SVE14A Series

SERVICE MANUAL Ver.1-2012C Revision History



•Design and specifications are subject to change without notice.

PERSONAL COMPUTER

SONY®

Sony, VAIO and CLIE are trademarks or registeredtrademarks of Sony, Microsoft, Windows, Windows Media, Outlook, Bookshelf and other Microsoft products are trademarks or registered trademarks of Microsoft Corporation in the United States and other countries. The word Bluetooth and the Bluetooth logo are trademarks of Bluetooth SIG, Inc. AMD, the AMD logo, other AMD product names and combinations thereof are trademarks of Advanced Micro Devices, Inc. Intel Inside Iogo. Pentium. Celeron and Core are trademarks or registered trademarks of Intel Corporation. Transmeta, the Transmeta logo, Crusoe Processor, the Crusoe logo and combinations thereof are trademarks of Transmeta Corporation in the USA and other countries. Graffi ti. Hot-Sync, PalmModem, and Palm OS are registered trademarks, and the Hotsync logo and Palm are trademarks of Palm. Inc. or its subsidiaries. (M) and Motrola are trademarks of Motrora, Inc. Other Motrola products and services with (R) mark like Dragomball are the trademarks of Motrola. Inc.

All other names of systems, products and services in this manual are trademarks or registered trade-Marks of their respective owners. In this manual, the (TM) or (R) mark are not specified. <u>Caution Markings for Lithium/Ion Battery</u> - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

CAUTION: The battery pack used in this device may present a fi re or chemical burn hazard if mistreated. Do not disassemble, heat above $60^{\circ}C$ (140°F) or incinerate. Dispose of used battery promptly. Keep away from children.

CAUTION: Changing the back up battery.

• Overcharging, short circuiting, reverse charging, multilation or incineration of the cells must be avoided to prevent one or more of the following occurrences; release of toxic materials, release of hydrogen and/or oxygen gas, rise in surface temperature.

• If a cell has leaked or vented, it should be replaced immediately while avoiding to touch it without any protection.

The components identified by mark flocontain confidential information.

Strictly follow the instructions whenever the components repaired and/or replaced.

Service and Inspection Precautions

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 Δ 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 du-Plicate 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 270°C.
- 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.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ! LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE △ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANSCE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

+

TABLE OF CONTENTS

Section	Title	Page			
CHAPTER1. BLOCK DIAGRAM 1-1.SVE14A Series (For Ext-Gfx (THAMES-XT(M)) Models)					
1-2.SVE14	4A Series (For Int-Gfx Models)	· 1-1 ·· 1-2			
CHAPTER2	2. FRAME HARNESS DIAGRAM	1-2)			
2-1 SVE14	4A Series (TOP)	2_1			
2-2.SVE14	4A Series (BOTTOM)	· 2-1 			
	(to	2_2			
CHAPTER3	3. EXPLODED VIEWS	2-2)			
Screws					
S-1. Sc	crews	. 3-2			
Palmrest		0 2			
P-1. Pa	almrest	. 3-3			
Main Boar	ď				
M-1. Ma	ain Board (For Ext-Gfx (THAMES-XT(M)) Mode	els)			
		3-4			
M-2. Ma	ain Board (For Int-Gfx Models)	3-5			
Bottom					
B-1. Bo	ottom	3-6			
ODD					
D-1. O[DD	3-7			
HDD					
H-1. HC	DD	3-8			
LCD					
L-1. LC	D	3-9			
Accessorie	es				
A-1. Ac	cessories	3-10			
	(to	o 3-10)			

Section Title

Page

CHAPTER4.OTHERS

4-1. Replacing the CPU 4-	-1
4-2. Holding Method of Motherboard 4	-2
4-3. Handing and Holding Method of LCD 4.	-3
(to 4-	-3)

• History of the changes is shown as the "Revision History" at the end of this data.

CHAPTER1. BLOCK DIAGRAM

1-1.SVE14A Series (For Ext-Gfx (THAMES-XT(M)) Models)



1-2.SVE14A Series (For Int-Gfx Models)



CHAPTER2. FRAME HARNESS DIAGRAM

2-1.SVE14A Series (TOP)





CHAPTER3. EXPLODED VIEWS

Section Page				
Screws				
S-1.Screws				
Palmrest				
P-1.Palmrest				
Main Board				
M-1. Main Board (For Ext-Gfx (THAMES-XT(M)) Models)				
M-2. Main Board (For Int-Gfx Models)3-5				
Bottom				
B-1.Bottom				
ODD				
D-1.ODD				
HDD				
H-1.HDD				
LCD				
L-1.LCD				
Accessories				
A-1.Accessories 3-10				



S-1. Screws



P-1. Palmrest



M-1. Main Board (For Ext-Gfx (THAMES-XT(M)) Models)



M-2. Main Board (For Int-Gfx Models)



B-1. Bottom



D-1. ODD



H-1. HDD



L-1. LCD



A-1. Accessories

2005 Power Cord



2007 Battery Pack



2010 Keyboard Skin



2006 AC Adapter



2008 Carrying Case



2011 Carrying Pouch



2006 AC Adapter(Stick Type)



2009 Bluetooth Mouse



2012 Cable Clip



[Sony Confidential] SVE14A Series (9-890-885-XX)

CHAPTER4. OTHERS

4-1. Replacing the CPU

1. Removing the CPU

- 1. Insert a flat-blade screwdriver into the notch as shown illustration and rotate it so that the protrusion comes to the lock release position.
- 2. Pull the CPU gently upward to lift it out of the CPU socket

2. Installing the CPU

- 1. Align the triangle reference mark of the mark the CPU with that of the CPU socket and insert all the pins of the CPU to the corresponding holes of the CPU socket.
- 2. Insert the flat head (-) screwdriver into the specified position and rotate the screwdriver to the LOCK position.





4-2 Holding Method of Motherboard

1. When operating with both hands, gently hold the middle of Main board edge as show.

2. When operating with one-hand, gently hold the middle of Main board edge and keep vertical.



(Level)



(Vertical)

4-3 Handing and Holding Method of LCD

1. Handling Method of LCD





 Take LCD Panel out of packing box with its both sides.
Note not to press the PCB.

2. Holding Method of LCD

2) Holding the opposite side of PCB with one hand, take off the tape of shielding bag with the other hand.



3) Holding one side of LCD Panel with one hand, take off the shielding bag with the other hand.



4) Besides the protector sheet, there is also another soft film on the surface of Samsung LCD. The soft film is under the protector sheet. Remove it carefully with one tape.



(Front View)



(Rear View)



This manual and the constituent data may not be replicated, copied nor reprinted in whole or in part without prior written authorization of Sony Corporation

Revision History

Suffix	Ver.	Date	Contents	QM No.		
-01	Ver.1	2012.03.26	First Edition			
<remarks></remarks>						