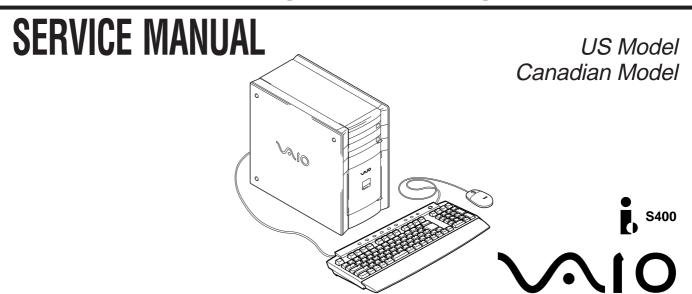
# PCV-RX360DS/RX370DS/RX380DS



**Specifications** 

PERSONAL COMPUTER VAIO



# Information in this document is subject to change without notice.

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All other trademarks are trademarks or registered trademarks of their respective owners. Oter trademarks and trade names may be used in this document to refer to the entitles claiming the marks and names or their produces. Sony Corporation disclaims any proprietary interest in trademarks and trade names other than its own.

#### **CAUTION**

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.

Dispose of used batteries according to the manufacturer's instructions.

#### 

# 1. Obey precautionary markings and instructions

Labels and stamps on the cabinet, chassis, and components identify areas requiring special precautions. Be sure to observe these precautions, as well as all precautions listed in the operating manual and other associated documents.

#### 2. Use designated parts only

The set's components possess important safety characteristics, such as noncombustibility and the ability to tolerate large voltages. Be sure that replacement parts possess the same safety characteristics as the originals. Also remember that the ( $\Delta$  mark, which appears in circuit diagrams and parts lists, denotes components that have particularly important safety functions; be extra sure to use only the designated components.

# 3. Always follow the original design when mounting parts and routing wires

The original layout includes various safety features, such as inclusion of insulating materials (tubes and tape) and the mounting of parts above the printer board. In addition, internal wiring has been routed and clamped so as to keep it away from hot or high-voltage parts. When mounting parts or routing wires, therefore, be sure to duplicate the original layout.

#### 4. Inspect after completing service

After servicing, inspect to make sure that all screws, components, and wiring have been returned to their original condition. Also check the area around the repair location to ensure that repair work has caused no damage, and confirm safety.

#### 5. When replacing chip components...

Never reuse components. Also remember that the negative side of tantalum capacitors is easily damaged by heat.

#### 6. When handling flexible print boards...

- The temperature of the soldering-iron tip should be about 270C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

# PLEASE NOTE: U.S. CUSTOMERS ONLY!

# **IMPORTANT NOTICE!**

# **Mother Board Part Numbers**

<u>Model Number</u>	<u>Part Number</u>		
PCV-RX360DS	T-9986-077-3		
PCV-RX370DS	T-9986-077-2		
PCV-RX380DS	T-9986-077-1		

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# SONY.

# VAIO Digital Studio<sup>™</sup> QuickStart

#### PCV-RX360DS



VAIO Digital Studio™ QuickStart

# Welcome

Congratulations on your purchase of the Sony VAIO® computer! Your new, high-performance, multimedia computer combines state-of-the-art computer functionality with the latest audio/video and information technology convergence features.

#### **Features**

- □ i.LINK® (IEEE1394) interface Two built-in i.LINK ports, located on the front and rear panels, provide you with digital connection capability. The i.LINK name and logo identify a high-speed communication interface, which allows you to easily connect compatible digital camcorders.
- i.LINK is a trademark of Sony used only to designate that a product contains an IEEE1394 connection. The i.LINK connection may vary, depending on the software applications, operating system and i.LINK-compatible devices. All products with an i.LINK connection may not communicate with each other.

Please refer to the documentation that came with your i.LINK-compatible device for information on operating conditions and proper connection. Before connecting i.LINK-compatible PC peripherals to your system, such as a CD-RW or Hard Disk Drive, confirm their operating system compatibility and required operating conditions.

- □ VAIO® AV Applications This suite of Sony original applications includes PictureGear,<sup>TM</sup> Smart Capture, DVgate,<sup>TM</sup> OpenMG<sup>TM</sup> Jukebox, MovieShaker,<sup>TM</sup> VisualFlow,<sup>TM</sup> and Media Bar.<sup>TM</sup> Using the i.LINK ports, you can capture, view, and share both still and video images, then catalog everything for fast, easy storage and retrieval.
- □ Exceptional performance Your computer includes an Intel® processor, a 10Base-T/100Base-TX Fast Ethernet interface, and a high-speed V.90-compatible data/fax modem.\*

Actual upload and download speeds may vary due to line conditions, ISP support, and government regulations.



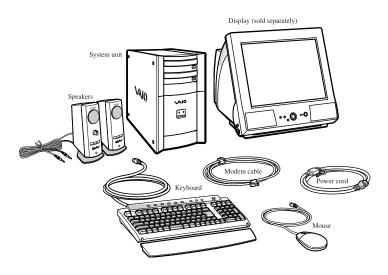
□ **DVD drive** — This new optical storage technology provides increased storage capacity and a rich multimedia computing experience. Your DVD-ROM drive plays both DVDs and CDs. □ **CD-RW drive** — This drive is the ideal solution for making backups and archiving data, with the ability to store up to 650 MB\* of removable, rewritable storage on a single rewritable CD. Save your movies to CD-R or CD-RW media and share videos and images with family and friends. □ VAIO Smart<sup>TM</sup> keyboard — This PS/2® keyboard has programmable shortcut buttons for launching your favorite programs or accessing the Internet. □ Sony audio and video quality — Take advantage of today's advanced multimedia applications, games, and entertainment software with Sony's high-fidelity audio system, high-powered 3D graphics, and "Sony-Tuned" MPEG digital video playback. ☐ Microsoft® Windows® Millennium Edition operating system — Your system includes this latest consumer operating system from Microsoft. ☐ **Preinstalled software titles** — All the software on your computer is preinstalled, configured, and ready for you to use right out of the box. ☐ Communications — Access popular online services, browse the Internet, send faxes, and more.

<sup>\* 530</sup> MB after formatting with Direct CD.TM

### **Unpacking Your Computer**

#### Computer and Supplied Accessories

#### Computer and accessories



#### Manuals

- □ *VAIO Digital Studio*<sup>TM</sup> *QuickStart* Contains information on unpacking and setting up your computer, supplementary updates, and software information.
- □ *VAIO Digital Studio*<sup>TM</sup> *User Guide* Contains features and specifications of your computer. It also includes information on the applications included with your system, how to contact software vendors, and solve common problems.
- ☐ *Microsoft*® *Windows*® *Millennium Edition Getting Started* Explains how to use the basic features of the Windows® operating system.

#### **Recovery CDs**

- □ System Recovery CD(s) Allows you to restore the software titles that shipped with your computer if they become corrupted or are erased. SRCDs can only be used to restore the hard disk of the Sony computer you purchased.
- □ **Application Recovery CD(s)** Allows you to reinstall individual applications or device drivers if they become corrupted or are erased.
- □ **Driver Recovery CD** Allows you to restore device drivers if they become corrupted or are erased.

#### Other

Packet containing special product offers

#### Software Library

Software Library contains the Microsoft software license agreement, Sony end-user license agreement, and the following CDs:

- □ Corel<sup>®</sup> WordPerfect
- □ Tomb Raider ® 5

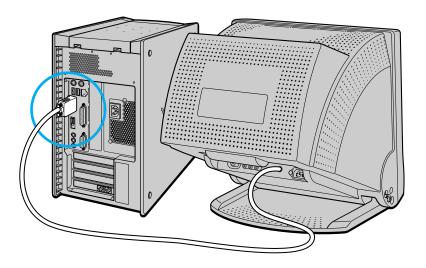
# Setting Up Your Computer

This section illustrates how to set up and install your computer and peripheral devices.

#### Connecting a CRT Display

- 1 Plug the display cable into the MONITOR port.
- 2 If necessary, plug the display cord into the rear of the display.

#### Connecting a CRT display



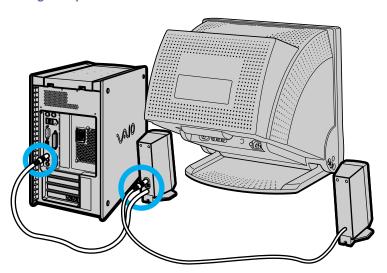
Install your equipment so that you can easily reach the power outlet in the event of an emergency.

#### VAIO Digital Studio™ QuickStart

#### **Connecting the Speakers**

- 1 Plug the cable attached to the left speaker into the L OUT jack on the back of the right speaker.
- 2 Plug the cable attached to the right speaker into the HEADPHONES jack.
- 3 Plug the jack end of the speaker power cord into the DC IN jack on the back of the right speaker and plug the other end into a grounded AC wall outlet or power strip.

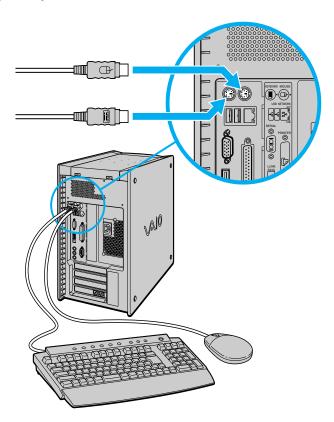
#### Connecting the speakers



#### Connecting the keyboard and mouse

- 1 Plug the keyboard cable into the PS/2<sup>®</sup> KEYBOARD port on the back of the computer.
- 2 Plug the mouse cable into the MOUSE port.

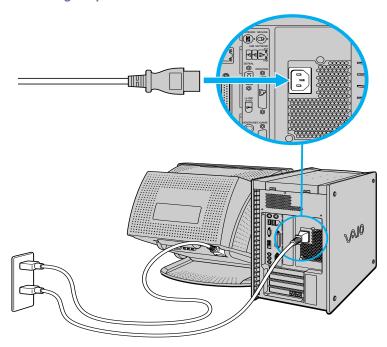
#### Connecting the keyboard and mouse



#### Connecting the modem cable and power cords

- 1 Unplug your phone from the wall jack, and plug it into the TELEPHONE jack on the computer.
- 2 Plug the modem cable (supplied) into the LINE jack on the computer, and then plug the other end of the cable into the wall jack.
- 3 Plug the power cord into the back of the computer.
- 4 Plug both the display and power cord into a grounded AC wall outlet or a power strip.

#### Connecting the power cords



 $\triangle$ 

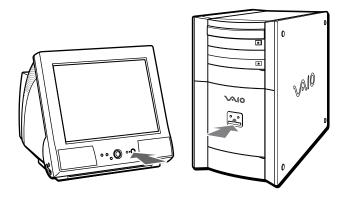
Warning: Your computer has a protective sticker covering the Ethernet port located on the rear panel. Connect only 10Base-T and 100Base-TX cables to the Ethernet port. Using other cables or a telephone cable may result in an electric current overload and can cause a malfunction, excessive heat or fire in the port. For help on connecting to a network, see your network administrator.

#### Turning on your VAIO Computer

- 1 Press the power switch on the display to turn on the power.
- 2 Press the power switch on the computer to turn on the power.

When you start your system for the first time, your computer may redetect new equipment and display a dialog box that asks you to restart your computer. Please respond to this request immediately.

#### Turning on your computer



You may sign up for Internet access with a Sony preferred Internet service provider.

#### Configuring the Wheel Mouse

#### To set up the mouse for left-handed use

- Click My Computer on your desktop.
- 2 Click Control Panel, and then Click Mouse. (If you don't see the option you need, click the hyperlink that allows you to view all Control Panel options.)
  The Mouse Properties dialog box appears.
- 3 In the Buttons tab, select Left-Handed under the Button Configuration options.
- 4 Click Apply, then OK.

#### Registering Your Computer

Take advantage of Sony's commitment to quality customer support and receive these benefits by registering your computer:

- **Sony Customer Support** Talk to a Support Representative to troubleshoot problems you may be having with your computer.
- ☐ **Limited warranty** Protect your investment. See the Warranty Card for more details.

If you did not register when you first turned on your computer, follow these steps to use the online computer registration service.

- 1 Make sure your computer is connected to a phone line.
- 2 Click the registration icon on the VAIO® desktop.
- 3 Enter the information as requested in the first online registration form.
- Press the tab key to move from box to box.
- 4 Click the Next button to advance to the next form.
- 5 Complete the remaining forms by clicking the Next button each time you complete a form.

6 The computer automatically transfers your registration information using your built-in modem and a toll-free or local telephone number.

Low You may sign up for Internet access with a Sony-preferred Internet Service Provider.

#### **Shutting Down Your Computer**

When you are ready to turn off your computer for an extended period of time, use this procedure.



To avoid loss of data, do not use the power switch to turn off the computer.

#### To turn off your computer

- If you plan to turn off your computer for a short period of time, you may want to use standby mode instead.
- 1 From the Start menu, select Shut Down to display the Shut Down Windows dialog box.
- 2 Select the Shut Down option.
- 3 Click OK to complete the shut down process.
- Respond to any prompts about saving documents
- 4 Wait for your computer to turn off automatically—the power indicator light turns off.
- 5 Turn off any peripheral devices connected to your computer.

#### About the Power Switch

If your system stops responding, press and hold the power switch for more than four seconds to force your system to shut down. You may need to repeat this procedure.

#### Using the Standby Function

When you plan to stop using your computer for a short period of time, you can put it in standby mode instead of turning it off completely. Putting the computer in standby mode saves energy and allows a quick return to normal computer use. You can use any of the following three methods for activating the standby mode.

#### To set the computer in standby mode using the Standby key

1 Save your work, close all applications, and close your dial-up Internet connection, if applicable.

You can leave the Windows® operating system running.

Press the (Standby) key on the top of the keyboard.
The computer goes into standby mode.

#### To set the computer in standby mode using the Windows taskbar

- 1 Save your work, close all applications, and close your dial-up Internet connection, if applicable.
- Myou can leave the Windows operating system running.
- 2 From the Start menu on the Windows taskbar, select Shut Down.
- 3 Select Standby.
- 4 Click OK.

The computer goes into standby mode.

#### To let the computer go into standby mode automatically

- Save your work, close all applications, and close your dial-up Internet connection, if applicable.
- You can leave the Windows operating system running
- 2 Click My Computer on your desktop.

- 3 Click Control Panel.
- 4 Click Power Options.
- 5 On the Power Schemes tab, select an option from the Power schemes drop-down list.
- 6 Choose settings for the power scheme you have selected.
- To save the settings under a name that is not offered in the Power schemes drop-down menu, choose your settings and then click Save As.
- 7 Type in a name.
- 8 Click OK.
- 9 Click Apply to finalize your power settings.
  The computer will go into standby mode according to your settings.

#### To resume from standby mode

There are three ways to bring your computer back from the standby mode:

- Press the space bar on your keyboard.
- ☐ Momentarily press the power button on your computer.
- Press Alt.

#### Standby Mode Indicators

You can tell which mode the computer is in by the color of the power indicator light.

Color	Mode	
Red	Computer is in standby mode.	
Blue	Computer is in normal mode, ready to use.	
No color	Computer is turned off.	

# About the Software on Your Computer

Your VAIO<sup>®</sup> computer is ready to help you work, play, learn, and communicate as soon as you turn it on. This section provides an overview of the software titles included with your computer.

#### Adobe® Acrobat® Reader

Adobe Systems Incorporated

Acrobat Reader software allows you to view, navigate, and print electronic documents in Adobe's Portable Document Format (PDF), an open file format that is intended to preserve the fidelity of documents created on all major computer platforms.

#### Adobe® PhotoDeluxe® Home Edition

Adobe Systems Incorporated

Create amazing photo effects with Adobe PhotoDeluxe. Without learning complex software, you can enhance, restore, and be creative with your photos. Includes built-in guided activities, stock photos, clip art, and templates to assist you.

#### America Online®

America Online

America Online is the world's most popular Internet online service. Stay in touch with family and friends with easy-to-use e-mail. Manage your personal finances, get the latest news and sports scores, and chat with thousands of others who share your interests.

#### CompuServe® 2000

CompuServe Interactive Services

The all-new CompuServe 2000 delivers a powerful tool for Internet users who want serious and timely information, in-depth research, and professional communities backed by state-of-the-art technologies, including high-speed access and powerful e-mail messaging.

#### Direct CD<sup>TM</sup>

Adaptec, Inc.

Direct CD allows you to drag and drop files directly to your CD-RW drive. You can save, rename, move or delete files right on your CD-RW.

#### **Microsoft<sup>®</sup> Internet Explorer**

#### Microsoft Corporation

Internet Explorer delivers the Web the way you want it. It's safe, easy to use, and you can personalize how you access the Web. Outlook Express and other tools in Internet Explorer help you have a great experience when you are on the Web!

#### Microsoft® Outlook® Express

#### Microsoft Corporation

Outlook Express, the messaging tool that takes your e-mail and newsgroup communications to new heights! Outlook Express is easy to set up and use, and provides you with secure, personalized, and comprehensive features that make creating, sending, and reading your e-mail a rich and dynamic experience.

#### **MovieShaker**<sup>TM</sup>

#### Sony Electronics, Inc.

Sony's original MovieShaker software creates personal movies that have transitions, background music, and text. Just import your video clips and "shake" with a click of the mouse. Your personal movies are easy to create and fun to share with family and friends.

#### **Netscape<sup>®</sup> Communicator**

#### Netscape Communications

Netscape Communicator is the all-in-one Internet tool that makes it easy to browse the Web, send Internet e-mail, chat, read newsgroups, and compose great Web documents.

#### OpenMG<sup>TM</sup> Jukebox

Sony Electronics, Inc.

OpenMG Jukebox software enables you to import digital audio files by downloading audio files from Electronic Music Distribution (EMD) services over digital networks, such as the Internet. You can record audio CDs onto your hard drive in a variety of formats.

#### PhotoPrinter<sup>TM</sup> 2000 Pro

ArcSoft, Inc.

PhotoPrinter Pro is an easy-to-use, advanced printing program that lets users quickly layout multiple images in multiple sizes on a single sheet of paper. PhotoPrinter Pro offers a wide selection of templates including landscape, portrait, free-style, mixed sizes, custom templates and more. The application includes enhancement tools and special effects for improving photos while giving users the ability to add text to any image.

#### **PictureGear**<sup>TM</sup>

Sony Electronics, Inc.

This image management software displays images from your hard drive, a Sony digital still camera, or a Sony Mavica® camera. The images appear in a convenient light-table format, so that you can easily view the contents of an entire folder.

#### $\textbf{Prodigy Internet}^{^{TM}}$

**Prodigy Communications Corporation** 

An Internet service that helps you find what you need online faster and smarter. Prodigy delivers powerful online content, such as sports scores, stock quotes, news, and easy access to Excite<sup>TM</sup>, plus a personal e-mail account and quality customer service—all at a competitive price.

#### Ouicken® 2001

Intuit, Inc.

Quicken is the fastest, easiest way to organize your finances. Quicken works just like your checkbook, so it's easy to learn and use. Quicken manages all of your finances, bank accounts, credit cards, investments, and loans. You can even pay your bills online.

#### **Smart Capture**<sup>TM</sup>

Sony Electronics, Inc.

By managing the i.LINK connection between your computer and a digital camera with an i.LINK interface, Smart Capture enables you to capture and compress video or still images that you can save or share via e-mail. Smart Capture is a smart solution to computer, digital audio/video, and network convergence.

#### Tomb Raider® 5

Eidos Interactive

Tomb Raider 5 is the next title in the action-adventure game series starring Lara Croft. Once again explore dangerous and exciting new worlds, find powerful weapons and tackle new enemies. Whether a veteran of the series or newcomer, Tomb Raider's stunning 3-D worlds and intense action is something you will not want to miss.

#### **VAIO Action Setup**

Sony Electronics, Inc.

VAIO Action Setup manages the settings for your computer's Shortcut keys and i.LINK interface.

#### **VAIO Support Agent**

Sony Electronics, Inc.

VAIO Support Agent provides immediate, interactive, on-line support.

#### **VisualFlow**<sup>TM</sup>

#### Sony Electronics, Inc.

VisualFlow is a state-of-the-art Sony multimedia browser designed specifically for Memory Stick media. It displays any still picture, movie or sound files stored in a Memory Stick media in a visually pleasing, artistic manner. VisualFlow not only plays a selected movie or sound file, but also enables playback of files by other applications like PictureGear, Memory Stick Slideshow and Windows Explorer.

#### **WordPerfect®**

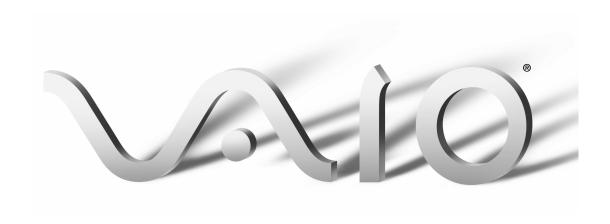
#### Corel Corporation

Create professional-looking documents, such as newsletters, reports and brochures with this outstanding word processor, adding graphics, charts and tables with ease. RealTime Preview lets you preview formatting before applying it to your documents and Reveal Codes increases the control you have over document structure.

# SONY<sub>®</sub>

# VAIO Digital Studio<sup>™</sup> QuickStart

#### PCV-RX370DS/PCV-RX380DS



VAIO Digital Studio™ QuickStart

# Welcome

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#### **Features**

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Please refer to the documentation that came with your i.LINK-compatible device for information on operating conditions and proper connection. Before connecting i.LINK-compatible PC peripherals to your system, such as a CD-RW or Hard Disk Drive, confirm their operating system compatibility and required operating conditions.

- VAIO® AV Applications This suite of Sony original applications includes PictureGear<sup>TM</sup>, Smart Capture, DVgate<sup>TM</sup>, OpenMG<sup>TM</sup> Jukebox, MovieShaker<sup>TM</sup>, VisualFlow<sup>TM</sup>, and Media Bar<sup>TM</sup>. Using the i.LINK ports, you can capture, view, and share both still and video images, then catalog everything for fast, easy storage and retrieval.
- □ Exceptional performance Your computer includes an Intel® processor, a 10Base-T/100Base-TX Fast Ethernet interface, and a high-speed V.90-compatible data/fax modem.\*

<sup>\*</sup> Actual upload and download speeds may vary due to line conditions, ISP support, and government regulations.



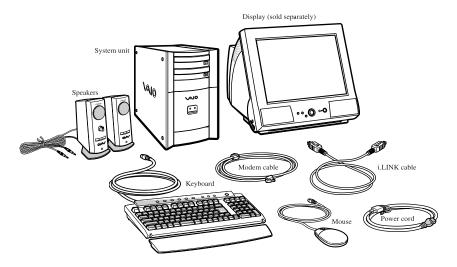
□ **DVD drive** — This new optical storage technology provides increased storage capacity and a rich multimedia computing experience. Your DVD-ROM drive plays both DVDs and CDs. □ **CD-RW drive** — This drive is the ideal solution for making backups and archiving data, with the ability to store up to 650 MB\* of removable, rewritable storage on a single rewritable CD. Save your movies to CD-R or CD-RW media and share videos and images with family and friends. □ VAIO Smart<sup>TM</sup> keyboard — This PS/2® keyboard has programmable shortcut buttons for launching your favorite programs or accessing the Internet. □ Sony audio and video quality — Take advantage of today's advanced multimedia applications, games, and entertainment software with Sony's high-fidelity audio system, high-powered 3D graphics, and "Sony-Tuned" MPEG digital video playback. ☐ Microsoft® Windows® Millennium Edition operating system — Your system includes this latest consumer operating system from Microsoft. ☐ **Preinstalled software titles** — All the software on your computer is preinstalled, configured, and ready for you to use right out of the box. ☐ Communications — Access popular online services, browse the Internet, send faxes, and more.

<sup>\* 530</sup> MB after formatting with Direct CD.TM

### **Unpacking Your Computer**

#### Computer and Supplied Accessories

Computer and accessories (PCV-RX370DS/PCV-RX380DS)



#### Manuals

- □ *VAIO Digital Studio*<sup>TM</sup> *QuickStart* Contains information on unpacking and setting up your computer, supplementary updates, and software information.
- □ *VAIO Digital Studio*<sup>TM</sup> *User Guide* Contains features and specifications of your computer. It also includes information on the applications included with your system, how to contact software vendors, and solve common problems.
- ☐ *Microsoft*® *Windows*® *Millennium Edition Getting Started* Explains how to use the basic features of the Windows® operating system.

#### **Recovery CDs**

- □ System Recovery CD(s) Allows you to restore the software titles that shipped with your computer if they become corrupted or are erased. SRCDs can only be used to restore the hard disk of the Sony computer you purchased.
- □ **Application Recovery CD(s)** Allows you to reinstall individual applications or device drivers if they become corrupted or are erased.
- □ **Driver Recovery CD** Allows you to restore device drivers if they become corrupted or are erased.

#### Other

Packet containing special product offers

#### Software Library

Software Library contains the Microsoft software license agreement, Sony end-user license agreement, and the following CDs:

- ☐ Microsoft® Word 2000
- ☐ Tomb Raider® 5

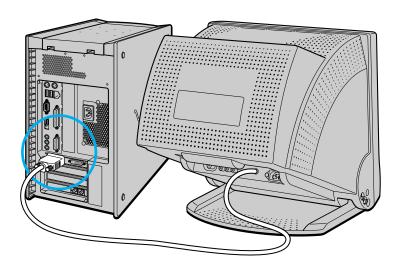
# Setting Up Your Computer

This section illustrates how to set up and install your computer and peripheral devices.

#### Connecting a CRT Display

- 1 Plug the display cable into the MONITOR port.
- 2 If necessary, plug the display cord into the rear of the display.

#### Connecting a CRT display (PCV-RX370DS/PCV-RX380DS)

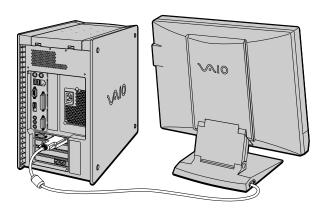


#### VAIO Digital Studio™ QuickStart

#### Connecting a LCD Display

- 1 Plug the display cable into the DVI port.
- 2 If necessary, plug the display cord into the rear of the display.
- You can use the optional Sony LCD monitor (PCVA-15XD2) with this computer. See the manual that came with your LCD monitor for more information on installation and use.

#### Connecting a LCD display (PCV-RX370DS/PCV-RX380DS)

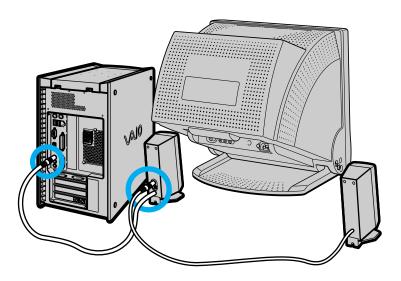


Install your equipment so that you can easily reach the power outlet in the event of an emergency.

#### **Connecting the Speakers**

- 1 Plug the cable attached to the left speaker into the L OUT jack on the back of the right speaker.
- 2 Plug the cable attached to the right speaker into the HEADPHONES jack.
- 3 Plug the jack end of the speaker power cord into the DC IN jack on the back of the right speaker and plug the other end into a grounded AC wall outlet or power strip.

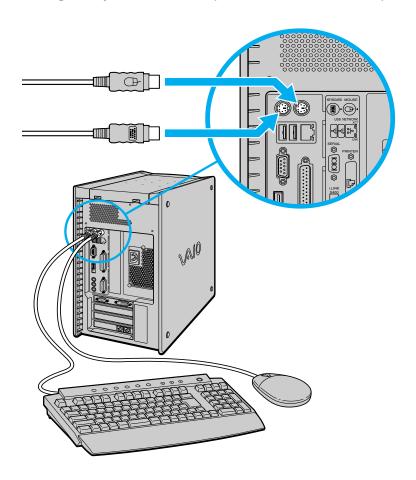
#### Connecting the speakers (PCV-RX370DS/PCV-RX380DS)



#### Connecting the keyboard and mouse

- 1 Plug the keyboard cable into the PS/2® KEYBOARD port on the back of the computer.
- 2 Plug the mouse cable into the MOUSE port.

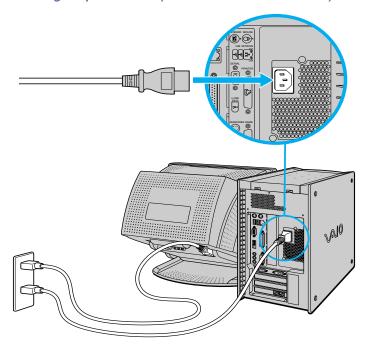
Connecting the keyboard and mouse (PCV-RX370DS/PCV-RX380DS)



## Connecting the modem cable and power cords

- 1 Unplug your phone from the wall jack, and plug it into the TELEPHONE jack on the computer.
- 2 Plug the modem cable (supplied) into the LINE jack on the computer, and then plug the other end of the cable into the wall jack.
- 3 Plug the power cord into the back of the computer.
- 4 Plug both the display and power cord into a grounded AC wall outlet or a power strip.

## Connecting the power cords (PCV-RX370DS/PCV-RX380DS)



 $\triangle$ 

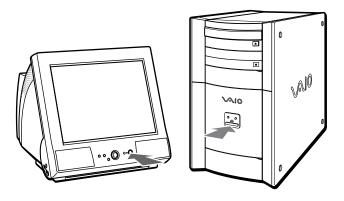
Warning: Your computer has a protective sticker covering the Ethernet port located on the rear panel. Connect only 10Base-T and 100Base-TX cables to the Ethernet port. Using other cables or a telephone cable may result in an electric current overload and can cause a malfunction, excessive heat or fire in the port. For help on connecting to a network, see your network administrator.

## VAIO Digital Studio™ QuickStart

## Turning on your VAIO Computer

- 1 Press the power switch on the display to turn on the power.
- 2 Press the power switch on the computer to turn on the power.
- When you start your system for the first time, your computer may redetect new equipment and display a dialog box that asks you to restart your computer. Please respond to this request immediately.

## Turning on your computer (PCV-RX370DS/PCV-RX380DS)



You may sign up for Internet access with a Sony preferred Internet service provider.

## Configuring the Wheel Mouse

## To set up the mouse for left-handed use

- Click My Computer on your desktop.
- 2 Click Control Panel, and then Click Mouse. (If you don't see the option you need, click the hyperlink that allows you to view all Control Panel options.)
  The Mouse Properties dialog box appears.
- 3 In the Buttons tab, select Left-Handed under the Button Configuration options.
- 4 Click Apply, then OK.

## Registering Your Computer

Take advantage of Sony's commitment to quality customer support and receive these benefits by registering your computer:

- **Sony Customer Support** Talk to a Support Representative to troubleshoot problems you may be having with your computer.
- ☐ **Limited warranty** Protect your investment. See the Warranty Card for more details.

If you did not register when you first turned on your computer, follow these steps to use the online computer registration service.

- 1 Make sure your computer is connected to a phone line.
- 2 Click the registration icon on the VAIO® desktop.
- 3 Enter the information as requested in the first online registration form.
- Press the tab key to move from box to box.
- 4 Click the Next button to advance to the next form.
- 5 Complete the remaining forms by clicking the Next button each time you complete a form.

The computer automatically transfers your registration information using your built-in modem and a toll-free or local telephone number.

You may sign up for Internet access with a Sony-preferred Internet Service Provider.

## **Shutting Down Your Computer**

When you are ready to turn off your computer for an extended period of time, use this procedure.



To avoid loss of data, do not use the power switch to turn off the computer.

## To turn off your computer

- If you plan to turn off your computer for a short period of time, you may want to use standby mode instead.
- 1 From the Start menu, select Shut Down to display the Shut Down Windows dialog box.
- 2 Select the Shut Down option.
- 3 Click OK to complete the shut down process.
- Respond to any prompts about saving documents
- 4 Wait for your computer to turn off automatically—the power indicator light turns off.
- 5 Turn off any peripheral devices connected to your computer.

## About the Power Switch

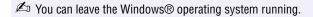
If your system stops responding, press and hold the power switch for more than four seconds to force your system to shut down. You may need to repeat this procedure.

## **Using the Standby Function**

When you plan to stop using your computer for a short period of time, you can put it in standby mode instead of turning it off completely. Putting the computer in standby mode saves energy and allows a quick return to normal computer use. You can use any of the following three methods for activating the standby mode.

## To set the computer in standby mode using the Standby key

1 Save your work, close all applications, and close your dial-up Internet connection, if applicable.



Press the © (Standby) key on the top of the keyboard.
The computer goes into standby mode.

## To set the computer in standby mode using the Windows taskbar

- 1 Save your work, close all applications, and close your dial-up Internet connection, if applicable.
- You can leave the Windows operating system running.
- 2 From the Start menu on the Windows taskbar, select Shut Down.
- 3 Select Standby.
- 4 Click OK.

The computer goes into standby mode.

## To let the computer go into standby mode automatically

1 Save your work, close all applications, and close your dial-up Internet connection, if applicable.

You can leave the Windows operating system running

2 Click My Computer on your desktop.

## VAIO Digital Studio™ QuickStart

- 3 Click Control Panel.
- 4 Click Power Options.
- 5 On the Power Schemes tab, select an option in the Power schemes drop-down list.
- 6 Choose settings for the power scheme you have selected.
- To save the settings under a name that is not offered in the Power schemes pulldown menu, choose your settings and then click Save As.
- 7 Type in a name.
- 8 Click OK.
- 9 Click Apply to finalize your power settings.
  The computer will go into standby mode according to your settings.

## To resume from standby mode

There are three ways to bring your computer back from the standby mode:

- ☐ Press the space bar on your keyboard.
- ☐ Momentarily press the power button on your computer.
- Press Alt.

## Standby Mode Indicators

You can tell which mode the computer is in by the color of the power indicator light.

Color	Mode
Red	Computer is in standby mode.
Blue	Computer is in normal mode, ready to use.
No color	Computer is turned off or in hibernate mode.

## About the Software on Your Computer

Your VAIO<sup>®</sup> computer is ready to help you work, play, learn, and communicate as soon as you turn it on. This section provides an overview of the software titles included with your computer.

## Adobe® Acrobat® Reader

Adobe Systems Incorporated

Acrobat Reader software allows you to view, navigate, and print electronic documents in Adobe's Portable Document Format (PDF), an open file format that is intended to preserve the fidelity of documents created on all major computer platforms.

## Adobe® PhotoDeluxe® Home Edition

Adobe Systems Incorporated

Create amazing photo effects with Adobe PhotoDeluxe. Without learning complex software, you can enhance, restore, and be creative with your photos. Includes built-in guided activities, stock photos, clip art, and templates to assist you.

## America Online®

America Online

America Online is the world's most popular Internet online service. Stay in touch with family and friends with easy-to-use e-mail. Manage your personal finances, get the latest news and sports scores, and chat with thousands of others who share your interests.

## CompuServe® 2000

CompuServe Interactive Services

The all-new CompuServe 2000 delivers a powerful tool for Internet users who want serious and timely information, in-depth research, and professional communities backed by state-of-the-art technologies, including high-speed access and powerful e-mail messaging.

## $\textbf{Direct} \ \textbf{CD}^{^{TM}}$

Adaptec, Inc.

DirectCD allows you to drag and drop files directly to your CD-RW drive. You can save, rename, move or delete files right on your CD-RW.

## VAIO Digital Studio™ QuickStart

## **DVgate**<sup>TM</sup>

Sony Electronics, Inc.

Connect a digital video camera recorder to the i.LINK® connector and capture your own video clips and still images. You can edit clips from your video, add others, and combine clips into new movie segments. You can also save your images in a variety of popular file formats.

## EarthLink TotalAccess TM

EarthLink Network, Inc.

An Internet Service Provider that supplies access, information, and assistance to its customers, introducing them to the Internet. Member benefits include e-mail, newsgroups, a Personal Start Page, a free 6 MB Web site, a member magazine, and 24-hour technical support.

## Easy CD Creator<sup>TM</sup>

Adaptec, Inc.

Easy CD Creator lets you make your own data, audio and multimedia CDs. You can back up your important files to CD, and read them back on standard CD-ROM drives. Create your own audio CDs right on your desktop, and play them back on your home or car stereo CD player. You can make your own personalized color jewel case inserts with custom text and graphics. You can even make backup copies of your existing CDs. The easy CD Creator Wizard makes creating your own custom CDs a simple process.

## McAfee's VirusScan®

Network Associates, Inc.

Protect your computer from viruses. VirusScan can detect viruses from floppy disks, Internet downloads, e-mail attachments, intranets, shared files, CD-ROMs, and online services.

## Media Bar<sup>TM</sup>

Sony Electronics, Inc.

Media Bar is your all-in-one solution for audio/video playback. Media Bar software handles all common computer multimedia formats, and controls selected Sony devices. Media Bar software encompasses audio/video library cataloging and playlist management, in addition to digital video quality control and effects features. Media Bar seamlessly integrates a variety of new media formats with an easy-to-use software interface.

## **Microsoft<sup>®</sup> Internet Explorer**

## Microsoft Corporation

Internet Explorer delivers the Web the way you want it. It's safe, easy to use, and you can personalize how you access the Web. Outlook Express and other tools in Internet Explorer help you have a great experience when you are on the Web!

## Microsoft® Outlook® Express

## Microsoft Corporation

Outlook Express, the messaging tool that takes your e-mail and newsgroup communications to new heights! Outlook Express is easy to set up and use, and provides you with secure, personalized, and comprehensive features that make creating, sending, and reading your e-mail a rich and dynamic experience.

## Microsoft® Word 2000

## Microsoft Corporation

Microsoft Word 2000 makes it easy to create common Web, e-mail, and print documents for use around the world. It embraces HTML as a first-class file format and extends Word's ease-of-use to the Web and e-mail. Word 2000 also extends that ease of use to international users, making it easy to create multilingual documents.

### **MovieShaker**<sup>TM</sup>

### Sony Electronics, Inc.

Sony's original MovieShaker software creates personal movies that have transitions, background music, and text. Just import your video clips and "shake" with a click of the mouse. Your personal movies are easy to create and fun to share with family and friends.

## **Netscape Communicator**®

## Netscape Communications

Netscape Communicator is the all-in-one Internet tool that makes it easy to browse the Web, send Internet e-mail, chat, read newsgroups, and compose great Web documents.

## OpenMG<sup>TM</sup> Jukebox

## Sony Electronics, Inc.

OpenMG Jukebox software enables you to import digital audio files by downloading audio files from Electronic Music Distribution (EMD) services over digital networks, such as the Internet. You can record audio CDs onto your hard drive in a variety of formats.

## **PictureGear**<sup>TM</sup>

### Sony Electronics, Inc.

This image management software displays images from your hard drive, a Sony digital still camera, or a Sony Mavica® camera. The images appear in a convenient light-table format, so that you can easily view the contents of an entire folder.

## PhotoPrinter<sup>TM</sup> 2000 Pro

### ArcSoft, Inc.

PhotoPrinter Pro is an easy-to-use, advanced printing program that lets users quickly layout multiple images in multiple sizes on a single sheet of paper. PhotoPrinter Pro offers a wide selection of templates including landscape, portrait, free-style, mixed sizes, custom templates and more. The application includes enhancement tools and special effects for improving photos while giving users the ability to add text to any image.

## **Prodigy Internet**<sup>TM</sup>

## Prodigy Communications Corporation

An Internet service that helps you find what you need online faster and smarter. Prodigy delivers powerful online content, such as sports scores, stock quotes, news, and easy access to Excite<sup>TM</sup>, plus a personal e-mail account and quality customer service—all at a competitive price.

## Quicken® 2001

## Intuit, Inc.

Quicken is the fastest, easiest way to organize your finances. Quicken works just like your checkbook, so it's easy to learn and use. Quicken manages all of your finances, bank accounts, credit cards, investments, and loans. You can even pay your bills online.

## **Smart Capture** TM

## Sony Electronics, Inc.

By managing the i.LINK connection between your computer and a digital camera with an i.LINK interface, Smart Capture enables you to capture and compress video or still images that you can save or share via e-mail. Smart Capture is a smart solution to computer, digital audio/video, and network convergence.

## Sound Forge® XP

## Sonic Foundry, Inc.

Sound Forge XP allows you to put powerful audio processing tools and effects to work on your desktop. Simply cut, copy, and paste your way to striking multimedia files for use in everything from Web pages to desktop presentations.

## Tomb Raider® 5

## Eidos Interactive

Tomb Raider 5 is the next title in the action-adventure game series starring Lara Croft. Once again explore dangerous and exciting new worlds, find powerful weapons and tackle new enemies. Whether a veteran of the series or newcomer, Tomb Raider's stunning 3-D worlds and intense action is something you will not want to miss.

## **VAIO Action Setup**

Sony Electronics, Inc.

VAIO Action Setup manages the settings for your computer's Shortcut keys and i.LINK interface.

## **VAIO Support Agent**

Sony Electronics, Inc.

VAIO Support Agent provides immediate, interactive, on-line support.

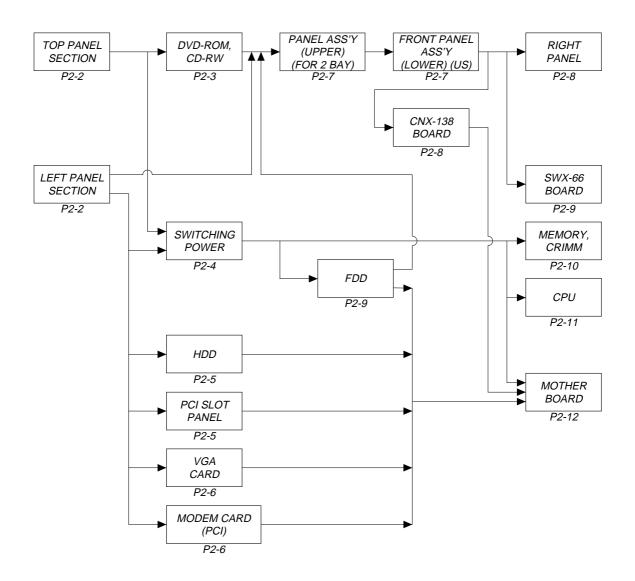
## **VisualFlow**<sup>TM</sup>

Sony Electronics, Inc.

VisualFlow is a state-of-the-art Sony multimedia browser designed specifically for Memory Stick media. It displays any still picture, movie or sound files stored in a Memory Stick media in a visually pleasing, artistic manner. VisualFlow not only plays a selected movie or sound file, but also enables playback of files by other applications like PictureGear, Memory Stick Slideshow and Windows Explorer.

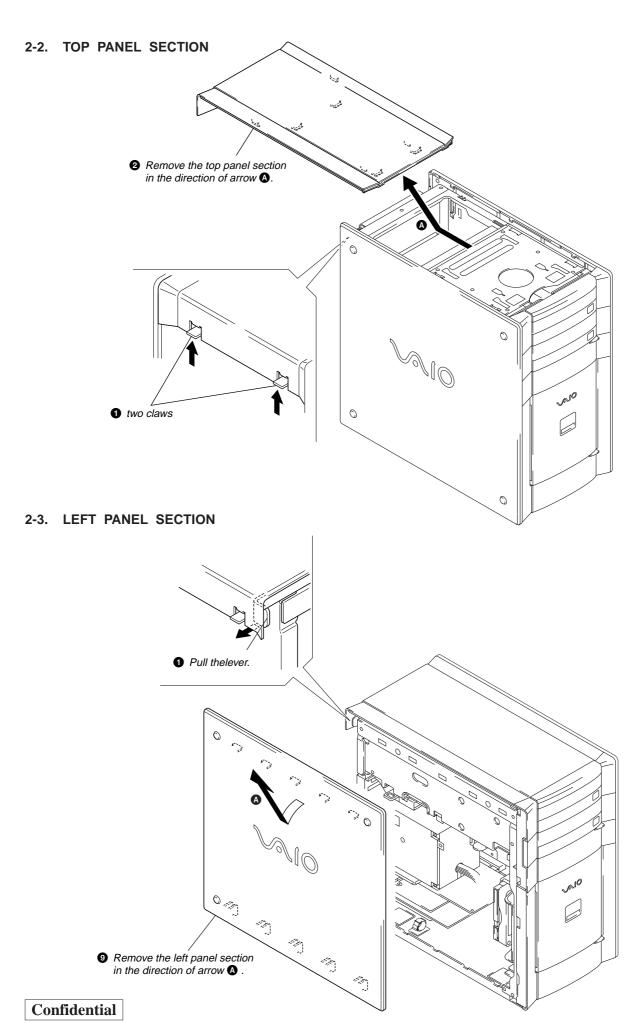
## SECTION 2 DISASSEMBLY

## 2-1. FLOW CHART

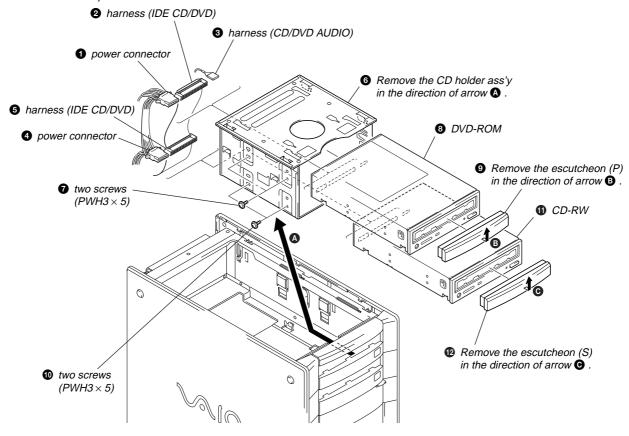


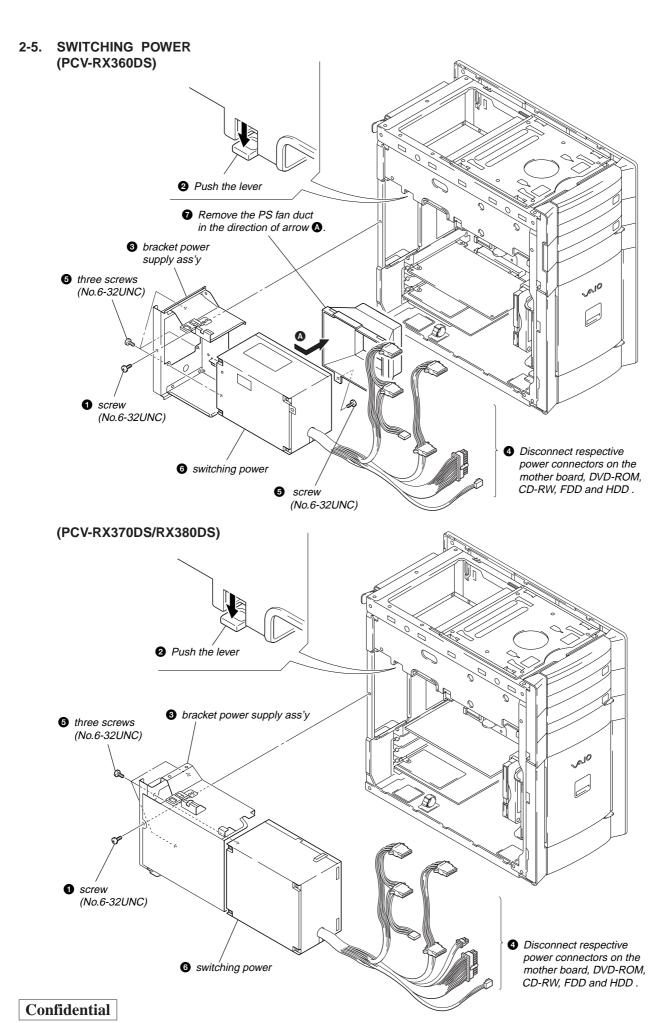
P□-□ denotes the page concerned.

HDD has a low resistance to vibration, requiring careful handling.

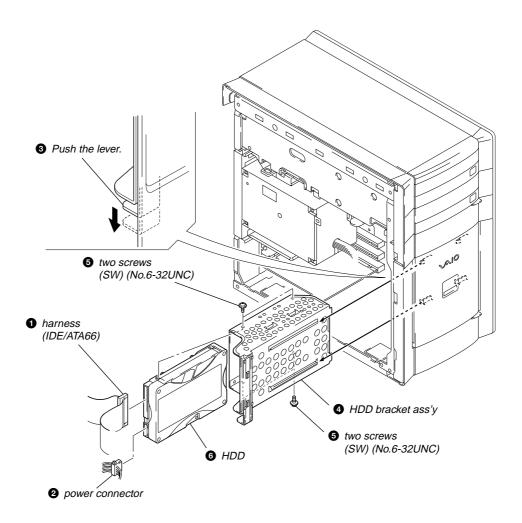


## 2-4. DVD-ROM, CD-RW

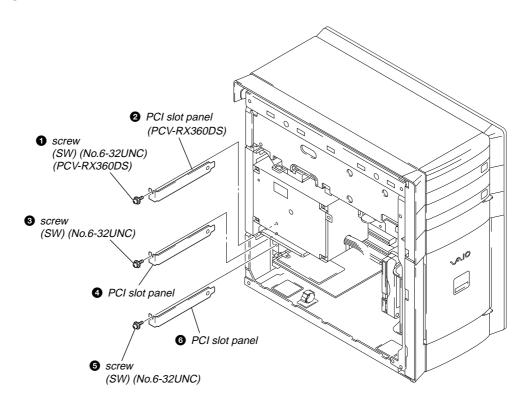




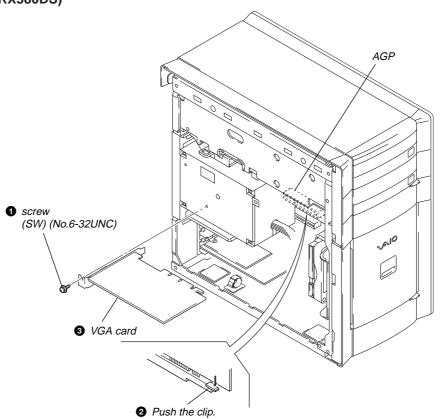
## 2-6. HDD



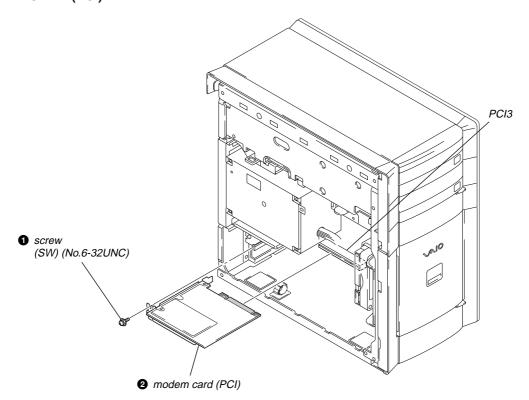
## 2-7. PCI SLOT PANEL



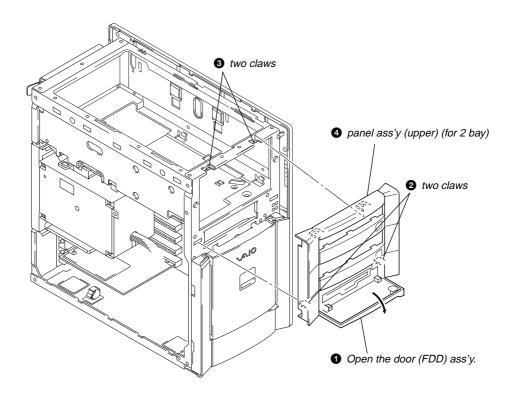
## 2-8. VGA CARD (PCV-RX370DS/RX380DS)



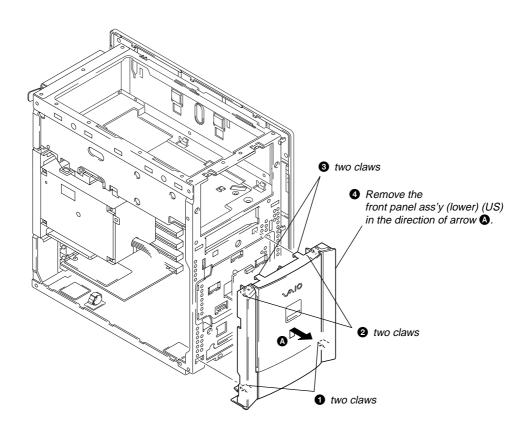
## 2-9. MODEM CARD (PCI)



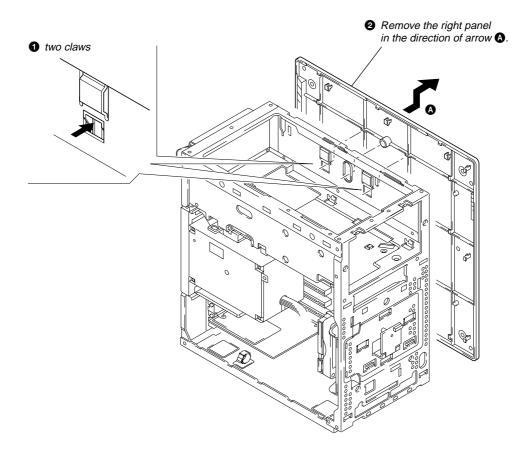
## 2-10. PANEL ASS'Y (UPPER) (FOR 2 BAY)



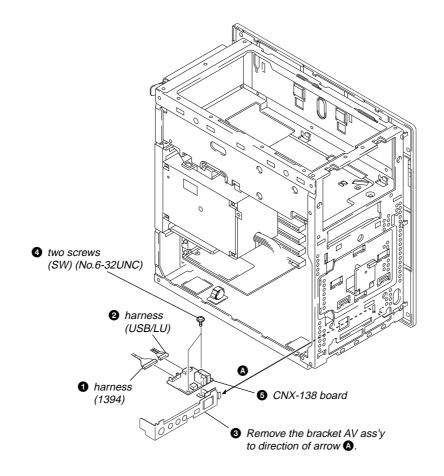
## 2-11. FRONT PANEL ASS'Y (LOWER) (US)



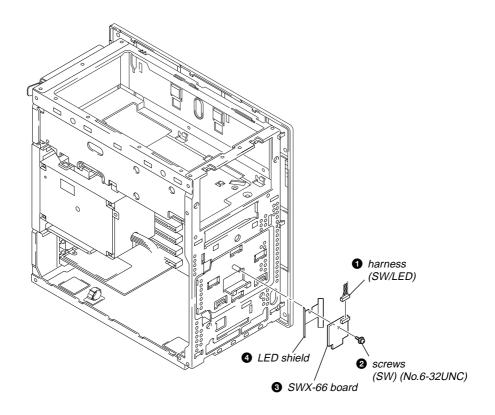
## 2-12. RIGHT PANEL



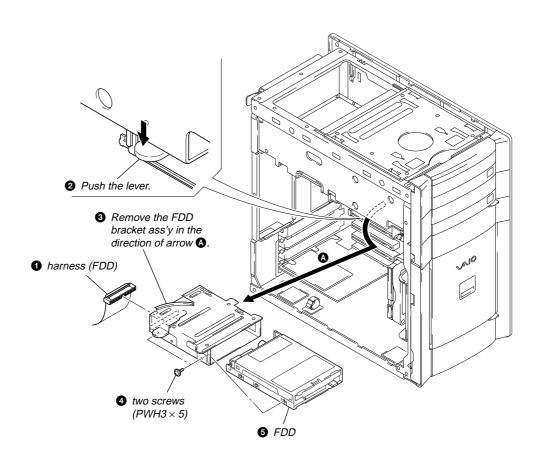
## 2-13. CNX-138 BOARD



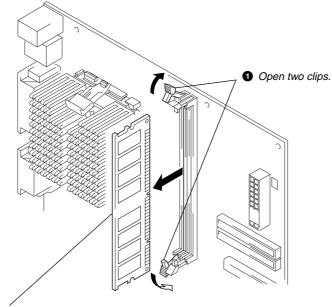
## 2-14. SWX-66 BOARD



## 2-15. FDD



## 2-16. MEMORY, CRIMM (PCV-RX360DS)

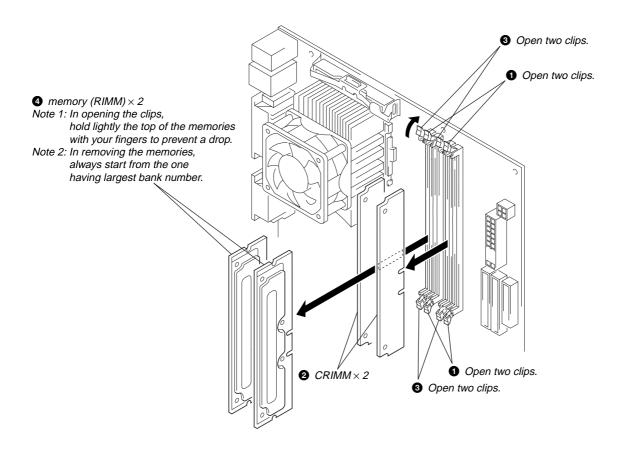


2 memory (DIMM)

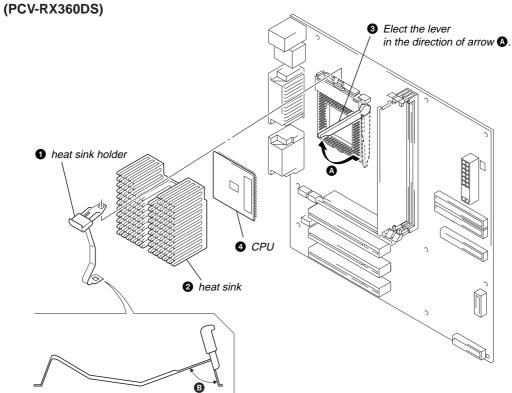
Note 1: In opening the clips, hold lightly the top of the memories with your fingers to prevent a drop.

Note 2: In removing the memories, always start from the one having largest bank number.

## (PCV-RX370DS/RX380DS)



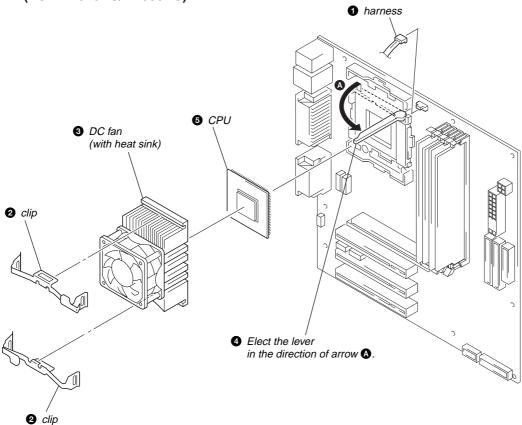
## 2-17. CPU



Precaution on mounting the heat sink holder: Check that the angle **3** shown in figure does not exceed 90 degrees, when the heat sink was removed or if the heat sink mounting failed. If over 90 degrees, bend it to recover the original condition (within 90

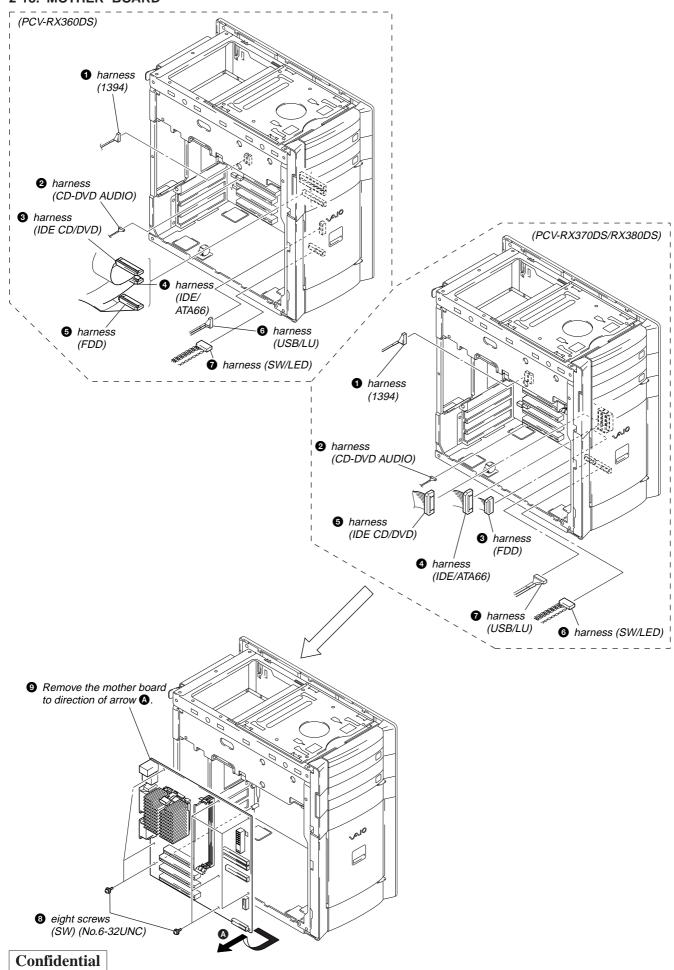
Do not reuse the heat sink holder that deformed over 120 degrees, and use a new part.

## (PCV-RX370DS/RX380DS)

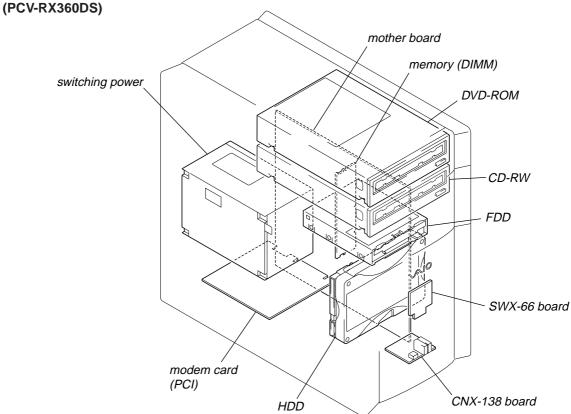


Confidential

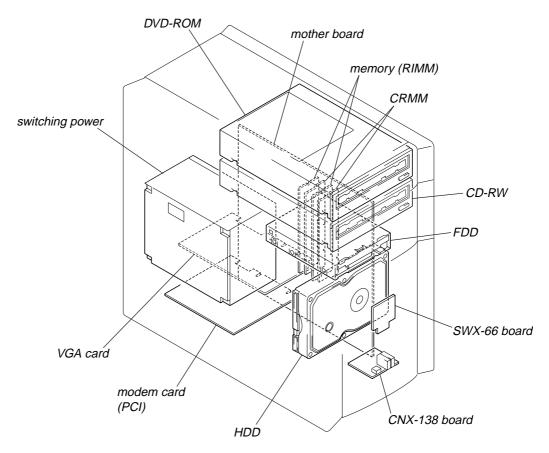
## 2-18. MOTHER BOARD



2-19. MAIN ELECTRIC PARTS ARRANGEMENT



## (PCV-RX370DS/RX380DS)



## SECTION 3 MOTHER BOARD DESCRIPTION

-HE ADPHONEOUT

+6dB Notes 乡

LINEIN MICIN

AC97 Codec

+12dB

32 ohm load(drive headphon

Codec Boost Off 10k ohm load

0.1 Vms(max) 2 Vms(max)

ohm impedance

2Vrms(max)

Vrms(typ)

Headphoneout

(line out)

Mic In

Specs(tentative I.5 Vms(max)

## CUSL-LV MOTHER BOARD (for PCV-RX360DS/RX370DS)

 $^{\rm F}$ 

EMI filters (or equivalent consideration) on HEADPHONE OUT/LINE IN/GAME PORT for

SNR +75dB (-12kHz)

0dB=1Vrms)

Optional SPDIF digital serial output with codec supporting SPDIF functions

Audio enable/disable control circuit and controlled by the BIOS.

Pop noise cancel function.

CVCCI

external +12dB boost add for MIC IN input(Single Powered OP-amp required) +6dB boost with power amplifier add for HEADPHONE OUT (LM4880 or equivalent)

Audio Quality meet PC99 specs

A to A to A b A

Circuit for utilizing soft audio required

AC97 codec Audio

3-1-4

Legacy DOS support

SNR +85dB, THD +65dB FSA SNR +80dB, THD +60dB FSA SNR +85dB, THD +55dB FSA (LINE IN to LINE OUT, 1kHz sine wave,

## Overview 3-1-1

This document describes the specification for the CUSL-LV motherboard for PCV-RX360DS.

1Cooling Fan connector(CPU) Clear password header (for BIOS)

Thermal measurement header

Ethernet Connector

CPU Clock select(optional)

PGA370 socket, Coppermine-128k/256K, all speeds, voltages, bus frequencies support Can support 133MHz/100MHz/66MHz FSB.

MicroATX version1.0 compatible

VRM 8.4 Rev 1.6 support

Intel 815 chipset (Solano1

AGP interface specification revision 2.0 compliance (support 2x/4x)

AGP Card retention support

Hardware monitoring FAN (CPUPS) speed monitor/CPU Temp/sensor/Voltage monitor Two 168-pin DIMM sockets (SDRAM, maximum 512Mbytes NonECC)

PC133/PC100

LPC I/F I/O Controller

One AGP, Three PCI slots and NO ISA slot

On board Ethernet

Suspend to RAM support (Wake up from Keyboard, Mouse, LAN, USB, Power button) Ultra DMA/66 enable (can support Host-side Detection)

On board IEEE1394 OHCI Header for Front accessible IEEE1394 connector

Header for Front-accessible USB connector

Keyboard/Mouse mixed signal (Notebook style) On board AC97 2.0 Codec Audio Flash BIOS(Firmware Hub)

Q-salt capacitors No Q-salt capacity PC99 Compliant

Heat sink grounding support for CPU

## Form Factor 3-1-2

Meet Intel MicroATX version 1.0 specification

maximum 9.6inches x 9.6 inches(244mmx244mm)

height restrictions of MicroATX version 1.0

## Connectors and Headers 3-1-3

ATX power supply power connector, Power Supply Fan connector

PGA370 socket

3 PCI slot and 1 AGP slot

4-pin AUX audio input (stereo) connector 4-pin Video input (stereo) connector

Optical Digital Audio(SPDIF) output header with codec supporting SPDIF functions One IEEE1394(6pin) standard interface connector, two headers

Intel815 Chipset Integrated Graphics

Soft DVD support (MC support)

AIMM support

**AGP Graphics** 

815Gfx and AGP connector support

Graphics

3-1-5

815, AGP swappable use

Parallel(25pin) connector

Serial (COM1, 9pin) connector in rear I/O

PS2 connector(Keyboard, Mouse)

I FDD/2 IDE Connectors

2 168pin DIMM socket (gold plated)

4-pin CD-ROM audio input (stereo) connector

4 USB port connector (2 for rear I/O, 2 with header for Front accessible area)

Power/Sleep/HDD/LED2/Reset/Speaker header (Front Panel I/O header)

Line In/Mic In/Headphone Out mini-jack

AGP Card Retention Specification rev 1.0 (From Intel) Support the retention module AGP Interface Specification Rev 2.0 (From Intel)

use the universal connector

2x/4x AGP interface

## **Confidential**

# 3-1-6 IEEE 1394 OHCI

## Texas Instrument TSB41AB3 PHY (physical layer) Texas Instrument TSB12LV26 LINK (link layer) Power provide +12V, 5W/port

- EMI filters (TOKO 857CM-009) on the IEEE1394 Front access header/Rear access option header/Rear connector for FCC/VCCI
  - IEEE1394 enable/disable control circuits and controlled by the BIOS. PHY power provided by the 3VSB\_DUAL (S5) and maximum current is 200mA.

3-1-7

- Realtek RTL8139C
- Supports 10/100 Mb/s, Auto-negotiation Supports Wake-On-LAN function( S1, S3) ;selectable power delivery for S3,5 10baseT Connector mixed with USB style

# 3-1-8 Other Key Components

- USB HUB
- LPC SIO
- FWH (No Socket)

## 3-1-9 BIOS

Refer to Sony BIOS document released separately for further details.

- Award 6.0 or later based
- Flash ROM, Upgradable by user Sony customization (i.e Sony logo during boot up)

# 3-1-10 Power Management

Suspend/Resume Supports S0, S1, S3, S4, S5 Resume: Keyboard (programmable), Mouse (programmable), USB, LAN, and Power

(Refer to Sony BIOS document)

Power Delivery

83	1394 PHY	USB (ICH&HUB&Port)	Keyboard Mouse	LAN See
35	Yes	S 02	No.	Yes

# 3-1-11 PS2 Keyboard/Mouse

Keyboard/Mouse mixed signal (notebook style)

# 3-1-12 Floppy Drive Support

720K/1.2/1.44/2.88 MB diskette drive support

# 3-1-13 CD-ROM/DVD-ROM Drive Support

Bootable CD support

# 3-1-14 IDE Drive Support

- 2 channel (4 devices) support through ICH
   Ultra DMA 66 support, cable detect method (host method)

## 3-1-15 Main Memory

- 2 x168pin DIMM sockets
- support PC133 unbuffered 64-bit SDRAM 3.3V DIMMS (single or double sided) below PC100 support

  - Maximun support 256MB (512MB support not validated)

1Mbit x 64	2Mbit x 64	4Mbit x 64	8Mbit x 64	16Mbit x 64	32Mbit × 64
8MB	16MB	32MB	64MB	128MB	256MB

# 3-1-16 Battery Requirements

- Battery life greater than 3 years on motherboard (without AC power supply) Type 2032, 3V coin battery with socket on motherboard
- 3-1-17 Reliability
- MTBF over xxxx [TBD]

# 3-1-18 Mother Board Environment Specification

 Parameter	Specification	Note
Temperature Non-operatig	-40°C to +70°C	
Operating	0°C to +55°C	
Shock	[TBD]	
Vibration	TBD	

**3-1-19 Power Supply/Consumption**The motherboard should meet the following power supply tolerance.
-5V supply is not used in this motherboard (-5V connect only the voltage monitor circuit)

DC Voltage	Acceptable Tolerance
+3.3V	%5∓
+5V	72%
+5V STB	%5∓
+12V	72%
-12V	72%

When installed in micro ATX chassis with SFX power supply, Celeron466/66MHz, 64MB PC10 0 DIMM, 3.5-inch floppy drive, 10GB IDE hard drive, 4X IDE DVD-ROM drive, and PCI MODE M card, the following table is provided as a guide for power consumption.

Mode					AC(watts) out of 120VAC Outlet
Windows ME desktop	ME	desktop			[TBD]
Windows	ME	desktop,	sleep	Windows ME desktop, sleep mode(S1) < 25W	< 25W
Windows	ME	desktop,	sleep	Windows ME desktop, sleep mode(S3)   <	< 5W

## 3-1-20 WHQL

The motherboard must pass WHQL certifications when installed with appropriate peripherals, OS and driver.

# 3-1-21 Label Requirements

The motherboard should have a reserved area for the label or print.

- product name
  - serial number revision

# 3-1-22 Regulatory Compliance

The motherboard should be compliant with the following safety and EMI regulations when cor rectly installed in a micro ATX chassis.

3-1-22-1 Safety

Meet the following regulations.

## 3-1-22-1-1 UL

UL1950-CSA950-95

# Resettable FUSE is requested for all I/O power lines

## 3-1-22-1-2 CSA

Meet the following regulations. CSA C222 No.95-93 3-1-22-2 EMC

## 3-1-22-2-1 FCC Class B

3-1-22-2-2 VCCI Class B

### WMT-LX MOTHER BOARD (for PCV-RX370DS/RX380DS) 3-2.

Overview

3-2-1

This document describes the specification for the WMT-LX motherboard for PCV-RX370DS/RX380 DS

MicroATX version 1.0 compatible

PGA423 socket, Pentium4 (Willamet) support.

Intel 850 + ICH2 chipset

AGP interface specification revision 2.0 compliance (support 2x/4x)

AGP Card retention support

Hardware monitoring FAN (CPU, PS) speed monitor/CPU Temp/sensor/Voltage monitor

Four 184-pin RIMM sockets (RDRAM, maximum 1024Mbytes NonECC)

PC800/PC600

One AGP, Three PCI slots and NO ISA slot LPC I/F I/O Controller

On board Ethernet

Suspend to RAM support (Wake up from Keyboard, LAN, USB, Power button)

Ultra DMA/100 enable (can support Host-side Detection) On board IEEE1394 OHC

Header for Front accessible IEEE1394 connector Header for Front-accessible USB connector

Keyboard/Mouse mixed signal (Notebook style) On board AC97 2.0 Codec Audio

Flash BIOS (Firmware Hub)

No Q-salt capacitors PC99 Compliant Heat sink grounding support for CPU

## Form Factor 3-2-2

Meet Intel MicroATX version 1.0 specification

maximum 9.6inches x 9.6 inches (244mmx244mm)

height restrictions of MicroATX version 1.0

## Connectors and Headers 3-2-3

ATX power supply power connector with ATX12V, Power Supply Fan connector

1 FDD/2 IDE Connectors

4 184pin RIMM socket (gold plated)

PGA423 socket

4-pin CD-ROM audio input (stereo) connector 3 PCI slot and 1 AGP slot

4-pin AUX audio input (stereo) connector

One IEEE1394 (6pin) standard interface connector, two headers 4-pin Video input (stereo) connector

4 USB port connector (2 for rear I/O, 2 with header for Front accessible area)

Power/Sleep/HDD/LED2/Reset/Speaker header (Front Panel I/O header) 1 Parallel (25pin) connector

Serial (COM1, 9pin) connector in rear I/O

PS2 connector (Keyboard, Mouse)

1 MIDI/Game connector

Line In/Mic In/Headphone Out mini-jack

1Cooling Fan connector (CPU)

Clear CMOS header (for BIOS)

CPU Clock select (optional)

Thermal measurement header

Ethernet Connector

## Audio 3-2-4

Circuit for utilizing soft audio required

AC97 codec

external +12dB boost add for MIC IN input (Single Powered OP-amp required)

+6dB boost with power amplifier add for HEADPHONE OUT (LM4880 or equivalent)

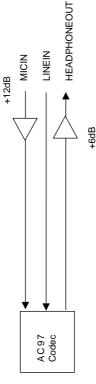
Audio Quality meet PC99 specs (TENTATIVE)

D to A SNR +85dB, THD +65dB FSA A to D SNR +80dB, THD +60dB FSA A to A SNR +85dB, THD +55dB FSA (LINE IN to LINE OUT, 1kHz sine wave, 0dB=1 Vrms) SNR +75dB (-12kHz)

EMI filters (or equivalent consideration) on HEADPHONE OUT/LINE IN/GAME PORT for FCC/

Pop noise cancel function.

Audio enable/disable control circuit and controlled by the BIOS.



	Specs (tentative)	Notes
Line In	1Vrms (typ) 2Vrms (max)	10k ohm impedance
Headphoneout (line out) 1.5 Vrms (max)	1.5 Vrms (max)	32 ohm load (drive headphone)
	2 Vrms (max)	10k ohm load
Mic In	0.1 Vrms (max)	Codec Boost Off

## AGP Graphics 3-2-5

2x/4x AGP interface

use the universal connector

Support the retention module

AGP Interface Specification Rev 2.0 (From Intel)

AGP Card Retention Specification rev 1.0 (From Intel)

## **IEEE 1394 OHCI** 3-2-6

Texas Instrument TSB41AB3 PHY (physical layer)

Fexas Instrument TSB12LV26 LINK (link layer

Power provide +12V, 5W/port

EMI filters (TOKO 857CM-009) on the IEEE1394 Front access header/Rear access option hea der/Rear connector for FCC/VCCI

IEEE1394 enable/disable control circuits and controlled by the BIOS

PHY power provided by the 3VSB\_DUAL (S5) and maximum current is 200mA.

## Y 3-2-7

- Realtec RTL8139C
- Supports 10/100 Mb/s, Auto-negotiation
- Supports Wake-On-LAN function (S1, S3) ; selectable power delivery for S3, 5 10baseT Connector mixed with USB style

## Other Key Components 3-2-8

- LPC SIO FWH (No Socket)

## BIOS 3-2-9

Refer to Sony BIOS document released separately for further details.

- Award 6.0 or later based
- Flash ROM, Upgradable by user
- Sony customization (i.e Sony logo during boot up)

## 3-2-10 Power Management

Suspend/Resume Supports S0, S1, S3, S4, S5

Resume: Keyboard (programmable) , Mouse (programmable) , USB, LAN, and Power button) (Refer to Sony BIOS document)

Power Delivery

USB Keyboard (ICH&HUB&Port) Mouse	1Y USB (ICH&HUB&Port)
USB (ICH&HUB&Port)	
	1394 PHY

# 3-2-11 PS2 Keyboard/Mouse

Keyboard/Mouse mixed signal (notebook style)

# 3-2-12 Floppy Drive Support

720K/1.2/1.44/2.88 MB diskette drive support

# CD-ROM/DVD-ROM Drive Support

 Bootable CD support 3-2-13 **Confidential** 

## IDE Drive Support 3-2-14

- 2 channel (4 devices) support through ICH
- Ultra DMA /100 support, cable detect method (host method)

## 3-2-15 Main Memory

- 4 x184pin RIMM sockets
- support PC800 unbuffered 64-bit SDRAM 3.3V DIMMS (single or double sided) below
  - Maximun support 256MB (512MB support not validated)

RIMM size	Configuration
64MB	
128MB	
256MB	
512MB	

# 3-2-16 Battery Requirements

- Type 2032, 3V coin battery with socket on motherboard
- Battery life greater than 3 years on motherboard (without AC power supply)

## 3-2-17 Reliability

MTBF over xxxx [TBD]

# 3-2-18 Mother Board Environment Specification

Parameter	Specification	Note
Temperature Non-operating	-40°C to +70°C	
Operating	0°C to +55°C	
Shock	[TBD]	
Vibration	[TBD]	

# 3-2-19 Power Supply/Consumption

The motherboard should meet the following power supply tolerance.
-5V supply is not used in this motherboard (-5V connect only the voltage monitor circuit)

DC Voltage	Acceptable Tolerance
+3.3V	<b>72%</b>
+5V	72%
+5V STB	72%
+12V	72%
-12V	72%

When installed in micro ATX chassis with SFX power supply, Celeron466/66MHz, 64MB PC100 DI MM, 3.5-inch floppy drive, 10GB IDE hard drive, 4X IDE DVD-ROM drive, and PCI MODEM card, t he following table is provided as a guide for power consumption,

Mode	AC (watts) out of 120VAC Outlet
Windows ME desktop	[TBD]
Windows ME desktop, sleep mode (S1)	< 25W
Windows ME desktop, sleep mode (S3)	< 5W

## 3-2-20 WHQL

The motherboard must pass WHQL certifications when installed with appropriate peripherals , OS and driver.

# 3-2-21 Label Requirements

The motherboard should have a reserved area for the label or print.

- product name
   revision
   serial number

# 3-2-22 Regulatory Compliance

The motherboard should be compliant with the following safety and EMI regulations when correctly installed in a micro ATX chassis.

**3-2-22-1 Safety**Meet the following regulations.

## 3-2-22-1-1 UL

UL1950-CSA950-95 Resettable FUSE is requested for all I/O power lines

## 3-2-22-1-2 CSA

CSA C222 No.95-93

## 3-2-22-2 EMC

Meet the following regulations.

## 3-2-2-2-1 FCC Class B

3-2-22-2 VCCI Class B

## Confidential

## SECTION 4 PROGRAM FOR SERVICE

### 4-1. General

The Diagnostic Programs for Service are available with the following three kinds.

### 1. PC-Doctor

This can test the Mother Board, CPU, Memory, FDD, HDD, and CD/DVD-ROM.

It is used for the PCV-RX51/RX61K/RX71K (J models) and PCV-RX360DS/RX370DS/RX380DS (US models).

## 2. Intel 815 Video Diag

This can test the VGA (815 Chipset built in). It is used for the PCV-RX51 (J model) and PCV-RX360DS (US model).

## 3. nVIDIA Video Diag

There are two types of diagnostic programs, one for the 16M memory Geforce used in the PCV-RX61K (J model)/RX370DS (US model), and the other for the 13M memory Geforce used in PCV-RX71K (J model)/RX380DS (US model).

## 4-2. PC-Doctor Starting Method

As the Diag. disc is a bootable CD, set the CD in the CD/DVD-ROM drive and turn the system power on.

The menu will be displayed, then select the following:

 $1.\ PC\text{-Doctor for PCV-RX51/RX61K/RX71K/RX360DS/RX370DS/RX380DS}$ 

After the system started, set a DOS formatted 1.44M floppy disk without the write protection in the FDD, and the CD-ROM Disc in the CD-RW drive, select the model to be tested following the menu. All tests are carried out automatically.

Do not remove the Diag. disc during the test.

## 4-2-1. Test Items

## CPU/COPROCESSOR TEST

The CPU/Coprocessor are tested.

## MEMORY TEST

The memory is tested.

The bus throughput of the extended memory cannot be tested, and therefore N/A is displayed as the test result, but this is not a fault.

## SYSTEM BOARD TEST

The Mother Board is tested.

Also, the keyboard and mouse are tested, thus requiring the keyboard and mouse to be connected to the set in advance.

## SERIAL PORT TEST

The COM port is tested.

### PARALLEL PORT TEST

The printer port is tested.

### VIDEO ADAPTER TEST

The video card is tested.

Only the DOS legacy mode is tested.

## FIXED DISK TEST HDD is tested.

### DISKETTE TEST

FDD is tested.

As the read/write operation is performed to the floppy disk, set the DOS formatted 1.44M disk without the write protection before the PC-Doctor is started. Also, if the PC-Doctor is booted from the CD, the boot image of CD is treated as the floppy 0 (drive A), and accordingly the FDD is treated as the floppy 1 (drive B).

In this case, the floppy 0 cannot be tested and N/A is displayed as the test result, but this is not a fault.

### MISCELLANEOUS TEST

Other devices are tested.

CD/DVD-ROM read check, CPU type check, and configuration check of PCI device, etc. are executed.

### 4-2-2. Test Result

After the test finished, "PASSED" or "FAILED" is displayed. In case of "FAILED" display, press the F1 key to display the log and then, check the faulty item.

Certain items cannot be tested and N/A is displayed, but this is not a fault.

Example of log file

PC-DOCTOR 2.0 SYSTEM TEST LOG

Inventory.....

CPU MHz is too low (700 vs 750) Inventory FAILED

## 4-3. Intel 815 Video Diag Starting Method

As the Diag. disc is a bootable CD, set the CD in the CD/DVD-ROM drive and turn the system power on.

The menu will be displayed, then select the following:

2. Intel 815 Video Diag for PCV-RX51/RX360DS

After the system started, the file is automatically expanded on the RAM disk and the test starts.

## 4-3-1. Test Result

After the test finished, "PASS" or "FAIL" is displayed. The contents of RAM disk are cleared when the power is turned off.

## 4-4. nVIDIA Geforce Video Diag Starting Method (For PCV-RX370DS)

As the Diag. disc is a bootable CD, set the CD in the CD/DVD-ROM drive and turn the system power on.

The menu will be displayed, then select the following:

3. nVIDIA Geforce 16M Diag for PCV-RX61K/RX370DS

After the system started, the file is automatically expanded on the RAM disk and the test starts.

### 4-4-1. Test Result

After the test finished, "PASS" or "FAIL" is displayed. The contents of RAM disk are cleared when the power is turned off

## 4-5. nVIDIA Geforce Video Diag Starting Method (For PCV-RX380DS)

As the Diag. disc is a bootable CD, set the CD in the CD/DVD-ROM drive and turn the system power on.

The menu will be displayed, then select the following:
4. nVIDIA Geforce 32M Diag for PCV-RX71K/RX380DS

After the system started, the file is automatically expanded on the RAM disk and the test starts.

## 4-5-1. Test Result

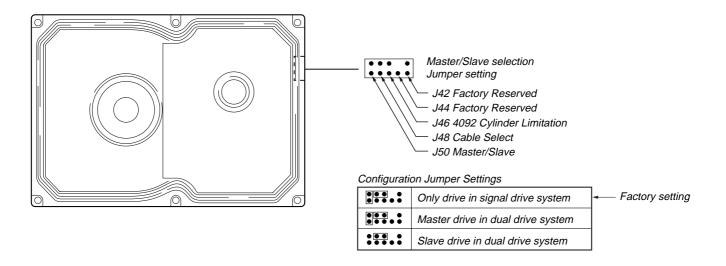
After the test finished, "PASS" or "FAIL" is displayed. The contents of RAM disk are cleared when the power is turned off.

## SECTION 5 SERVICE INFORMATION

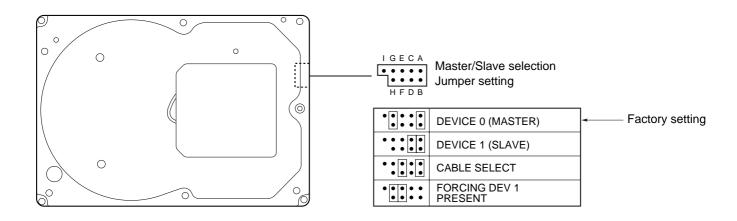
## 5-1. JUMPER SETTING ON HARD DISK DRIVE

The hard disk drive of service parts can be used without changing factory jumper setting, when it was replaced for service.

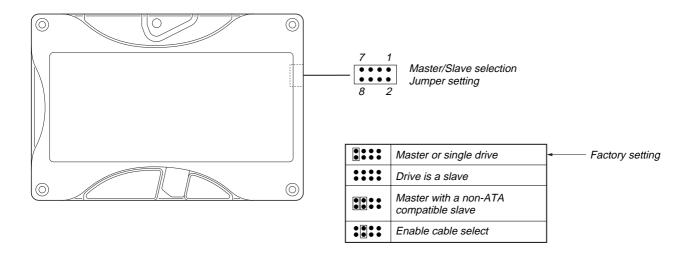
Model	Part No.	Maker	Code	Capacity (formatted)
PCV-RX380DS	1-796-089-11	Maxtor	98196Н8	80 GB



Model	Part No.	Maker	Code	Capacity (formatted)
PCV-RX370DS	1-796-090-11	IBM	DTLA-305060	60 GB

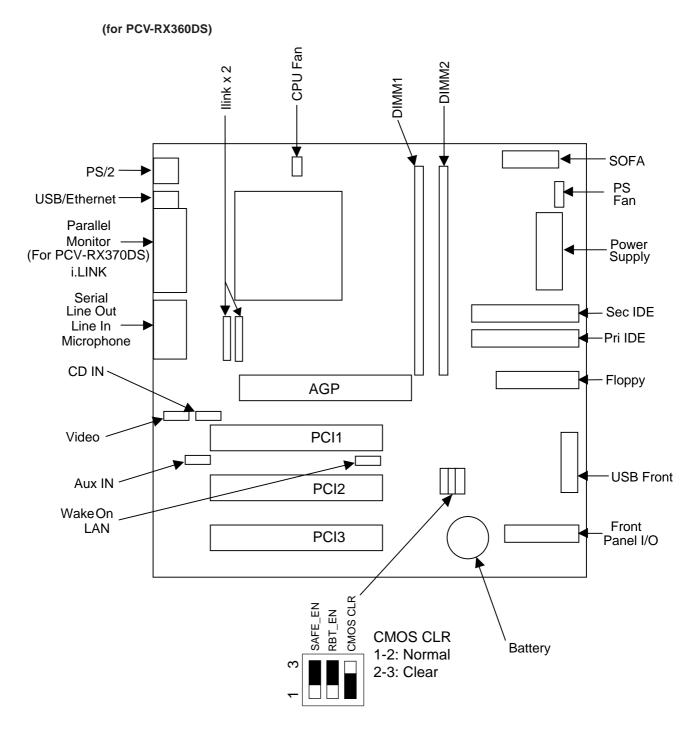


Model	Part No.	Maker	Code	Capacity (formatted)
PCV-RX360DS	1-772-938-12	Seagate	ST340823A	40 GB



## 5-2. JUMPER SETTING OF MOTHER BOARD

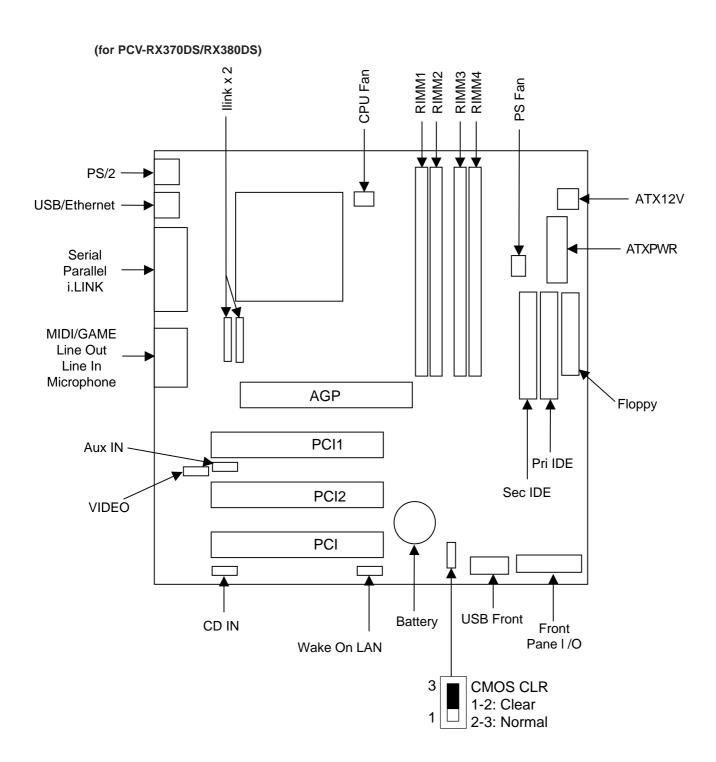
The Mother board of service parts can be used without changing factory jumper setting, when it was replaced for service.





Do not change the jumper with the power turned on.

Before changing the jumper, turn off the power and disconnect the power cord from the set.



## SECTION 6 FRAME HARNESS

## 6-1. CONNECTOR LIST

#### CUSL-LV MOTHER BOARD (for PCV-RX360DS) 1.

#### 1-1 Internal connector

#### Power supply

20pin ATX type connector

Connector location on MB See the frame harness diagram

Pin assignments:		
Pin	Signal Name	
1	+3.3 V	
2	+3.3 V	
3	Ground	
4	+5 V	
5	Ground	
6	+5 V	
7	Ground	
8	PWRGD (Power Good)	
9	+5 VSB	
10	+12 V	
11	+3.3 V	
12	-12 V	
13	Ground	
14	PS-ON# (power supply remote on/off control)	
15	Ground	
16	Ground	
17	Ground	
18	No Connection	
19	+5 V	
20	+5 V	

### PS FAN

Support FAN control of power supply.

Connector location on MB | See the frame harness diagram

Pin assignments:

Pin	Signal Name
1	Ground
2	FAN_CTRL (0V(S3), 2V(S1), 12 V(S0))
3	FAN_SEN

The FAN\_CTRL line is controlled by the BIOS and this line is voltage control line

## IDE Primary/Secondary

For 3.5" Hard Drive, 40 pin Header (2.54mm standard type)

Connector location on MB | See the frame hamess diagram Host side detect Cable Type Using GPIOs

Connector location on MB See the frame hamess diagram

Pin assignments:

i iii uu	i iii assigiiiileitis.				
Pin	Signal Name	Pi	Signal Name		
		n			
1	Ground	2	HDsel		
3	Ground	4	N.C.		
5	Ground	6	DRIVE_SELECT_#3		
7	Ground	8	INDEX		
9	Ground	10	DRIVE_SELECT_#0		
11	Ground	12	DRIVE_SELECT_#1		
13	Ground	14	DRIVE_SELECT_#2		
15	Ground	16	N.C.		
17	Ground	18	DIRECTION#		
19	Ground	20	STEP#		
21	Ground	22	WRITE_DATA#		
23	Ground	24	WRITE_GATE#		
25	Ground	26	TRACK_00#		
27	Ground	28	WRITE_PROTECT#		
29	N.C.	30	READ_DATA#		
31	Ground	32	SIDE_1_SELECT#		
33	N.C.	34	DSKCHG#		

--NOTE--

'HDsel' signal is sent form drive. It indicate 2HD(when High) or 2DD(when Low) media. 'MODE\_SELECT#' is control signal of disk rotation speed. When this signal is High, Media rotates 300RPM (2MB). When Low, media rotates 360RPM(1.6MB).

#### 168pin DIMM socket x2

2 slot DIMM connector, 3.3V Unbuffered SDRAM

Connector location on MB See the frame harness diagram

#### PGA370 socket

Coppermine-128k, Coppermine-256K supported

Connector location on MB See the frame harness diagram

#### PCI Slot x3

Single Edge Contact PCI slot.

Connector location on MB | See the frame harness diagram

-12V	B1	A1	TRST#
TCK	B2	A2	+12V
Ground	В3	А3	TMS
TDO	B4	A4	TDI
+5V	B5	A5	+5V
+5V	В6	A6	INTA#
INTB#	B7	A7	INTC#
INTD#	B8	A8	+5V
PRSNT1#	B9	A9	Reserved
Reserved	B10	A10	+5V
PRSNT2#	B11	A11	*Reserved
Ground	B12	A12	Ground
Ground	B13	A13	Ground
Reserved	B14	A14	Reserved
Ground	B15	A15	RST#
CLK	B16	A16	+5V
Ground	B17	A17	GNT#
REQ#	B18	A18	Ground
+5V	B19	A19	Reserved
AD[31]	B20	A20	AD[30]
AD[29]	B21	A21	+3.3V
Ground	B22	A22	AD[28]
AD[27]	B23	A23	AD[26]
AD[25]	B24	A24	Ground
+3.3V	B25	A25	AD[24]
C/BE[3]#	B26	A26	IDSEL
AD[23]	B27	A27	+3.3V
Ground	B28	A28	AD[22]
AD[21]	B29	A29	AD[20]
AD[19]	B30	A30	Ground
+3.3V	B31	A31	AD[18]

AD[17]	B32	A32	AD[16]
C/BE[2]#	B33	A33	+3.3V
Ground	B34	A34	FRAME#
IRDY#	B35	A35	Ground
+3.3V	B36	A36	TRDY#
DEVSEL#	B37	A37	Ground
Ground	B38	A38	STOP#
LOCK#	B39	A39	+3.3V
PERR#	B40	A40	Reserved
+3.3V	B41	A41	Reserved
SERR#	B42	A42	Ground
+3.3V	B43	A43	PAR
C/BE[1]#	B44	A44	AD[15]
AD[14]	B45	A45	+3.3V
Ground	B46	A46	AD[13]
AD[12]	B47	A47	AD[11]
AD[10]	B48	A48	Ground
Ground	B49	A49	AD[09]
Key	B50	A50	Key
Key	B51	A51	Key
AD[08]	B52	A52	C/BE[0]#
AD[07]	B53	A53	+3.3V
+3.3V	B54	A54	AD[06]
AD[05]	B55	A55	AD[04]
AD[03]	B56	A56	Ground
Ground	B57	A57	AD[02]
AD[01]	B58	A58	AD[00]
+5V	B59	A59	+5V
ACK64#	B60	A60	REQ64#
+5V	B61	A61	+5V
+5V	B62	A62	+5V

PCI #3 slot has special connection at A11 pin.

The serial IRQ signal connects to the A11 pin on the PCI #3.

## AGP Slot (not installed\*)

Single Edge Contact AGP slot. Universal AGP connector

Connector location on MB See the frame harness diagram

## CPU FAN

Supports CPU cooling fan of 500mA or less. Voltage = 12V Connector location on MB See the frame harness diagram

Pin assignments: Signal Name Ground FAN\_CTRL (+12 V) FAN\_SEN

4 pin standard 2mm single line header for CD Audio signal input Connector location on MB See the frame harness diagram

Pin assignments:

Pin	Signal Name		
1	Left Line In		
2	Ground		
3	Ground		
4	Right Line In		

<sup>\*</sup> Connectors mentioned (not installed) are not used even they are mounted on MB

## AUX IN (not installed\*)

4 pin standard 2mm single line header for AUX Audio signal input
Connector location on MB See the frame hamess diagram

Pin assignments:

Pin	Signal Name		
1	Left Line In		
2	Ground		
3	Ground		
4	Right Line In		

## Video (not installed\*)

4 pin standard 2mm single line header for Video Audio signal input
Connector location on MB | See the frame harmess diagram

Pin assignments:

Pin	Signal Name	
1	Video_L	
2	Ground	
3	Ground	
4	Video_R	

## SPDIFOUT (not installed\*)

3 pin standard 2mm single line header for S/P DIFoutput

Connector location on MB See the frame hamess diagram

Pin assignments:

Pin	Signal Name		
1	VCC		
2	AU_DATA(GPIO[2])		
3	Ground		

#### IEEE1394 header x2

8 pin standard 2.5 mm single line header for IEEE1394 Front connector. IEEE1394 Front access header

IEEE1394 Front access neader				
Connector location on MB	Refered as 1394HEAD3			
	See the frame harness diagram			
IEEE1394 Optional header (not installed*)				
Connector location on MB	Refered as 1394HEAD2			

Pin assignments:

Pin	Signal Name		
1	Shell Ground		
2	Ground		
3	TPA		
4	TPA*		
5	TPB		
6	TPB*		
7	Ground		
8	VP (Power)		

VP line need over current protector. Raychem SMD150/33-2 or equivalent is used for that.

## **USB FRONT**

12 pin standard 2.5mm Dual line Box header for Front USB connector.

Connector location on MB See the frame harness diagram

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	+3V_Dual	2	NP1#
3	NP3#	4	NC (Key)
5	USB VCC1	6	USB VCC2
7	LP2+	8	LP3+
9	LP2-	10	LP3-
11	Ground	12	Ground

USBVCC2 line needs the over current protector. Raychem miniSMDC110-2 or equivalent is used for that.

#### FRONT PANEL I/O

20 pin standard 2.5mm dual line header for LED/Switch unit

Connector location on MB	See the frame harness diagram
in accianments:	

Pin	Signal Name	Pin	Signal Name
1	PWR_BTN	11	MSG_LED+
2	PWR_BTN_G	12	MSG_LED-
3	IDELED-	13	KEYLOCK
4	IDELED+	14	KEYLOCK_G
5	KEY	15	SMI
6	PWR_LEDL+	16	SMI_G
7	PWR_LED-	17	+5V
8	PWR_LEDB+	18	HD_LED2-
9	RESET	19	Ground
10	RESET G (GND)	20	SPKR

## Battery Holder & Battery

Holder vender	LOTES B6615BP5L or equivalent
Holder location on MB	See the frame harness diagram
Battery vender	Sony CR2032 or equivalent

## SOFA header (not installed\*)

This SOFA header is not same one Callisto has

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	PWRBTN#	2	GND
3	SYS_ON	4	GND
5	TXD2	6	GND
7	RXD2	8	GND
9	CTS#	10	GND
11	RTS#	12	GND
13	+5VSB	14	+5VSB
15	+5VSB	16	+5V
17	+5V	18	+5V
19	NC	20	+12V

(Note) PWRBTN#: control M/B power on/off.

SYS\_ON: control M/B reset signal and secondary IDE reset signal. TxD2, RxD2, and CTS2: shared with COM2 Optional header

## 1-2 External connector

Parallel

Connector location on MB	Rear side, see the frame harness diagram

Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	Strobe#	14	Auto Feed#
2	Data bit 0	15	Fault#
3	Data bit 1	16	INIT#
4	Data bit 2	17	SLCT IN#
5	Data bit 3	18	Ground
6	Data bit 4	19	Ground
7	Data bit 5	20	Ground
8	Data bit 6	21	Ground
9	Data bit 7	22	Ground
10	ACK#	23	Ground
11	Busy	24	Ground
12	Error	25	Ground
13	Select		

<sup>\*</sup> Connectors mentioned (not installed) are not used even they are mounted on MB

#### COM/Line Out/Line In/Microphone

Connector location on MB Rear side, see the frame harness diagram
Pin assignments:

Pin	Signal Name
1	DCD
2	Serial In #
3	Serial Out #
4	DTR#
5	Ground
6	DSR
7	RTS
8	CTS
9	RI1#

COM1, COM2 RI# output con nected to ICH input for Wake up event

#### IEEE1394 Rear connector

6 pin standard IEEE1394 Rear connector.

Connector location on MB See the frame harness diagram

Pin assignments:

Pin	Signal Name
1	VP (Power)
2	Ground
3	TPB*
4	TPB
5	TPA*
6	TPA

VP line need over current protector.

Raychem SMD150/33-2 or equivalent is used for that.

#### PS2 Keyboard/Mouse

Connector location on MB Rear side, see the frame harness diagram

Pin assignments:

Pin	Signal Name
1	Keyboard Data
2	Mouse Data
3	Ground
4	PS2VCC
5	Keyboard Clock
6	Mouse Clock
7	Mouse Data
8	N.C.
9	Ground
10	PS2VCC
11	N.C.
12	Mouse Clock

PS2VCC line needs the over current protector. Raychem miniSMDC110-2 or equivalent is used for that.

## USB/LAN

Two USB connector for external USB devices. (Support the stacked connector) One 10/100Base-T connector

Connector location on MB See the frame harness diagram

Pin assignments:

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Pin	Signal Name	
1	USBVCC1	
2	USBP0#	
3	USBP0	
4	Ground	
5	USBVCC2	
6	USBP1#	
7	USBP1	
8	Ground	
9		
10		
11		
12		
13		
14		
15		
16		

USBVCC1/USBVCC2 lines need the over current protector. Raychem miniSMDC110-2 or equivalent is used for that.

#### VGA

Connector location on MB Rear side, see the frame harness diagram

Game port pin assignments:

Pin	Signal Name
1	RED
2	GREEN
3	BLUE
4	NC
5	GND
6	GND
7	GND
8	Reserved
9	Reserved
10	GND
11	NC
12	DDCDAT
13	HSYNC
14	VSYNC
15	DDCCLK

Line Out pin assignments:

Pin	Signal Name
Sleeve	Ground
Tip	Audio Left Out
Ring	Audio Right Out

Line In pin assignments:

Pin	Signal Name
Sleeve	Ground
Tip	Audio Left In
Ring	Audio Right In

Microphone In pin assignments:

Pin	Signal Name
Sleeve	Ground
Tip	Microphone mono In
Ring	Electret Bias Voltage

## 1-3 Jumper Header

## CPU Clock select

Jumper Header manual configuration is used only for debug. Production should be auto-sense configuration. PCB should be able to support automatic and manual configuration by minimal mount options. Select CPU's External frequency (BUS frequency) and BUS Frequency Multiplier and Memory Frequency. (Acceptable for BIOS setting instead of Jumper Header)

## CMOS Clear/Reboot En/Safe En

## Clear the RTC data

Connector location on MB See the frame harness diagram

Jumper header



Combination of jumper caps:

		CMOSCLR	RBT_EN	SAFE_EN
Γ	1-2	Normal	Reboot Disabled	Safe Mode Enabled
	2-3	Clear	Normal	Normal

Reboot Enable:

If set to 1-2, disables reboot function

Safe Enable:

If set to 1-2, CPU speed will be set to safe mode

Those two headers are for factory testing purpose only DO NOT CHANGE  $\,$ 

## 2. WMT-LX MOTHER BOARD (for PCV-RX370DS/RX380DS)

## 1-1 Internal connector

## ATXPWR

20pin ATX type connector.

Connector location on MB See the frame harness diagram

## Pin assignments:

Pin	Signal Name
1	+3.3 V
2	+3.3 V
3	Ground
4	+5 V
5	Ground
6	+5 V
7	Ground
8	PWRGD (Power Good)
9	+5 VSB
10	+12 V
11	+3.3 V
12	-12 V
13	Ground
14	PS-ON# (power supply remote on/off control)
15	Ground
16	Ground
17	Ground
18	No Connection
19	+5 V
20	+5 V

## 4pin ATX12V type connector.

Connector location on MB	See the frame harness diagram
Connector location on MD	i See the name namess diadram

## Pin assignments:

Pin	Signal Name
1	Ground
2	Ground
3	+12V
4	+12V

## PS FAN

Support FAN control of power supply.

## Pin assignments:

Pin	Signal Name	
1	Ground	
2	FAN_CTRL (0V(S3), 2V(S1), 12 V(S0))	
3	FAN SEN	

The FAN\_CTRL line is controlled by the BIOS and this line is voltage control line

## IDE Primary / Secondary

For 3.5" Hard Drive, 40 pin Header (2.54mm standard type)

Host side detect Cable Type Using GPIOs

#### FLOPPY

## Pin assignments:

Pin	Signal Name	Pi	Signal Name
		n	
1	Ground	2	HDsel
3	Ground	4	N.C.
5	Ground	6	DRIVE_SELECT_#3
7	Ground	8	INDEX
9	Ground	10	DRIVE_SELECT_#0
11	Ground	12	DRIVE_SELECT_#1
13	Ground	14	DRIVE_SELECT_#2
15	Ground	16	N.C.
17	Ground	18	DIRECTION#
19	Ground	20	STEP#
21	Ground	22	WRITE_DATA#
23	Ground	24	WRITE_GATE#
25	Ground	26	TRACK_00#
27	Ground	28	WRITE_PROTECT#
29	N.C.	30	READ_DATA#
31	Ground	32	SIDE_1_SELECT#
33	N.C.	34	DSKCHG#

--NOTE--

'HDsel' signal is sent form drive. It indicate 2HD(when High) or 2DD(when Low) media. 'MODE\_SELECT#' is control signal of disk rotation speed. When this signal is High, Media rotates 300RPM (2MB). When Low, media rotates 360RPM(1.6MB).

## 184pin RIMM socket x4

4 slot RIMM connector, 2.5V Unbuffered RDRAMM

B1 A1 TRST#

Connector location on MB	See the frame harness diagram

## PGA423 socket

Pentium4 supported

## PCI Slot x3

-12V

Single Edge Contact PCI slot.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

TCK	B2	A2	+12V
Ground	В3	A3	TMS
TDO	B4	A4	TDI
+5V	B5	A5	+5V
+5V	B6	A6	INTA#
INTB#	B7	A7	INTC#
INTD#	B8	A8	+5V
PRSNT1#	B9	A9	Reserved
Reserved	B10	A10	+5V
PRSNT2#	B11	A11	*Reserved
Ground	B12	A12	Ground
Ground	B13	A13	Ground
Reserved	B14	A14	Reserved
Ground	B15	A15	RST#
CLK	B16	A16	+5V
Ground	B17	A17	GNT#
REQ#	B18	A18	Ground
+5V	B19	A19	Reserved
AD[31]	B20	A20	AD[30]
AD[29]	B21	A21	+3.3V
Ground	B22	A22	AD[28]
AD[27]	B23	A23	AD[26]
AD[25]	B24	A24	Ground
+3.3V	B25	A25	AD[24]
C/BE[3]#	B26	A26	IDSEL
AD[23]	B27	A27	+3.3V
Ground	B28	A28	AD[22]
AD[21]	B29	A29	AD[20]
AD[19]	B30	A30	Ground
+3.3V	B31	A31	AD[18]

me namess	ulayla	111	
AD[17]	B32	A32	AD[16]
C/BE[2]#	B33	A33	+3.3V
Ground	B34	A34	FRAME#
IRDY#	B35	A35	Ground
+3.3V	B36	A36	TRDY#
DEVSEL#	B37	A37	Ground
Ground	B38	A38	STOP#
LOCK#	B39	A39	+3.3V
PERR#	B40	A40	Reserved
+3.3V	B41	A41	Reserved
SERR#	B42	A42	Ground
+3.3V	B43	A43	PAR
C/BE[1]#	B44	A44	AD[15]
AD[14]	B45	A45	+3.3V
Ground	B46	A46	AD[13]
AD[12]	B47	A47	AD[11]
AD[10]	B48	A48	Ground
Ground	B49	A49	AD[09]
Key	B50	A50	Key
Key	B51	A51	Key
AD[08]	B52	A52	C/BE[0]#
AD[07]	B53	A53	+3.3V
+3.3V	B54	A54	AD[06]
AD[05]	B55	A55	AD[04]
AD[03]	B56	A56	Ground
Ground	B57	A57	AD[02]
AD[01]	B58	A58	AD[00]
+5V	B59	A59	+5V
ACK64#	B60	A60	REQ64#
+5V	B61	A61	+5V
+5V	B62	A62	+5V

PCI #3 slot has special connection at A11 pin.

The serial IRQ signal connects to the A11 pin on the PCI #3.

### AGP Slot

Single Edge Contact AGP slot. Universal AGP connector

Connector location on MB	See the frame harness diagram

## **CPU FAN**

Supports CPU cooling fan of 500mA or less. Vo ltage = 12V

Connector location on MB	See the frame harness diagram

## Pin assignments:

Pin	Signal Name
1	Ground
2	FAN_CTRL (+12 V)
3	FAN_SEN

#### **CD IN**

4 pin standard 2mm single line header for CD Audio signal input

	<b>.</b>
Connector location on MB	See the frame harness diagram

## Pin assignments:

Pin	Signal Name
1	Left Line In
2	Ground
3	Ground
4	Right Line In

## AUX IN (not installed\*)

4 pin standard 2mm single line header for AUX Audio signal input

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

## Pin assignments:

Pin	Signal Name
1	Left Line In
2	Ground
3	Ground
4	Right Line In

## Video (not installed\*)

4 pin standard 2mm single line header for Video Audio signal input

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

## Pin assignments:

Pin	Signal Name
1	Video_L
2	Ground
3	Ground
4	Video_R

## IEEE1394 header x2

8 pin standard 2.5 mm single line header for IEEE1394 Front connector.

## IEEE1394 Front access header

Connector location on MB	Refered as 1394HEAD3
	See the frame hamess diagram
IEEE1394 Optional header	(not installed*)
Connector location on MB	Refered as 1394HEAD2
	See the frame harness diagram

## Pin assignments:

Pin	Signal Name	
1	Shell Ground	
2	Ground	
3	TPA	
4	TPA*	
5	TPB	
6	TPB*	
7	Ground	
8	VP (Power)	

VP line need over current protector. Raych em SMD150/33-2 or equivalent is used for that.

## \* Connectors mentioned (not installed) are not used even they are mounted on MB

## **USB Front**

12 pin standard 2.5mm Dual line Box header for Front USB connector.

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

#### Pin assignments:

	•		
Pin	Signal Name	Pin	Signal Name
1	+3V_Dual	2	NP1#
3	NP3#	4	NC (Key)
5	USB VCC1	6	USB VCC2
7	LP2+	8	LP3+
9	LP2-	10	LP3-
11	Ground	12	Ground

USBVCC2 line needs the over current protector.

Raychem miniSMDC110-2 or equivalent is used for that.

## FRONT PANEL I/O

20 pin standard 2.5mm dual line header for LED/Switch unit

Connector location on MB	See the frame harness diagram

## Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	PWR_BTN	11	MSG_LED+
2	PWR_BTN_G	12	MSG_LED-
3	IDELED-	13	KEYLOCK
4	IDELED+	14	KEYLOCK_G
5	KEY	15	SMI
6	PWR_LEDL+	16	SMI_G
7	PWR_LED-	17	+5V
8	PWR_LEDB+	18	HD_LED2-
9	RESET	19	Ground
10	RESET G (GND)	20	SPKR

## **Battery Holder & Battery**

Holder vender	LOTES B6615BP5L or equivalent
Holder location on MB	See the frame harness diagram
Battery vender	Sony CR2032 or equivalent

## 1-2 External connector

## Parallel

|--|

## Pin assignments:

Pin	Signal Name	Pin	Signal Name
1	Strobe#	14	Auto Feed#
2	Data bit 0	15	Fault#
3	Data bit 1	16	INIT#
4	Data bit 2	17	SLCT IN#
5	Data bit 3	18	Ground
6	Data bit 4	19	Ground
7	Data bit 5	20	Ground
8	Data bit 6	21	Ground
9	Data bit 7	22	Ground
10	ACK#	23	Ground
11	Busy	24	Ground
12	Error	25	Ground
13	Select		

#### IEEE1394 Rear connector

6 pin standard IEEE1394 Rear connector.

Connector location on MB See the frame harness diagram

## Pin assignments:

Pin	Signal Name
1	VP (Power)
2	Ground
3	TPB*
4	TPB
5	TPA*
6	TPA

VP line need over current protector.

Raychem SMD150/33-2 or equivalent is used for that.

## PS2 Keyboard /Mouse

Connector location on MB	See the frame harness diagram

## Pin assignments:

Pin	Signal Name
1	Keyboard Data
2	Mouse Data
3	Ground
4	PS2VCC
5	Keyboard Clock
6	Mouse Clock
7	Mouse Data
8	N.C.
9	Ground
10	PS2VCC
11	N.C.
12	Mouse Clock

PS2VCC line needs the over current protector. Raych em miniSMDC110-2 or equivale nt is used for that.

## USB/LAN

Two USB connector for external USB devices. (Support the stacked connector)

One 10/100Base-T connector

Connector location on MB	See the frame harness diagram
--------------------------	-------------------------------

## Pin assignments:

Pin	Signal Name
1	USBVCC1
3	USBP0#
3	USBP0
4	Ground
5	USBVCC2
6	USBP1#
7	USBP1
8	Ground
9	
10	
11	
12	
13	
14	
15	
16	

USBVCC1/USBVCC2 lines need the over current protector.

Raychem miniSMDC110-2 or equivalent is used for that.

## Game/Line Out/Line In/Microphone Jack

Connector location on MB	Rear side, See the frame harness diagram

## Game port pin assignments:

Signal Name
GAMEVCC
JPYB0
JOYA0
GND
GND
JOYA1
JOYB1
GAMEVCC
GAMEVCC
JOYB2
JOYA2
MIDI_TxD
JOYA3
JOYB3
MIDI_RxD

## Line Out pin assignments:

	-
Pin	Signal Name
Sleeve	Ground
Tip	Audio Left Out
Ring	Audio Right Out

## Line In pin assignments:

Pin	Signal Name
Sleeve	Ground
Tip	Audio Left In
Ring	Audio Right In

## Microphone In pin assignments:

Pin	Signal Name
Sleeve	Ground
Tip	Microphone mono In
Rina	Electret Bias Voltage

GAMEVCC line need the over current protector.

Raychem miniSMDC110-2 or equivalent is used for that.

## 1-3 Jumper Header

## CMOS Clear

## Clear the RTC data

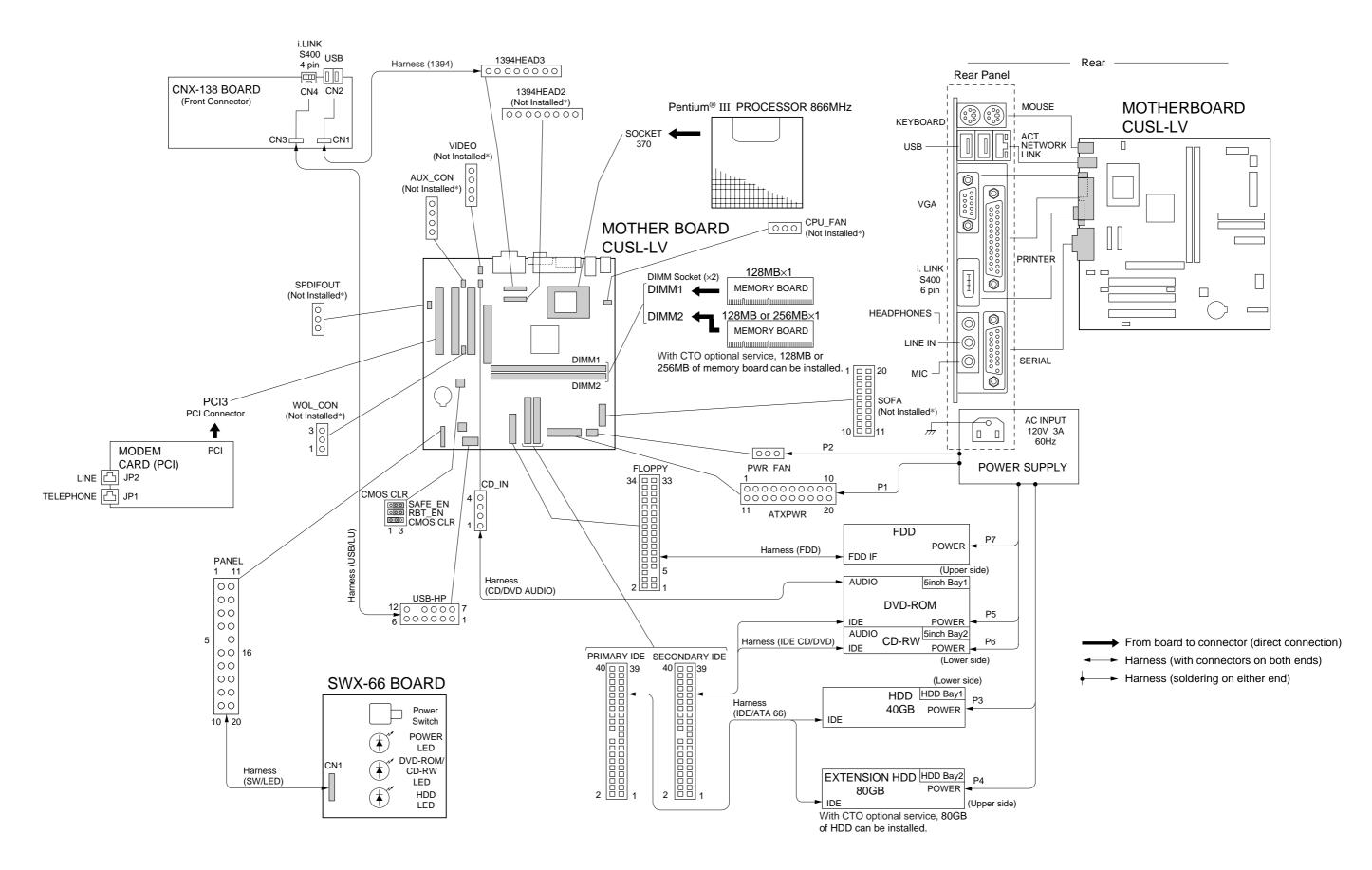
Connector location on MB	See the frame harness diagram

## Jumper header

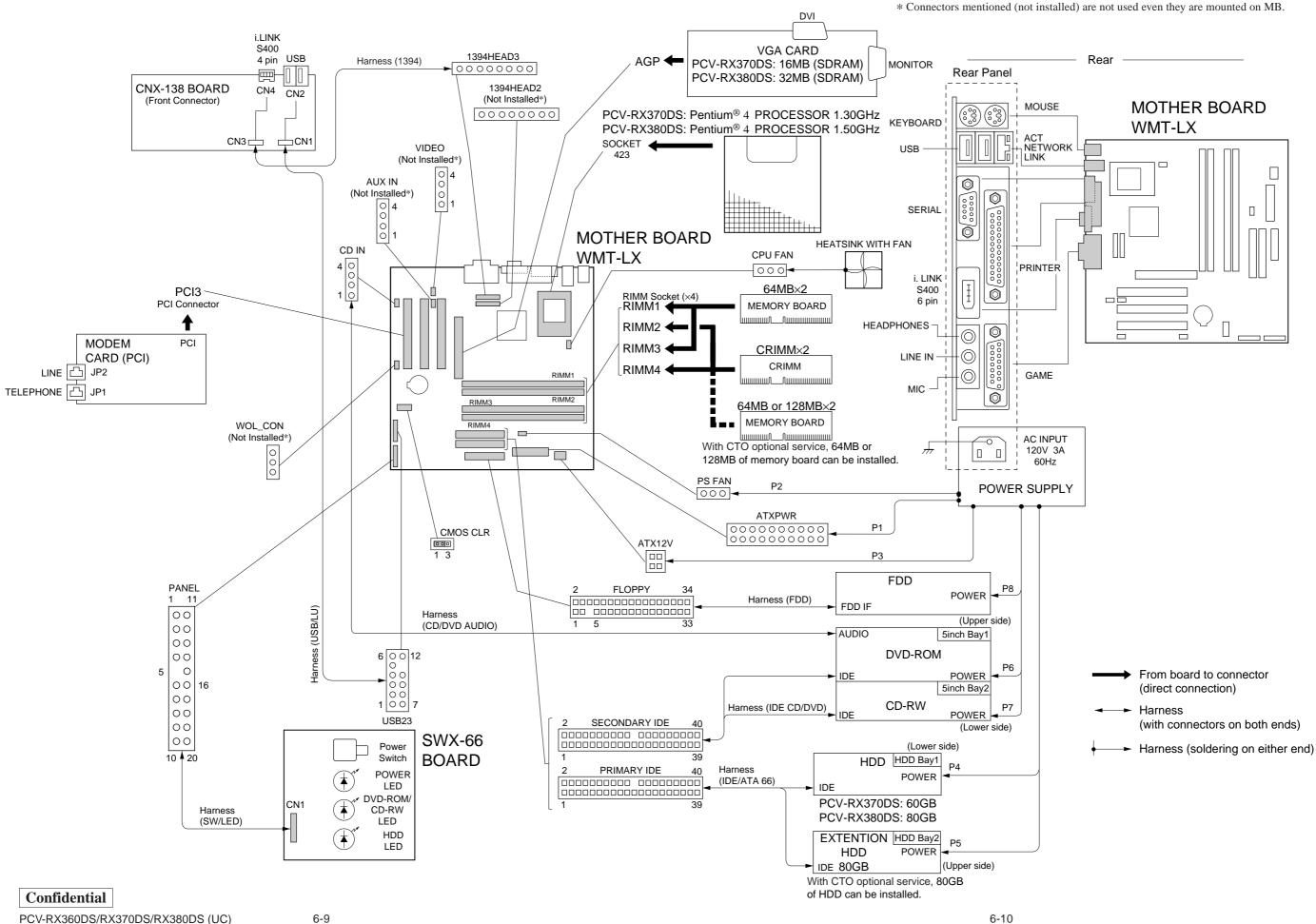


## Combination of jumper caps:

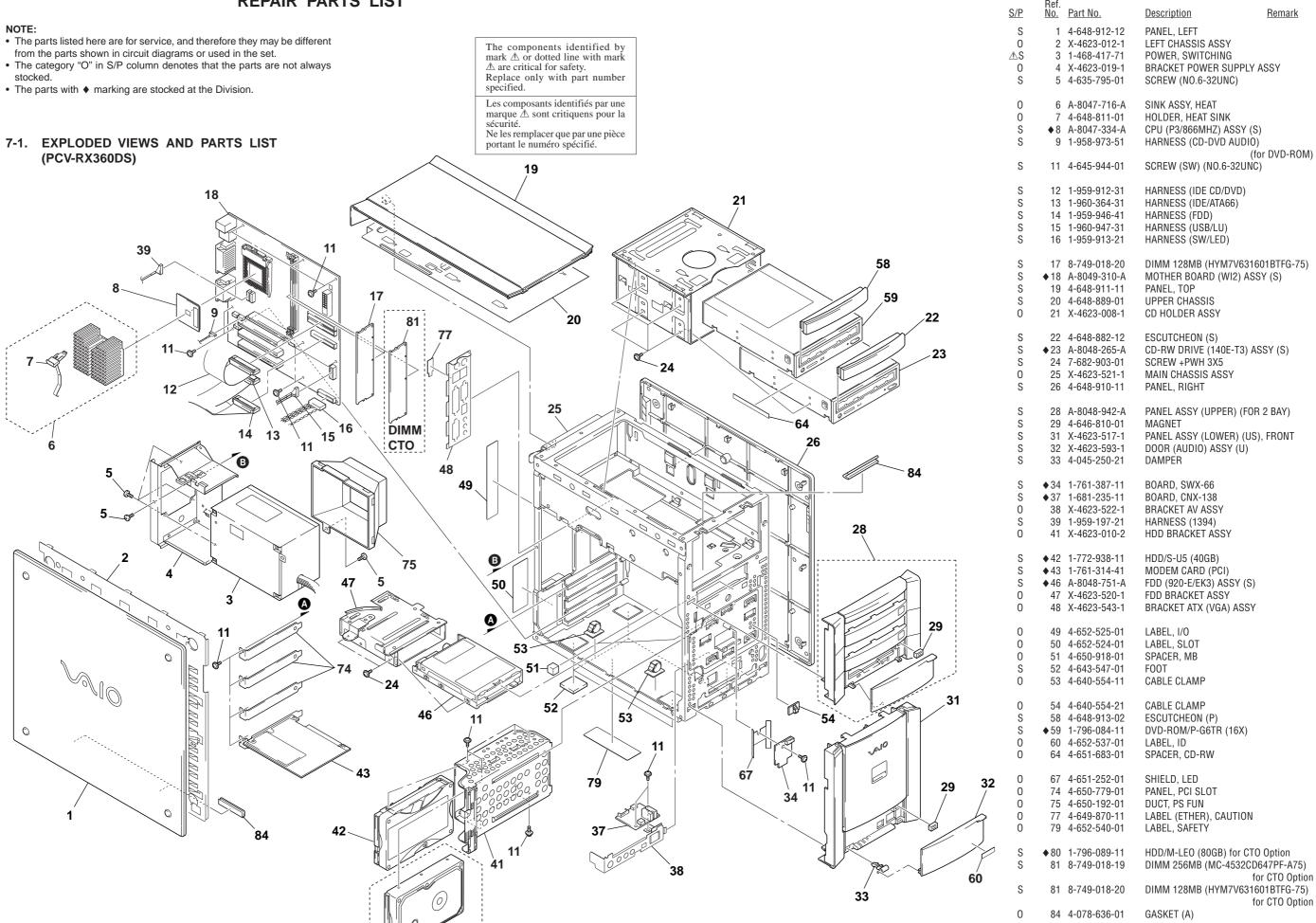
Combination of jumper	
	CMOSCLR
1-2	Clear
2-3	Normal



## (for PCV-RX370DS/RX380DS)



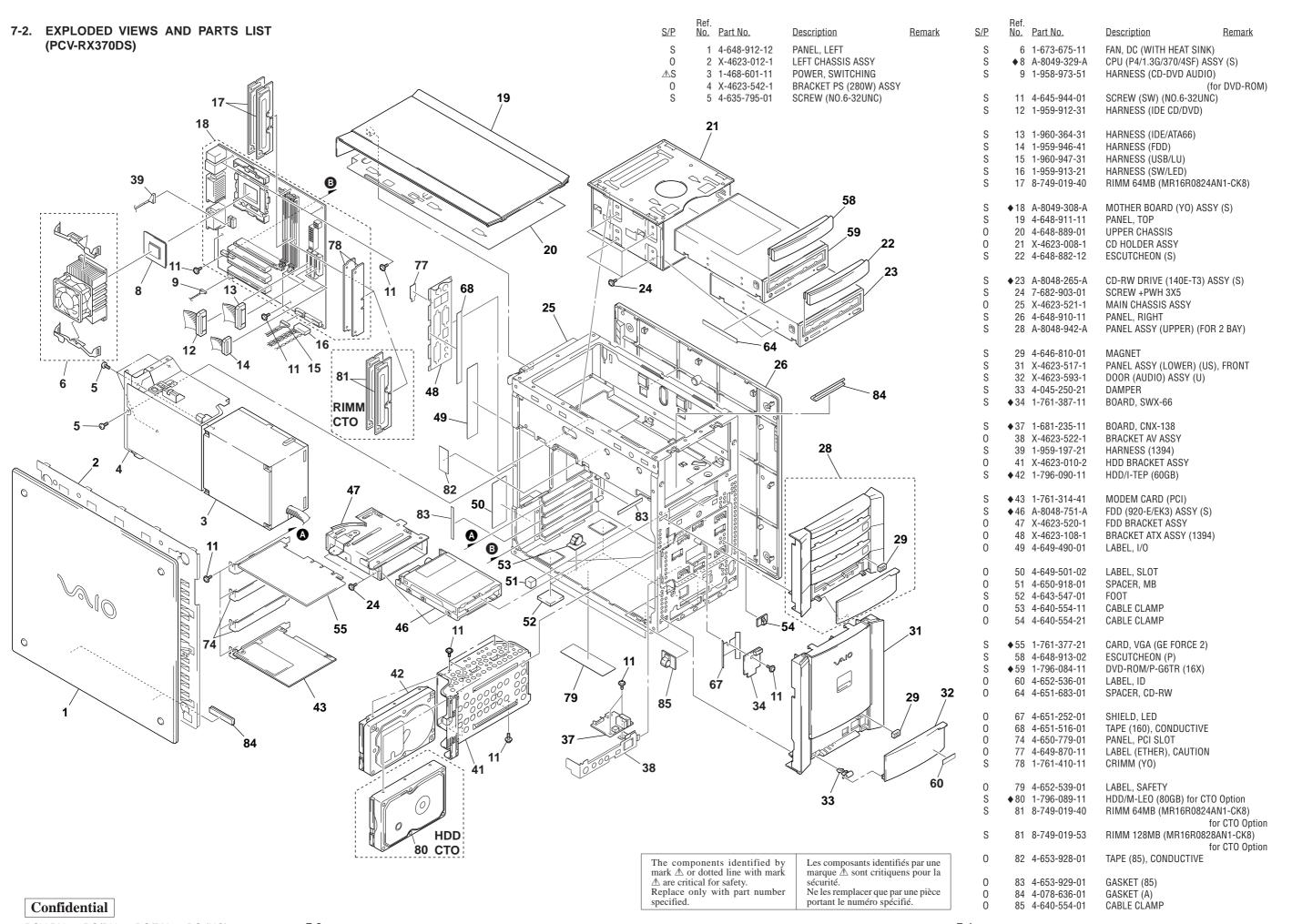
# SECTION 7 REPAIR PARTS LIST



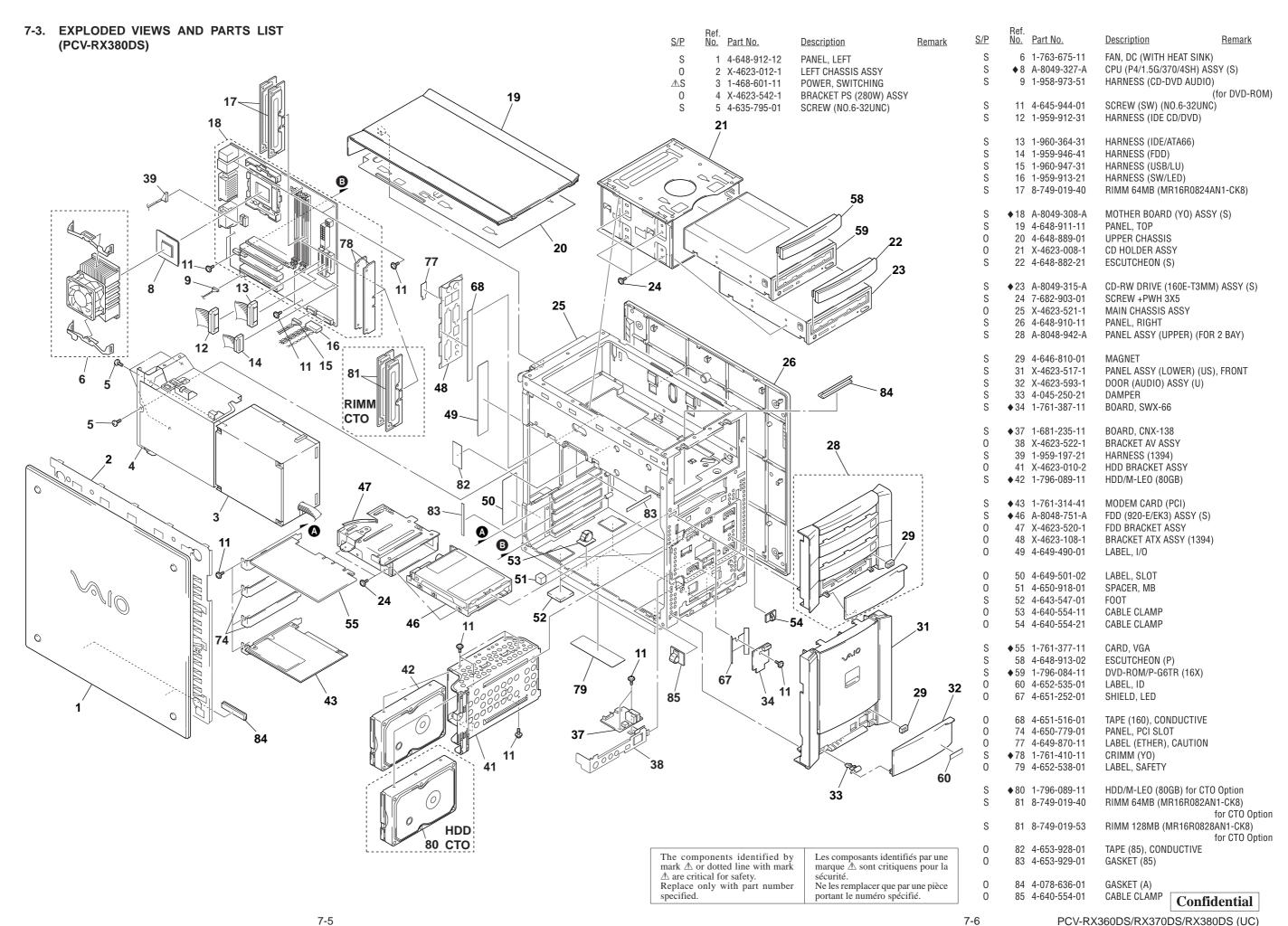
80 CTO

7-1

7-2



PCV-RX360DS/RX370DS/RX380DS (UC) 7-3 7-4



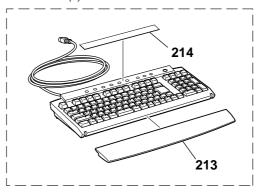
## **MEMO**

## 7-4. ACCESSORIES AND PARTS LIST

## 201 POWER CORD (1)



## **204** KEYBOARD (1)



Ref. <u>No.</u> <u>Part No.</u> **Description** Remark ACCESSORIES & PACEKING MATEIRALS \*\*\*\*\*\*\*\*\*\* 4-653-603-01 (RX370DS/RX380DS)...QUICK START 4-653-605-01 (RX360DS)...QUICK START S (RX370DS/RX380DS)...USER GUIDE (RX360DS)...USER GUIDE 4-653-606-01 S 4-653-610-01 ΔS 201 1-777-786-11 CORD, AC S ♦ 204 1-772-704-51 KEY BOARD (US) WHEEL MOUSE (PS/2) ◆ 205 1-772-207-71 207 1-782-207-11 CABLE, MODEM 209 1-790-145-21 CORD, WITH CONNECTOR (i.LINK) 213 9-885-008-07 REST, PALM PLATE (PLAIN), TOP SPEAKER UNIT 214 9-885-000-89 S 215 1-529-892-11

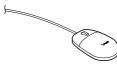
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.

Replace only with part number specified.

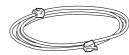
ADAPTOR, AC (for SPEAKER UNIT)

Les composants identifiés par une marque  $\Delta$  sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

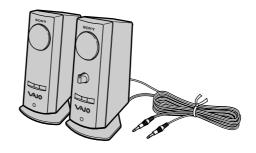
## **205** MOUSE (1)



207 MODEM CABLE (1)



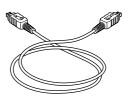
215 SPEAKER UNIT (1)



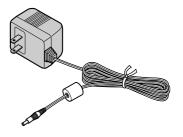
# **209** *i.LINK CABLE (1)*

ΔS

216 1-476-386-21



216 AC ADAPTOR (1)





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