pak** allows users to easily expand storage capacity (see chart on page 14) or to access two different operating systems, one on the primary hard drive, another on the VersaBay III hard drive.
6. The **lithium ion battery** for VersaBay III supplements the one that comes with the system, providing an extra power source for long trips.

Can VersaBay III Paks be hot or warm swapped?

The Paks can be warm swapped on the Versa LX, hot swapped on the Versa SX.

What if the user doesn't have a device installed in the VersaBay III slot?

A weight-saving module, included with each notebook, covers the VersaBay III slot when no device is installed. This module reduces the total travel weight by almost half a pound.

What about a 1.44MB diskette drive?

The NEC Versa LX comes with a 1.44MB diskette drive *or* SuperDisk LS-120 drive pre-installed internally (i.e., not in the VersaBay III slot). The NEC Versa SX ships with a 1.44MB diskette drive in the VersaBay III slot. An optional SuperDisk drive can be ordered for the VersaBay III slot on both notebooks.

Can VersaBay III Paks be used in other NEC Versa notebooks equipped with a VersaBay slot?

No, VersaBay III Paks are compatible only with the NEC Versa LX and Versa SX.

A C C E S S O R I E S

What is significant about the accessories for the NEC Versa LX and Versa SX?

The accessories for these notebooks are compatible across both product lines and will work with the next generation of Versa offerings. The only exceptions to this rule—because the Versa SX requires a thin form factor—are the primary lithium ion batteries. All the accessories available for the NEC Versa LX and Versa SX are listed on page 9.

Q u e s t i o n s & A n s w e r s

How does cross compatibility benefit users?

Cross compatibility lowers the total cost of ownership because:

- Accessories can be shared among many individuals no matter which notebook they're using.
- There's no more confusion as to whether this option will work with that notebook.
- The MIS department has just one family of accessories to maintain.
- When the next generation of NEC Versa notebooks arrives, the existing accessories can still be used.

Is there a full-blown desktop docking solution for the NEC Versa LX and Versa SX?

The **Versa Dock** is the answer. Like the NEC Versa LX and Versa SX, it includes PCI architecture, for faster data throughput and provides:

- Two easy-access PCI slots (one full length, one half length)
- Two external half-height bays to hold industry-standard add-ons or VersaBay III Paks (optional VersaBay III Adapter required)
- Motor-assisted docking with manual override for ease of use
- Keylock protection from “undocking” to help prevent notebook theft
- Hot docking of NEC Versa LX and Versa SX Windows 95/Windows 98 models
- Full port replication (printer, serial, monitor, mouse and keyboard) plus a MIDI/game port and combination USB and PS/2 port.
- Three audio ports—line in/out, headphone and microphone
- When coupled with the 10/100 Versa Dock PCI Card, support for wake on LAN remote boot and remote control capabilities
- Integrated monitor stand that supports up to 55 pounds

Are there other desktop expansion solutions for the NEC Versa LX and Versa SX?

The **Versa PortBar** offers one quick connection to peripheral resources. Users keep a monitor, keyboard, printer, etc. attached to it, and when they're in the office, they have only one hookup to make to the NEC Versa LX or Versa SX. Designed to look like part of the notebook when connected, the Versa PortBar has an easy, mechanically supported locking mechanism and supports warm docking.

The **External Diskette Kit** for the Versa SX allows users to access the 1.44MB diskette drive while another device is in the VersaBay III slot. The NEC Versa LX comes with a 1.44MB diskette drive or SuperDisk LS-120 drive pre-installed internally (i.e., not in the VersaBay III slot) and, therefore, does not require this device.

One of the ports on the NEC Versa LX and Versa SX is for connecting a mouse or keyboard. An optional **Y-Adapter** allows both devices to be connected at once.

Can the Versa Dock and Versa PortBar be used with other NEC Versa notebooks?

No, they're compatible with the NEC Versa LX and Versa SX only.

P E A C E O F M I N D

What is the length of the warranty on the NEC Versa LX and Versa SX, and what does it include?

Each comes with a three-year return-to-factory limited warranty on all parts and labor. This warranty, called **UltraCare Essential** service, provides in the U.S. and Canada:

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- Toll-free hardware support number, 24 hours a day, seven days a week
- Transferable warranty
- Same-country, next-city forwarding
- Overnight parts exchange
- Virus detection and notification
- Five-year limited warranty on CPU chip, graphics accelerator chip and main memory
- Repair within three business days and return prepaid freight

What is UltraCare Preferred service?

By completing and submitting the NEC Versa LX or Versa SX product registration, users receive **one free year of UltraCare Preferred** service, which offers:

- International coverage
- Free door-to-door courier pickup and return
- Repair within one business day in the U.S. and Canada after arrival at the service depot, within two business days in other countries where coverage is provided

Can users upgrade to other service plans?

Users can extend their UltraCare Preferred service for up to five years or upgrade to other service plans. The top-of-the-line program is **UltraCare Premium Plus**, which provides all of the UltraCare Essential and Preferred features plus three years of **No-Fault Screen Assurance**. This entitles users to two screen replacements per year, if needed, and subsequent replacements at a 50 percent discount.

Where can users get more information on UltraCare?

Full details on all the UltraCare service plans and pricing are available by calling **1-800-632-4525**, or users can go to **http://support.neccsdeast.com/warranty/versa_ultra_s2.asp**.

Are the Versa LX and Versa SX actually engineered and built by NEC?

They were designed by NEC engineers and are assembled at the NEC Computer Systems Division plant in Fife, Washington.

Are the NEC Versa LX and Versa SX ready for the next century?

Yes, all models are year-2000 compliant.

P C C A R D S U P P O R T

Do the NEC Versa LX and Versa SX have PC Card slots?

They have two CardBus-ready PC Card slots that hold two Type II cards or one Type III. Zoomed Video cards are supported in both slots.

What are the advantages of CardBus?

The 32-bit CardBus specification gives PC Cards access to PCI bandwidth, providing higher data throughput and enabling the use of high-performance 10/100MB network PC Cards, plug-in graphics cards plus video capture and decompression cards to name just a few.

Q u e s t i o n s & A n s w e r s

What will Zoomed Video (ZV) do for users?

ZV technology, which expands on the capabilities of CardBus, allows video data on a PC Card to bypass the notebook's processor and be transferred directly to the video controller, resulting in faster video throughput.

How do the NEC Versa LX and Versa SX allow for office-type communicating on the road?

A 56Kbps-capable PC Card modem is available so that users can send and receive faxes and e-mail messages at the fastest speed currently available.

Will users have to replace the PC Cards they already own?

No! Their current PC Cards (formerly called PCMCIA) will work in the NEC Versa LX and Versa SX even if they're not CardBus or ZV cards.

M U L T I M E D I A S U P P O R T

What multimedia features are included on the NEC Versa LX and Versa SX?

- The Pentium II and Pentium processors with MMX technology rev the performance of multimedia applications.
- The displays feature a fast refresh rate and wide viewing angle for client-pleasing presentations.
- The 24X maximum variable-speed CD-ROM drive for the VersaBay III slot is the fastest currently available for a notebook.
- The DVD drive promises to deliver new multimedia applications with MPEG-2 decoding, 3-D graphics, TV-quality video and Dolby digital sound when coupled with the DVD Drive Accelerator PC Card.
- Graphics accelerators (ATI 3D RAGE LT PRO in the Versa LX, Trident Cyber9388 in the Versa SX) support DVD playback, Zoomed Video, video-conferencing and multiple image display on one LCD or two separate LCDs.
- Zoomed Video provides for an overall improvement in video quality.
- Maestro-2ETM PCI audio accelerator delivers advanced audio features.
- Two internal stereo speakers are located on the palmrest of the Versa LX, on the front of the Versa SX.
- Sound Blaster® Pro-compatible audio supports .AVI, MIDI and .WAV files for clear, powerful audio and video.
- The TV-out port on the NEC Versa LX supports NTSC/PAL and S-Video.
- Three audio ports are conveniently located on the side of each notebook (stereo headphone, mono microphone, stereo line in on the Versa LX; stereo headphone, stereo microphone, stereo line in on the Versa SX).
- Volume is controlled by an easy-to-use dial.
- An internal microphone and FM synthesizer are part of the package.

MPEG? What does that do?

At one time notebook displays presented tiny, jerky video images. MPEG (Motion Pictures Experts Group) gives the user full-screen, full-motion video playback at 30 frames per second with a resolution comparable to VHS video.

Q u e s t i o n s & A n s w e r s

What are some of the high-performance features provided by the Maestro-2E PCI audio accelerator?

- 64-channel wavetable music synthesis with downloadable wavetable samples
- HRTF 3-D positional audio acceleration
- DVD AC-3 5.1-to-2 speaker virtualization
- Enhanced effects, such as reverb, chorus, flange, treble, bass and 3-D stereo expander
- Advanced platform for DVD movie playback and internet communications

Why should users want MIDI and .WAV files? What are they?

Users will want them in order to give the best presentations possible. With these files they can, for example, take their company's TV commercial and insert it in a presentation.

.WAV files are compressed audio files that are commonly used for voice and special effects. Typically, .WAV files are rather large, and the size is a function of the sample rate. The higher the sample rate, the more natural the sound.

MIDI files are for recreating musical notes and were first used by musicians for instrument control. The information is for the number of instruments, notes pressed, duration and force. Therefore, complex musical scores can be played with a much smaller file size compared to .WAV files. The limitation of MIDI files is that they cannot include voice or sound effects. MIDI files usually have the extension of .MID. Games typically play MIDI files for background music and use .WAV files for sound effects.

B A T T E R Y P O W E R

What type of batteries power the NEC Versa LX and Versa SX, and how long do they last?

Each is powered by a lithium ion (LiION) battery and has an LED battery-life indicator. The notebooks use different primary batteries because the Versa SX requires a thin form factor. The 12-cell battery on the NEC Versa LX lasts three to four hours with 52 watt hours capacity. The nine-cell LiION battery in the Versa SX has a two-to-three-hour life with 39 watt hours capacity.

Can these primary batteries be supplemented?

Power can be increased by inserting a secondary battery in the VersaBay III slot (see page 16). This optional six-cell LiION battery provides two to three hours of power with 36 watt hours capacity. Alternatively, another primary battery can be purchased to supplement the one that comes with each system.

Do you have to turn off the NEC Versa LX or Versa SX to replace the battery?

No, just put it in suspend mode. Each notebook has an internal bridge battery that acts as a safety net for easy battery swapping. When the system is in suspend mode, it retains the memory contents and system status while the battery is removed and replaced. The bridge battery supplies power for up to five minutes while the system is in suspend.

Why are lithium ion (LiION) batteries superior to nickel metal hydride (NiMH) batteries?

LiION batteries provide more power for their weight, run a notebook longer and

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can be charged more often. NiMH batteries, when recharged without being fully depleted, “remember” the last discharge level and often do not recharge beyond that point. Users won’t experience this problem with LiION batteries.

Do the NEC Versa LX and Versa SX have power-saving features?

Yes, power management is provided by a set of built-in features that allows the user to conserve energy, maximize the life of the battery and LCD light, and protect against data loss due to low battery power. It’s simple to change on the setup menu or from the keyboard by toggling the FN F7 key between Longest Battery Life, Highest Performance, Custom and Off.

Power management lets the user direct the NEC Versa LX or Versa SX to go into suspend mode automatically after a preset time of system inactivity or to manually put the system in suspend mode through the suspend key. To get the system running again, the user simply presses the power button. The effect of power-saving modes on system operation is minimal. Once the user exits a power-saving mode, the system is up and running in a fraction of a second.

U S E R - F R I E N D L I N E S S

What is VersaGlide, and what are its advantages?

VersaGlide is the integrated, maintenance-free touchpad pointing device that, along with two mouse buttons, is located to the left of center on the sculpted palmrest below the keyboard. The VersaGlide touchpad has programmable mouse buttons, IntelliMouse® emulation and a drag-lock function. Its double-tap capabilities can be disabled full time or only when typing.

Do the NEC Versa LX and Versa SX have other user-friendly features I should know about?

Yes, it does. The 83-key keyboard is full sized and has a fully responsive 3.0mm stroke on the Versa LX, 2.8mm on the Versa SX. LED indicators are readily visible to provide users with a variety of system information at a glance, including power on, suspend, battery in use, battery power status, power management level, caps and number lock as well as hard disk and diskette drive access.

Is there an infrared port on the NEC Versa LX and Versa SX?

Each is equipped with an FIR (fast infrared) port plus IntelliSync for Notebooks software for transmitting and receiving data at up to four megabits per second.

Why should users want infrared capability?

Infrared allows users to communicate with other infrared-equipped devices, such as a printer or desktop computer, without hooking up cables in order to send a file. Instead, they just point and click.

What is USB, and why is it important?

USB (Universal Serial Bus) is a new standard that makes connecting peripherals to a computer as simple as plugging in a lamp. As USB peripherals become available, users can take instant advantage of them because the NEC Versa LX and Versa SX each have a USB port.

S o f t w a r e

Any one of these operating systems is pre-installed on the NEC Versa LX and Versa SX:

- **Windows 95** (A coupon redeemable for an upgrade to Windows 98 for \$29.95 U.S. is included with Windows 95 systems shipped between June 1 and September 30, 1998.)
- **Windows 98** (available after July 15, 1998)
- **Windows NT Workstation 4.0**

Agaté Tioman is pre-installed on all NEC Versa LX and Versa SX models to enable swapping of VersaBay III devices without shutting down the system.

Models with the Windows NT operating system have this software pre-installed: **SystemSoft CardWizard** for PC Card plug and play capability and **SystemSoft PowerProfiler** for power management.

Every NEC Versa LX and Versa SX ships with two CD-ROMs—a recovery CD and a second CD that has the following software:

- Adobe® Acrobat Reader
- Intellisync for Notebooks
- LANDesk Client Manager 3.2
- McAfee VirusScan
- Microsoft Internet Explorer 4.0
- Netscape Navigator 3.0
- PartitionMagic for NEC
- System software drivers for Windows for Workgroups 3.11/MS-DOS® 6.22
- User documentation and utilities
- Versa Tools catalog

NEC Versa LX Series Specifications

Standard Configurations

Model	Order Code	Processor	TFT Color Display	Memory	Hard Drive	CD-ROM
NEC Versa LX	VL440	266MHz Pentium II	14.1" XGA	32MB	2.1GB	24X maximum
NEC Versa LX	VL330	233MHz Pentium II	13.3" XGA	32MB	2.1GB	24X maximum
NEC Versa LX	VL210	233MHz Pentium MMX	12.1" SVGA	32MB	2.1GB	24X maximum

Processors	<p>266MHz or 233MHz mobile Pentium II with MMX technology</p> <p>233MHz mobile Pentium with MMX technology</p> <p>All processors: 32KB internal cache, 512KB secondary cache, 32-bit PCI 2.1 bus and 64-bit CPU architecture</p>
Memory	<p>128MB, 96MB, 64MB or 32MB SDRAM SODIMM pre-installed</p> <p>User upgradeable via 128MB Memory Card (available September 1998) up to 256MB SDRAM SODIMM on Pentium II models, 192MB SDRAM SODIMM on Pentium MMX model</p> <p>256KB flash</p>
ROM	<p>SMART (Self Monitoring and Reporting Technology) hard disk drives (HDD) that alert user to possible drive failure:</p>
Hard Disk Drives (HDD)	<ul style="list-style-type: none"> • 6.0GB (available July 1998), 5.0GB, 4.0GB (available July 1998), 3.2GB or 2.1GB HDD pre-installed • 12.0GB maximum with 6.0GB primary HDD (available July 1998) and optional 6.0GB HDD (available August 1998) in VersaBay III slot <p>Interfaces: ATAPI (IDE), Ultra DMA</p> <p>Dimensions/weight of VersaBay III HDD: 5.1"W x 5.9"D x 0.6"H/0.5 lb.</p> <p>Physical:</p> <ul style="list-style-type: none"> • Type - Magnetic • Capacity (formatted) - 5020MB • Buffer - 512KB • Disks - 3 • Heads - 6 • Rotational speed - 4000 RPM <p>Performance:</p> <ul style="list-style-type: none"> • Seek (average/minimum/maximum) - 12ms/3ms/24ms • Transfer (media to buffer) - 7.6MB/s to 11.0MB/s • Transfer (buffer to system) - 33.3MB/s maximum

NEC Versa LX Series Specifications

Internal 1.44 MB Diskette Drive (FDD)	<p>Notebook ships with nonremovable 1.44MB diskette drive (standard) or 120MB SuperDisk LS-120 drive (optional)</p> <p>Interface: FDD</p> <p>Physical:</p> <ul style="list-style-type: none">• Type - Magnetic• Capacity (formatted) - 1440KB• Disks - 1• Heads - 2• Rotational speed - 300 RPM <p>Performance:</p> <ul style="list-style-type: none">• Seek (minimum) - 3ms• Transfer (media to buffer) - 250KB/s to 500KB/s
Internal SuperDisk LS-120 Drive	<p>Notebook ships with nonremovable 1.44MB diskette drive (standard) or 120MB SuperDisk LS-120 drive (optional)</p> <p>Accommodates 1.44MB diskettes and 120MB SuperDisk diskettes</p> <p>Interface: ATAPI (IDE)</p> <p>Physical with SuperDisk diskette:</p> <ul style="list-style-type: none">• Type - Magneto-optical• Capacity (formatted) - 120MB• Disks - 1• Heads - 2• Rotational speed - 720 RPM <p>Performance with SuperDisk diskette:</p> <ul style="list-style-type: none">• Seek (average/minimum/maximum) - 70ms/20ms/120ms• Access (average) - 112ms• Transfer (media to buffer) - 375KB/s to 680KB/s• Transfer (buffer to system) - 33.3MB/s maximum <p>Physical with 1.44MB diskette:</p> <ul style="list-style-type: none">• Type - Magneto-optical• Capacity (formatted) - 1.44MB• Disks - 1• Heads - 2• Rotational speed - 720 RPM <p>Performance with 1.44MB diskette:</p> <ul style="list-style-type: none">• Seek (average/minimum/maximum) - 70ms/25ms/170ms• Transfer (media to buffer) - 150KB/s• Transfer (buffer to system) - 8.3MB/s maximum
Active-Matrix Color Displays	<p>Type: TFT (thin-film transistor), cold cathode fluorescent tube (CCFT) backlit LCD</p> <p>Viewing area: 14.1", 13.3" or 12.1"</p> <p>Resolutions: XGA (1024 x 768) on 14.1" and 13.3", SVGA (800 x 600) on 12.1"</p> <p>Dot pitch: 0.306mm</p> <p>Colors supported: 16.8 million</p> <p>ATI 3D RAGE LT PRO graphics accelerator</p>

NEC Versa LX Series Specifications

Video Processor	64-bit PCI bus accelerated video 4MB external SGRAM (100MHz) Simultaneous display of external video, LCD and TV (ATI TriView™) on Windows 98 models Dual image display on one LCD or two separate display devices (Windows 98 models)
Audio Processor	Maestro-2E PCI audio accelerator 64-channel wavetable synthesizer support 3-D positional stereo surround sound Sound Blaster Pro compatible
Speaker/Sound Wattage	Pioneer Premium Sound with 1.5 watts per channel via encapsulated speaker sound chamber
Notebook Dimensions and Weights	12.1"W x 10.0"D x 1.8"H With 14.1" or 13.3" display: 6.8 lb. with weight-saving module installed, 7.4 lb. with CD-ROM drive or 1.44MB diskette drive installed With 12.1" display: 6.6 lb. with weight-saving module installed, 7.2 lb. with CD-ROM drive installed
VersaBay III	Integrated front-loading bay accommodates these warm-swappable Paks: <ul style="list-style-type: none">• 24X Maximum CD-ROM Drive Pak (standard) or DVD Drive Pak• 120MB SuperDisk LS-120 Drive Pak• 100MB Zip Built-In Drive Pak (available September 1998)• 6.0GB (available August 1998) or 5.0GB Hard Disk Drive with Cradle Pak• Secondary LiION (lithium ion) Battery and Tray Pak Weight-saving module (standard) covers bay when drive is not installed
CD-ROM Drive for VersaBay III	Standard 24X maximum variable-speed CD-ROM drive resides in VersaBay III slot Notebook ships with CD-ROM or DVD drive Interfaces: ATAPI (IDE), Ultra DMA Compliance: Photo CD, CD-1, MPC-3, 8X sampling for CD audio Dimensions/weight: 5.1"W x 5.9"D x 0.6"H/0.6 lb. Physical: <ul style="list-style-type: none">• Type - Optical• Capacity (formatted) - 656MB• Buffer - 128KB• Disks - 1• Heads - 2

NEC Versa LX Series Specifications

- Rotational speed - 5120 RPM (10X-24X)

Performance:

- Seek (average/maximum) - 100ms/230ms
- Access (average) - 110ms
- Transfer (media to buffer) - 3.6MB/s to 4.1MB/s
- Transfer (buffer to system) - 16.7MB/s maximum

DVD Drive for VersaBay III

Optional drive resides in VersaBay III slot and also accommodates CD-ROMs

Notebook ships with CD-ROM or DVD drive

Interface with DVD: ATAPI (IDE)

Compliance: DVD-5, 9, 10

Interfaces with CD-ROM: ATAPI (IDE), Ultra DMA

Compliance: Photo CD, CD-1, MPC-3, 8X sampling for CD audio

Dimensions/weight: 5.1"W x 5.9"D x 0.6"H/0.6 lb.

Physical with DVD:

- Type - Optical
- Capacity (formatted) - 8.5GB
- Buffer - 512KB
- Disks - 1
- Heads - 2
- Rotational speed - 4660 RPM (1.0X-2.0X)

Performance with DVD:

- Seek (average/maximum) - 210ms/410ms
- Transfer (media to buffer) - 11Mbits/s to 22Mbits/s
- Transfer (buffer to system) - 16.7MB/s maximum

Physical with CD-ROM:

- Type - Optical
- Capacity (formatted) - 600MB
- Buffer - 512KB
- Disks - 1
- Heads - 2
- Rotational speed - 4660 RPM (8.6X-20X)

Performance with CD-ROM:

- Seek (average/maximum) - 130ms/250ms
- Access (average) - 112ms
- Transfer (media to buffer) - 1.3MB/s to 3.4MB/s
- Transfer (buffer to system) - 16.7MB/s maximum

SuperDisk LS-120 Drive for VersaBay III

Optional drive resides in VersaBay III slot

Accommodates 1.44MB diskettes and 120MB SuperDisk diskettes

Dimensions/weight: 5.1"W x 5.9"D x 0.6"H/0.5 lb.

See "Internal SuperDisk LS-120 Drive" above for specifications

NEC Versa LX Series Specifications

Zip Built-In Drive for VersaBay III	<p>Optional drive (available September 1998) resides in VersaBay III slot</p> <p>Interface: ATAPI (IDE)</p> <p>Dimensions/weight: 5.1"W x 5.9"D x 0.6"H/0.6 lb.</p> <p>Physical:</p> <ul style="list-style-type: none">• Type - Magnetic• Capacity (formatted) - 100MB• Buffer - 16K• Disks - 1• Heads - 2• Rotational speed - 2941 RPM <p>Performance:</p> <ul style="list-style-type: none">• Seek (average) - 29ms• Transfer (media to buffer) - 1.0MB/s• Transfer (buffer to system) - 26.7Mbits/s maximum
Interface Ports	<p>Serial: 1 port, 9-pin, UART compatible, type 16550A</p> <p>Enhanced parallel: 1 port, 25-pin, ECP and EPP mode support</p> <p>External CRT VGA: 1 port, 15-pin D-sub</p> <p>External keyboard and mouse: 1 port, supports PS/2-type mouse or keyboard; optional Y-Adapter allows simultaneous support of keyboard and mouse</p> <p>Expansion: 1 port, 240-pin for Versa Dock or Versa PortBar; MIDI/game through Versa Dock or Versa PortBar interface</p> <p>Infrared: 1 left-mounted FIR (fast infrared) port, IrDA compliant</p> <p>USB (Universal Serial Bus): 1 port</p> <p>TV out with NTSC/PAL: 1 port, RCA jack, S-Video (Windows 95/Windows NT models)</p> <p>Audio: 3 ports (stereo line in, stereo headphone, mono microphone)</p>
Infrared Transmitter/Receiver	<p>IrDA-compliant FIR (fast infrared) port located on left side of notebook</p> <p>Enabled by Intellisync for Notebooks software</p> <p>Transmit distance: 3.25' maximum</p> <p>Speed: 115.2Kbps to 4Mbps depending on operating system and software support</p>
Expansion	<p>Connector for optional Versa Dock or Versa PortBar</p> <p>VersaBay III slot</p> <p>2 slide-in SODIMM memory card slots</p> <p>2 PC Card slots</p>

NEC Versa LX Series Specifications

Secondary Battery	Optional 6-cell LiION (lithium ion) used in VersaBay III slot Life (depending on configuration and usage): 2 to 3 hours, 36 watt hours capacity Recharge time: 2.5 hours with power off Output voltage: 10.8 volts DC Capacity: 3300 mAh Dimensions/weight: 5.1"W x 5.9"D x .0.6"H, 0.9 lb.
Bridge Battery	Backs up memory contents and system status for up to 5 minutes in suspend mode
Lithium Battery	Powers the CMOS that retains configuration, date and time
Calendar Clock	Year/month/day/hour/minute/second maintained by internal lithium backup battery; year-2000 compliant
Power Management	4 levels: Longest Battery Life, Highest Performance, Custom, Off ACPI (Advanced Configuration and Power Interface) support
Multimedia Support	24X maximum variable-speed CD-ROM drive DVD drive Zoomed Video support ATI 3D RAGE LT PRO graphics accelerator Sound Blaster Pro audio compatibility with 3-D spatializer technology Maestro-2E PCI audio accelerator 2 integrated stereo speakers Integrated mono microphone Stereo headphone Stereo line in TV out with NTSC/PAL (RCA jack and S-Video) on Windows 95/Windows NT models Volume control dial
Security Features	Power-on password, battery warnings, anti-virus software, SMART battery technology, thermal monitoring, Kensington lock slot
Environment	Operating temperature: 41°F to 95°F (5°C to 35°C) Storage temperature: -4°F to 140°F (-20°C to 60°C) Operating humidity: 20% to 80% noncondensing Storage humidity: 10% to 80% noncondensing

NEC Versa LX Series Specifications

PC Card Slots	2 slots for 2 Type II Cards or 1 Type III 32-bit PC CardBus architecture Zoomed Video support in both slots
Major Compliances	ACPI (Advanced Configuration and Power Interface) DMI 2.0 (Desktop Management Interface) PC98, PC97 WfM 1.1A (Wired for Management) Year 2000
Pointing Device	VersaGlide touchpad with 2 programmable mouse buttons located left of center on the palmrest below the keyboard Supports double-tap/tap-disable capabilities and drag-lock function Microsoft IntelliMouse emulation
Keyboard	Full-size 83-key with standard QWERTY layout Function keys: 12, full-size shift key Cursor control keys: 8, arrow keys in inverted T layout Windows hot keys: included Numeric keypad: embedded Fn key: function key for ROM-based key functions Stroke: 3.0mm
LED Status Indicators	Show status of system functions and components: suspend, battery in use, battery power status, power management level, caps and number lock, HDD and FDD access, scroll lock
AC Adapter	Input voltage: 100 to 240 volts AC, 50/60 Hz, 1.0-0.5 A Output voltage: 15 volts (60 watts maximum) Dimensions/weight: 2.0"W x 4.9"D x 1.1"H, 0.9 lb.
Primary Battery	12-cell LiION (lithium ion) with LED battery-life indicator and low-power warnings Life (depending on configuration and usage): 3 to 4 hours, 52 watt hours capacity Recharge time: 2.5 hours with power off Output voltage: 10.8 volts DC Capacity: 4800 mAh Dimensions/weight: 6.2"W x 4.5"D x .0.7"H, 1.1 lb.

NEC Versa LX Series Specifications

Technical Support	Available 24 hours a day, 7 days a week at 1-800-632-4525
Warranty	3-year parts and labor limited warranty (UltraCare Essential service) 1 year of free global UltraCare Preferred service with product registration Extended UltraCare service and screen assurance programs available (call 1-800-632-4525)

NEC Versa SX Series Specifications

Standard Configurations

Model	Order Code	Processor	TFT Color Display	Memory	Hard Drive	CD-ROM
NEC Versa SX	VS440	266MHz Pentium II	14.1" XGA	32MB	2.1GB	24X maximum
NEC Versa SX	VS330	233MHz Pentium II	13.3" XGA	32MB	2.1GB	24X maximum

Processors 266MHz or 233MHz mobile Pentium II with MMX technology
32KB internal cache, 512KB secondary cache, 32-bit PCI 2.1 bus and 64-bit CPU architecture

Memory 128MB, 96MB, 64MB or 32MB SDRAM SODIMM pre-installed
User upgradeable via 128MB Memory Card (available September 1998) up to 256MB SDRAM SODIMM

ROM 256KB flash

Hard Disk Drives (HDD) SMART (Self Monitoring and Reporting Technology) hard disk drives (HDD) that alert user to possible drive failure:

- 4.0GB (available July 1998), 3.2GB or 2.1GB HDD pre-installed
- 10.0GB maximum with 4.0GB primary HDD (available July 1998) and optional 6.0GB HDD (available August 1998) in VersaBay III slot

Interfaces: ATAPI (IDE), Ultra DMA

Dimensions/weight of VersaBay III HDD:
5.1"W x 5.9"D x 0.6"H/0.5 lb.

Physical:

- Type - Magnetic
- Capacity (formatted) - 5020MB
- Buffer - 512KB
- Disks - 3
- Heads - 6
- Rotational speed - 4000 RPM

Performance:

- Seek (average/minimum/maximum) - 12ms/3ms/24ms
- Transfer (media to buffer) - 7.6MB/s to 11.0MB/s
- Transfer (buffer to system) - 33.3MB/s maximum

Active-Matrix Color Displays Type: TFT (thin-film transistor), cold cathode fluorescent tube (CCFT) backlit LCD

Viewing area: 14.1" or 13.3"

Resolution: XGA (1024 x 768)

Dot pitch: 0.306mm

Colors supported: 65,536

NEC Versa SX Series Specifications

Video Processor	Trident Cyber9388 graphics accelerator 64-bit PCI bus accelerated video 2MB integrated DRAM Simultaneous display of external video and LCD Dual image display on one LCD or two separate display devices (Windows 98 models) Maximum external resolution: 1024 x 768, 65,536 colors, 85Hz refresh
Audio Processor	Maestro-2E PCI audio accelerator 64-channel wavetable synthesizer support 3-D positional stereo surround sound Sound Blaster Pro compatible
Speaker/Sound Wattage	Pioneer Premium Sound with 0.5 watts per channel
Notebook Dimensions and Weights	12.0"W x 9.9"D x 1.3"H 4.8 lb. with weight-saving module installed 5.2 lb. with 1.44MB diskette drive installed 5.4 lb. with CD-ROM drive installed
VersaBay III	Integrated side-loading bay accommodates these hot-swappable Paks: <ul style="list-style-type: none">• 1.44MB diskette drive (standard) or 120MB SuperDisk LS-120 Drive Pak• 24X Maximum CD-ROM Drive Pak (standard) or DVD Drive Pak• 100MB Zip Built-In Drive Pak (available September 1998)• 6.0GB (available August 1998) or 5.0GB Hard Disk Drive with Cradle Pak• Secondary LiION (lithium ion) Battery and Tray Pak Weight-saving module (standard) covers bay when drive is not installed
1.44MB Diskette Drive (FDD) for VersaBay III	Standard, resides in VersaBay III slot Notebook ships with 1.44MB diskette drive or SuperDisk LS-120 drive Interface: FDD Physical: <ul style="list-style-type: none">• Type - Magnetic• Capacity (formatted) - 1440KB• Disks - 1• Heads - 2• Rotational speed - 300 RPM Performance: <ul style="list-style-type: none">• Seek (minimum) - 3ms• Transfer (media to buffer) - 250KB/s to 500KB/s

NEC Versa SX Series Specifications

SuperDisk LS-120 Drive for VersaBay III

Optional drive resides in VersaBay III slot
Notebook ships with 1.44MB diskette drive or
SuperDisk LS-120 drive
Accommodates 1.44MB diskettes and 120MB SuperDisk diskettes
Interface: ATAPI (IDE)
Dimensions/weight: 5.1"W x 5.9"D x 0.6"H/0.5 lb.
Physical with SuperDisk diskette:
• Type - Magneto-optical
• Capacity (formatted) - 120MB
• Disks - 1
• Heads - 2
• Rotational speed - 720 RPM
Performance with SuperDisk diskette:
• Seek (average/minimum/maximum) - 70ms/20ms/120ms
• Access (average) - 112ms
• Transfer (media to buffer) - 375KB/s to 680KB/s
• Transfer (buffer to system) - 33.3MB/s maximum
Physical with 1.44MB diskette:
• Type - Magneto-optical
• Capacity (formatted) - 1.44MB
• Disks - 1
• Heads - 2
• Rotational speed - 720 RPM
Performance with 1.44MB diskette:
• Seek (average/minimum/maximum) - 70ms/25ms/170ms
• Transfer (media to buffer) - 150KB/s
• Transfer (buffer to system) - 8.3MB/s maximum

CD-ROM Drive for VersaBay III

Standard 24X maximum variable-speed CD-ROM drive resides
in VersaBay III slot
Notebook ships with CD-ROM or DVD drive
Interfaces: ATAPI (IDE), Ultra DMA
Compliance: Photo CD, CD-1, MPC-3, 8X sampling for CD audio
Dimensions/weight: 5.1"W x 5.9"D x 0.6"H/0.6 lb.
Physical:
• Type - Optical
• Capacity (formatted) - 656MB
• Buffer - 128KB
• Disks - 1
• Heads - 2
• Rotational speed - 5120 RPM (10X-24X)
Performance:
• Seek (average/maximum) - 100ms/230ms
• Access (average) - 110ms
• Transfer (media to buffer) - 3.6MB/s to 4.1MB/s
• Transfer (buffer to system) - 16.7MB/s maximum

NEC Versa SX Series Specifications

DVD Drive for VersaBay III

Optional drive resides in VersaBay III slot and also accommodates CD-ROMs

Notebook ships with CD-ROM or DVD drive

Interface with DVD: ATAPI (IDE)

Compliance: DVD-5, 9, 10

Interfaces with CD-ROM: ATAPI (IDE), Ultra DMA

Compliance: Photo CD, CD-1, MPC-3, 8X sampling for CD audio

Dimensions/weight: 5.1"W x 5.9"D x 0.6"H/0.6 lb.

Physical with DVD:

- Type - Optical
- Capacity (formatted) - 8.5GB
- Buffer - 512KB
- Disks - 1
- Heads - 2
- Rotational speed - 4660 RPM (1.0X-2.0X)

Performance with DVD:

- Seek (average/maximum) - 210ms/410ms
- Transfer (media to buffer) - 11Mbits/s to 22Mbits/s
- Transfer (buffer to system) - 16.7MB/s maximum

Physical with CD-ROM:

- Type - Optical
- Capacity (formatted) - 600MB
- Buffer - 512KB
- Disks - 1
- Heads - 2
- Rotational speed - 4660 RPM (8.6X-20X)

Performance with CD-ROM:

- Seek (average/maximum) - 130ms/250ms
- Access (average) - 112ms
- Transfer (media to buffer) - 1.3MB/s to 3.4MB/s
- Transfer (buffer to system) - 16.7MB/s maximum

Zip Built-In Drive for VersaBay III

Optional drive (available September 1998) resides in VersaBay III slot

Interface: ATAPI (IDE)

Dimensions/weight: 5.1"W x 5.9"D x 0.6"H/0.6 lb.

Physical:

- Type - Magnetic
- Capacity (formatted) - 100MB
- Buffer - 16K
- Disks - 1
- Heads - 2
- Rotational speed - 2941 RPM

Performance:

- Seek (average) - 29ms
- Transfer (media to buffer) - 1.0MB/s
- Transfer (buffer to system) - 26.7Mbits/s maximum

NEC Versa SX Series Specifications

Interface Ports	Serial: 1 port, 9-pin, UART compatible, type 16550A Enhanced parallel: 1 port, 25-pin, ECP and EPP mode support External CRT VGA: 1 port, 15-pin D-sub External keyboard and mouse: 1 port, supports PS/2-type mouse or keyboard; optional Y-Adapter allows simultaneous support of keyboard and mouse Expansion: 1 port, 240-pin for Versa Dock or Versa PortBar; MIDI/game through Versa Dock or Versa PortBar interface Infrared: 1 front-mounted FIR (fast infrared) port, IrDA compliant USB (Universal Serial Bus): 1 port Audio: 3 ports (stereo line in, stereo headphone, stereo microphone)
Infrared Transmitter/Receiver	IrDA-compliant FIR (fast infrared) port located on front of notebook Enabled by Intellisync for Notebooks software Transmit distance: 3.25' maximum Speed: 115.2Kbps to 4Mbps depending on operating system and software support
Expansion	Connector for optional Versa Dock or Versa PortBar VersaBay III slot 2 slide-in SODIMM memory card slots 2 PC Card slots
PC Card Slots	2 slots for 2 Type II Cards or 1 Type III 32-bit PC CardBus architecture Zoomed Video support in both slots
Major Compliances	ACPI (Advanced Configuration and Power Interface) DMI 2.0 (Desktop Management Interface) PC98, PC97 WfM 1.1A (Wired for Management) Year 2000
Pointing Device	VersaGlide touchpad with 2 programmable mouse buttons located left of center on the palmrest below the keyboard Supports double-tap/tap-disable capabilities and drag-lock function Microsoft IntelliMouse emulation

NEC Versa SX Series Specifications

Multimedia Support	24X maximum variable-speed CD-ROM drive DVD drive Zoomed Video support Trident Cyber9388 graphics accelerator Sound Blaster Pro audio compatibility with 3-D spatializer technology Maestro-2E PCI audio accelerator 2 integrated stereo speakers Integrated stereo microphone Stereo headphone Stereo line in Volume control dial
Security Features	Power-on password, battery warnings, anti-virus software, SMART battery technology, thermal monitoring, Kensington lock slot
Environment	Operating temperature: 41°F to 95°F (5°C to 35°C) Storage temperature: -4°F to 140°F (-20°C to 60°C) Operating humidity: 20% to 80% noncondensing Storage humidity: 10% to 80% noncondensing
Technical Support	Available 24 hours a day, 7 days a week at 1-800-632-4525
Warranty	3-year parts and labor limited warranty (UltraCare Essential service) 1 year of free global UltraCare Preferred service with product registration Extended UltraCare service and screen assurance programs available (call 1-800-632-4525)

NEC Versa SX Series Specifications

Keyboard	Full-size 83-key with standard QWERTY layout Function keys: 12, full-size shift key Cursor control keys: 8, arrow keys in inverted T layout Windows hot keys: included Numeric keypad: embedded Fn key: function key for ROM-based key functions Stroke: 2.8mm
LED Status Indicators	Show status of system functions and components: suspend, battery in use, battery power status, power management level, caps and number lock, HDD and FDD access, scroll lock
AC Adapter	Input voltage: 100 to 240 volts AC, 50/60 Hz, 1.0-0.5 A Output voltage: 15 volts (60 watts maximum) Dimensions/weight: 2.0"W x 4.9"D x 1.1"H, 0.9 lb.
Primary Battery	9-cell LiION (lithium ion) with LED battery-life indicator and low-power warnings Life (depending on configuration and usage): 2 to 3 hours, 39 watt hours capacity Recharge time: 2 hours with power on or off Output voltage: 10.8 volts DC Capacity: 3600 mAh Dimensions/weight: 5.6"W x 3.5"D x 0.7"H, 0.8 lb.
Secondary Battery	Optional 6-cell LiION (lithium ion) used in VersaBay III slot Life (depending on configuration and usage): 2 to 3 hours, 36 watt hours capacity Recharge time: 2 hours with power on or off Output voltage: 10.8 volts DC Capacity: 3300 mAh Dimensions/weight: 5.1"W x 5.9"D x .0.6"H, 0.9 lb.
Bridge Battery	Backs up memory contents and system status for up to 5 minutes in suspend mode
Lithium Battery	Powers the CMOS that retains configuration, date and time
Calendar Clock	Year/month/day/hour/minute/second maintained by internal lithium backup battery; year-2000 compliant
Power Management	4 levels: Longest Battery Life, Highest Performance, Custom, Off ACPI (Advanced Configuration and Power Interface) support

NEC Versa LX Series

NEC Versa SX Series

Processors	<ul style="list-style-type: none"> • 266MHz or 233MHz mobile Pentium II • 233MHz mobile Pentium with MMX technology 	Processors	<ul style="list-style-type: none"> • 266MHz or 233MHz mobile Pentium II
Memory	<ul style="list-style-type: none"> • 128MB, 96MB, 64MB or 32MB SDRAM SODIMM pre-installed • User upgradeable via 128MB Memory Card (available September 1998) up to 256MB SDRAM SODIMM on Pentium II models, 192MB SDRAM SODIMM on Pentium MMX model 	Memory	<ul style="list-style-type: none"> • 128MB, 96MB, 64MB or 32MB SDRAM SODIMM pre-installed • User upgradeable via 128MB Memory Card (available September 1998) up to 256MB SDRAM SODIMM
SMART Hard Disk Drives (HDD)	<ul style="list-style-type: none"> • 6.0GB (available July 1998), 5.0GB, 4.0GB (available July 1998), 3.2GB or 2.1GB HDD pre-installed • 12.0GB maximum with 6.0GB primary HDD (available July 1998) and optional 6.0GB HDD (available August 1998) in VersaBay III slot <p>SMART technology alerts user to possible drive failure</p>	SMART Hard Disk Drives (HDD)	<ul style="list-style-type: none"> • 4.0GB (available July 1998), 3.2GB or 2.1GB HDD pre-installed • 10.0GB maximum with 4.0GB primary HDD (available August 1998) and optional 6.0GB HDD (available August 1998) in VersaBay III slot <p>SMART technology alerts user to possible drive failure</p>
Nonremovable Diskette Drives	<p>1.44MB (standard) or 120MB SuperDisk LS-120 drive</p>	Nonremovable Diskette Drives	<p>Not applicable</p>
VersaBay III	<p>Integrated front-loading bay accommodates these warm-swappable Paks:</p> <ul style="list-style-type: none"> • 24X Maximum CD-ROM Drive Pak (standard) or DVD Drive Pak ships with notebook • 120MB SuperDisk LS-120 Drive Pak • 100MB Zip Built-In Drive Pak (available September 1998) • 6.0GB (available August 1998) or 5.0GB Hard Disk Drive with Cradle Pak • Secondary LiION (lithium ion) Battery and Tray Pak <p>Weight-saving module (standard) covers bay when drive is not installed</p>	VersaBay III	<p>Integrated side-loading bay accommodates these hot-swappable Paks:</p> <ul style="list-style-type: none"> • 24X Maximum CD-ROM Drive Pak (standard) or DVD Drive Pak ships with notebook • 1.44MB diskette drive (standard) or 120MB SuperDisk LS-120 Drive Pak • 100MB Zip Built-In Drive Pak (available September 1998) • 6.0BG (available August 1998) or 5.0GB Hard Disk Drive with Cradle Pak • Secondary LiION (lithium ion) Battery and Tray Pak <p>Weight-saving module (standard) covers bay when drive is not installed</p>

NEC Versa LX Series

TFT Color

- 14.1" /XGA (1024 x 768) resolution
- 13.3" /XGA (1024 x 768) resolution
- 12.1" /SVGA (800 x 600) resolution

Displays

16.8 million colors, 4MB external SGRAM, ATI 3D RAGE LT PRO graphics accelerator

Windows 98 models: Dual image display on one LCD or two separate display devices; simultaneous display of external video, LCD and TV (ATT TriView)

NEC Versa SX Series

- 14.1" /XGA (1024 x 768) resolution
- 13.3" /XGA (1024 x 768) resolution

65,536 colors, 2MB integrated DRAM, Trident Cyber9388 graphics accelerator, dual image display on one LCD or two separate display devices (Windows 98 models), simultaneous display of external video and LCD

Interface

Ports

- Serial
- Enhanced parallel
- External CRTVGA
- PS/2-style keyboard/mouse
- Infrared transmitter/receiver
- USB (Universal Serial Bus)
- Connector for optional Versa Dock or Versa PortBar
- MIDI/game through Versa Dock or Versa PortBar interface
- Stereo headphone
- Mono microphone
- Stereo line in
- TV out with NTSC/PAL (RCA jack and S-Video) on Windows 95/Windows NT models

- Serial
- Enhanced parallel
- External CRTVGA
- PS/2-style keyboard/mouse
- Infrared transmitter/receiver
- USB (Universal Serial Bus)
- Connector for optional Versa Dock or Versa PortBar
- MIDI/game through Versa Dock or Versa PortBar interface
- Stereo headphone
- Stereo microphone
- Stereo line in

Expansion

- Connector for optional Versa Dock or Versa PortBar
- VersaBay III slot
- Two slide-in SODIMM memory card slots
- Two PC Card slots

- Connector for optional Versa Dock or Versa PortBar
- VersaBay III slot
- Two slide-in SODIMM memory card slots
- Two PC Card slots

PC Card Slots

- Two slots for two Type II cards or one Type III
- 32-bit PC CardBus architecture
- Zoomed Video support in both slots

- Two slots for two Type II cards or one Type III
- 32-bit PC CardBus architecture
- Zoomed Video support in both slots

NEC Versa LX Series

NEC Versa SX Series

Operating Systems (any one of these is pre-installed)	<ul style="list-style-type: none"> • Windows 95 • Windows 98 (available July 1998) • Windows NT Workstation 4.0 		<ul style="list-style-type: none"> • Windows 95 • Windows 98 (available July 1998) • Windows NT Workstation 4.0
Software	<p>Pre-installed: Agaté Tioman VersaBay III Swap</p> <p>On a CD-ROM shipped with each notebook:</p> <ul style="list-style-type: none"> • LANDesk Client Manager 3.2 • McAfee VirusScan • Microsoft Internet Explorer 4.0 • Netscape Navigator 3.0 • PartitionMagic for NEC • Intellisync for Notebooks 		<p>Pre-installed: Agaté Tioman VersaBay III Swap</p> <p>On a CD-ROM shipped with each notebook:</p> <ul style="list-style-type: none"> • LANDesk Client Manager 3.2 • McAfee VirusScan • Microsoft Internet Explorer 4.0 • Netscape Navigator 3.0 • PartitionMagic for NEC • Intellisync for Notebooks
User Interface	<ul style="list-style-type: none"> • Programmable VersaGlide touchpad and mouse buttons with drag-lock function, double-tap/tap-disable capabilities, IntelliMouse emulation • Full-size 83-key low-profile keyboard, 12 function keys, Windows hot keys, inverted T arrow keys, full-size shift key, 3.0mm stroke, palmrest 		<ul style="list-style-type: none"> • Programmable VersaGlide touchpad and mouse buttons with drag-lock function, double-tap/tap-disable capabilities, IntelliMouse emulation • Full-size 83-key low-profile keyboard, 12 function keys, Windows hot keys, inverted T arrow keys, full-size shift key, 2.8mm stroke, palmrest
Dimensions	12.1"W x 10.0"D x 1.8"H		12.0"W x 9.9"D x 1.3"H
Weights	<p>With 14.1" or 13.3" display:</p> <ul style="list-style-type: none"> • 6.8 lb. with weight-saving module installed • 7.4 lb. with CD-ROM drive installed <p>With 12.1" display:</p> <ul style="list-style-type: none"> • 6.6 lb. with weight-saving module installed • 7.2 lb. with CD-ROM drive installed 		<ul style="list-style-type: none"> • 4.8 lb. with weight-saving module installed • 5.4 lb. with CD-ROM drive installed
AC Power	100-240 volts, 50/60 Hz, 60 watts maximum		100-240 volts, 50/60 Hz, 60 watts maximum
Primary Batteries	<p>12-cell LiION (lithium ion):</p> <ul style="list-style-type: none"> • Life (depending on configuration and usage): 3 to 4 hours, 52 watt hours capacity • Recharge time: 2.5 hours with power off 		<p>9-cell LiION (lithium ion):</p> <ul style="list-style-type: none"> • Life (depending on configuration and usage): 2 to 3 hours, 39 watt hours capacity • Recharge time: 2 hours with power on or off

NEC Versa LX vs. NEC Versa SX

	NEC Versa LX Series	NEC Versa SX Series
Security Features	<ul style="list-style-type: none">• Power-on password• Battery warnings• Anti-virus software• SMART battery technology• Thermal monitoring• Kensington lock slot	<ul style="list-style-type: none">• Power-on password• Battery warnings• Anti-virus software• SMART battery technology• Thermal monitoring• Kensington lock slot
Warranty	<ul style="list-style-type: none">• Three-year parts and labor limited warranty (UltraCare Essential service)• One year of free UltraCare Preferred service with product registration• Extended UltraCare service and screen assurance programs available	<ul style="list-style-type: none">• Three-year parts and labor limited warranty (UltraCare Essential service)• One year of free UltraCare Preferred service with product registration• Extended UltraCare service and screen assurance programs available
Accessories	Also compatible with NEC Versa SX Series (except primary LiION battery)	Also compatible with NEC Versa LX Series (except primary LiION battery)

NEC Versa LX Series

**Secondary
Battery for
VersaBay III**

- 6-cell LiION:
 • Life (depending on configuration and usage):
 2 to 3 hours, 36 watt hours capacity
 • Recharge time: 2.5 hours with power off

**Power
Management**

- Four levels:
 • Longest Battery Life
 • Highest Performance
 • Custom
 • Off

**Major
Compliances**

- ACPI (Advanced Configuration and Power Interface)
- DMI 2.0 (Desktop Management Interface)
- PC98, PC97
- WFM 1.1A (Wired for Management)
- Year 2000

**Multimedia
Support**

- 24X maximum variable-speed CD-ROM drive
- DVD drive
- Zoomed Video support
- ATI 3D RAGE LT PRO graphics accelerator
- 16-Bit Sound Blaster PRO audio compatibility with 3-D spatializer technology
- Maestro-2E PCI audio accelerator
- Two integrated stereo speakers
- Integrated mono microphone
- Volume control dial
- Stereo headphone
- Stereo line in
- TV out with NTSC/PAL (RCA jack and S-Video) on Windows 95/Windows NT models

NEC Versa SX Series

- 6-cell LiION:
 • Life (depending on configuration and usage):
 2 to 3 hours, 36 watt hours capacity
 • Recharge time: 2 hours with power on or off

- Four levels:
 • Longest Battery Life
 • Highest Performance
 • Custom
 • Off

- ACPI (Advanced Configuration and Power Interface)
- DMI 2.0 (Desktop Management Interface)
- PC98, PC97
- WFM 1.1A (Wired for Management)
- Year 2000

- 24X maximum variable-speed CD-ROM drive
- DVD drive
- Zoomed Video support
- Trident Cyber9388 graphics accelerator
- 16-Bit Sound Blaster PRO audio compatibility with 3-D spatializer technology
- Maestro-2E PCI audio accelerator
- Two integrated stereo speakers
- Integrated stereo microphone
- Volume control dial
- Stereo headphone
- Stereo line in

NEC

NEC Computer Systems Division
Packard Bell NEC, Inc.
1414 Massachusetts Avenue
Boxborough, MA 01719-2298