Aspire 3300

Service Guide

Service guide files and updates are available on AIPG/CSD web. For more information, please refer to <u>http://csd.acer.com.tw</u>

100% Recycled Paper

PART NO.: 49.37C002.001 DOC. NO.:

PRINTED IN TAIWAN

Copyright

Copyright © 1999 by Acer Incorporated. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of Acer Incorporated.

Intel is a registered trademark of Intel Corporation.

Pentium and Pentium II are trademarks of Intel Corporation.

Other brand and product names are trademarks and/or registered trademarks of their respective holders.

Disclaimer

The information in this guide is subject to change without notice.

Acer Incorporated makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties of merchantability or fitness for any particular purpose. Any Acer Incorporated software described in this manual is sold or licensed "as is". Should the programs prove defective following their purchase, the buyer (and not Acer Incorporated, its distributor, or its dealer) assumes the entire cost of all necessary servicing, repair, and any incidental or consequential damages resulting from any defect in the software.

Conventions

The following are the conventions used in this manual:

Text entered by user	Represents text input by the user.
Screen messages	Denotes actual messages that appear onscreen.
ALT, ENTER, F8, etc.	Represent the actual keys that you have to press on the keyboard.
NOTE	Gives bits and pieces of additional information related to the current topic.
WARNING	Alerts you to any damage that might result from doing or not doing specific actions.
CAUTION	Gives precautionary measures to avoid possible hardware or software problems.
IMPORTANT	Reminds you to do specific actions relevant to the accomplishment of procedures.

Preface

Before using this information and the product it supports, please read the following general information!

- This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, and extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. When this case arises, you should contact your regional offices or the responsible personnel/channel to provide you with further technical details.
- 2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

Chapter	1 System Specifications	1
	System Overview	1
	System Outlook for Aspire 3300	3
	Front Panel	3
	Rear Panel	4
	System Board Layout	5
	BIOS Hotkey List	6
	Hardware Specifications and Configurations	6
	Processor	6
	BIOS	7
	System Memory	8
	DIMM Combinations	9
	Cache Memory 1	0
	Video Memory 1	0
	Video Interface 1	0
	Audio Interface 1	1
	IDE Interface 1	1
	FDD Interface1	2
	Parallel Port1	2
	Serial Port1	3
	Memory Address Map 1	3
	PCI INTx# and IDSEL Assignment Map 1	4
	PCI Slot IRQ Routing Map 1	4
	I/O Address Map 1	5
	Aspire 3300 GPIO (General Purpose I/O) PIN Define 1	6
	IRQ Assignment Map 1	7
	DRQ Assignment Map 1	8
	System Board Major Chips1	8
	Power Management1	9
	Power Saving Mode Phenomenon List 1	9
	Environmental Requirements	20

Chapter 2 System Utilities

Entering Setup	22
System Information	24
Processor2	25
Processor Speed2	25
Internal Cache2	25
External Cache2	25
Floppy Drive A2	25
Floppy Drive B2	25
IDE Primary Channel Master2	25
IDE Primary Channel Slave2	25
IDE Secondary Channel Master	25
IDE Secondary Channel Slave2	25
Total Memory2	26
Serial Port	26
Parallel Port2	26
Product Information	27
Product Name2	27
System S/N2	27
Main Board ID2	27
Main Board S/N2	27
System BIOS Version2	27
SMBIOS Version2	28
System BIOS ID2	28
BIOS Release Date	28
Disk Drives	28
Floppy Drives	29
LS-120 drive as2	29
IDE Drives2	29
Onboard Peripherals	32
Serial Port	32
Parallel Port	33
Onboard Device Settings	34
Power Management	35
Power Management Mode	35
Power Switch < 4 sec	36
ACPI BIOS Support	36
System Wake-Up Event	36
Boot Options	37

21

Table of Contents

Boot Sequence	37
First Hard Disk Drive	37
Primary Display Adapter	37
Fast Boot	38
Silent Boot	38
Num Lock After Boot	38
Memory Test	38
Configuration Table	38
Date and Time	39
Date	39
Time	39
System Security	40
Setup Password	40
Power-on Password	43
Disk Drive Control	43
Advanced Options	44
Memory/Cache Options	45
PnP/PCI Options	46
Load Default Settings	48
Abort Settings Change	49
Exiting Setup	50

Chapter 3 Removal and Replacement

Removing an Optional Serial Device (Rare Panel Cover)	52
Opening the Housing	53
Removing an Expansion Board	54
Removing a 3.5-inch Drive	54
Removing the CD-ROM Drive	56
Removing the 5.25-inch Drive	58
Removing the System Board	59
Removing a DIMM	60
Removing the CPU Heatsink and CPU Board	61
Removing a Daughterboard	63
Chapter 4 Troubleshooting	65
Power-On Self-Test (POST)	65

Chapter 5	Jumper and Connector Information	71
Jur	nper Settings	72
Co	nector List	74

51

Table of Contents

Chapter 6	FRU (Field Replaceable Unit) List	75
Appendix A	Model Number and Configurations	85
Appendix B	Test Compatible Components List	87
Micr Micr Micr Envi Micr IBM [€] Nove	osoft [®] Windows [®] 98 (En/Jp) Environment Test osoft [®] Windows [®] NT 4.0 Workstation Environment Test . osoft [®] Windows [®] 2000 Professional Beta 3 Build 2000 ronment Test osoft [®] Windows [®] 95 Environment Test [®] OS/2 Warp 4.0 Environment Test ell [®] Netware [®] 3.12 & 4.11 & 5.0 Environment Test	88 90 91 92 93 94
Appendix C	Online Support Information	97

99

System Specifications

System Overview

- □ This product is a Pentium processor based IBM PC/AT compatible system with PCI/AGP bus.
- Lt supports:
- AMD K6-2, S Sharptooth, and Cyrix M2 family processors, with supporting CPU clock up to 450MHz
- 512K PBSRAM L2 cache
- □ 2 * 168 pin DIMM sockets (maximum up to 256MB)
- Power management features
- CPU SMM (System Management Mode), STOP clock control
- ACPI compliance BIOS
- □ API (Application Program Interface) feature
- □ ATA compliance hard disk power saving feature
- On-board PCI master enhanced local bus IDE (Embedded in SiS 530 chipset)
- PIO mode 4
- Multiword DMA Mode 2
- Ultra DMA 33/66
- On-board serial ports 2 high speed NS16C550 compatible UARTs with 16 byte FIFOs
- □ On-board parallel port SPP, EPP and ECP (IEEE 1284 compliant)
- □ On-board FDD interface 1.2MB/1.44MB/2.88MB & 3 mode FDD
- USB keyboard
- USB mouse
- □ Plug-and-Play (PnP) feature
- Four USB connectors
- □ On-board ESS SOLO1 sound chip (PCI bus)
- On-board SiS530 3D Super AGP VGA (AGP bus) with share frame buffer up to 8 MB
- Shared frame buffer architecture

- □ 2 PCI slots + 1 ISA/PCI shared slot
- □ Software shutdown for Windows98
- □ On-board DC-to-DC converter (VRM 8.4 spec.)

System Outlook for Aspire 3300

Front Panel



- 1. CD-ROM/ DVD-ROM Drive
- 2. CD-ROM/ DVD-ROM Eject Button
- 3. Power/ Quickstart Button
- 4. Power Indicator Light
- 5. Activity Indicator Light
- 6. Expansion Bay Door

Rear Panel



- 1. Fan
- 2. System Main Power Switch
- 3. Voltage Selector
- 4. System Power Socket
- 5. USB Ports
- 6. PS/2 Mouse Port (Under Rare Back Cover)
- 7. PS/2 Keyboard Port (Under Rare Back Cover
- 8. Serial Port

- 9. Parallel Port
- 10. Monitor/VGA Port
- 11. Audio-out Port
- 12. Audio-in Port
- 13. Game/MIDI Port
- 14. Microphone-in Port
- 15. Add-on Card Brackets

System Board Layout ,27 ²⁵24₂₃₂₂22 28 29 ۵Ŵ 30 31 26 ii> 34 32 19 ,18 -20 33 35 1_2 3 4⁵678 17 Ø 16 15 14 9 13 ^{10′}11́ 12

USB ports	13	ISA slot	25	HDD LED connector
PS/ 2 keyboard port	14	PCI slot	26	2-pin fan connector
Serial port	15	SiS 5595 chipset	27	ATX Power connector
VGA port	16	Wake-Up On LAN connector	28	CPU socket
Game/ MIDI port	17	Modem ring in connector	29	DIMM sockets
Line-out jack	18	System BIOS ROM	30	USB Hub connector
Line-in jack	19	Power LED connector	31	Printer port
Microphone jack	20	Password Check	32	PS/2 mouse port
CD-ROM audio in connector	21	IDE connector	33	COM1 connector
Speaker Type connector	22	Power Button	34	SiS 530 chipset
Speaker Type connector	23	FDD connector	35	System Battery
Fax-Voice Modem connector	24	Reset Button		
	USB ports PS/ 2 keyboard port Serial port VGA port Game/ MIDI port Line-out jack Line-in jack Microphone jack CD-ROM audio in connector Speaker Type connector Speaker Type connector Fax-Voice Modem connector	USB ports13PS/ 2 keyboard port14Serial port15VGA port16Game/ MIDI port17Line-out jack18Line-in jack19Microphone jack20CD-ROM audio in connector21Speaker Type connector22Speaker Type connector23Fax-Voice Modem connector24	USB ports13ISA slotPS/ 2 keyboard port14PCI slotSerial port15SiS 5595 chipsetVGA port16Wake-Up On LAN connectorGame/ MIDI port17Modem ring in connectorLine-out jack18System BIOS ROMLine-in jack19Power LED connectorMicrophone jack20Password CheckCD-ROM audio in connector21IDE connectorSpeaker Type connector22Power ButtonFax-Voice Modem connector24Reset Button	USB ports13ISA slot25PS/ 2 keyboard port14PCI slot26Serial port15SiS 5595 chipset27VGA port16Wake-Up On LAN connector28Game/ MIDI port17Modem ring in connector29Line-out jack18System BIOS ROM30Line-in jack19Power LED connector31Microphone jack20Password Check32CD-ROM audio in connector21IDE connector33Speaker Type connector22Power Button34Fax-Voice Modem connector24Reset Button

BIOS Hotkey List

Hotkey	Function	Description
CTRL + ALT + ESC	Enter BIOS Setup Utility	Press while the system is booting to enter BIOS Setup Utility.
ALT + F4	Enable hidden page of BIOS Setup Utility	Press in BIOS Setup Utility main menu screen, the Advanced Options menu then appears.
		The items shown in the Advanced Options menu are:
		Memory/Cache Options PnP/PCI Options

Hardware Specifications and Configurations

Processor

Item	Specification
Туре	AMD K6-2 and Cyrix M2 CPU
Slot	Socket 7
CPU internal speed	350/380/400 MHz
CPU external speed	90/95/100 MHz
Minimum operating speed	0 MHz

BIOS

Item	Specification
BIOS code programmer	Acer
BIOS version	V3.2, R01-A0 R0 EN
BIOS ROM type	Bulk mode flash ROM
BIOS ROM model number	AT29C020 SST 29EE020
BIOS ROM size	2 MB
BIOS ROM package	32-pin DIP package
Support protocol	PCI 2.1, APM1.2, DMI 2.00.1, E-IDE, ACPI 1.0, ESCD 1.03, ANSI ATA 3.0, PnP 1.0a, Bootable CD-ROM 1.0, ATAPI, USB 1.0
Boot from CD-ROM feature	Yes
Support to LS-120 drive	Yes
Support to BIOS boot block feature	No

NOTE The BIOS can be overwritten/upgraded using the "AFLASH" utility (AFLASH.EXE).

System Memory

This section lists the system memory specifications and the possible combinations of memory modules.

Item	Specification
On-board embedded memory size	OMB
Memory socket number	2 sockets (2 banks)
Supported memory size per socket	8MB / 16MB / 32MB / 64MB / 128MB
Supported maximum memory size	256MB (128 MB x 2)
Supported memory type	SDRAM
Supported memory speed	100MHz (PC100) (for Local Bus speed 100MHz or 66 MHz) 66MHz (for Local Bus speed 66MHz)
Supported memory voltage	3.3 V
Supported memory module package	168-pin DIMM
Support for parity check feature	No
Support for Error Correction Code (ECC) feature.	No
Memory module combinations	You can install memory modules in any combination as long as they match the above specifications.

WARNING If only 1 DIMM slot will be used, be sure the memory is placed in DIMM1 slot, instead of DIMM2 slot. Without memory in DIMM1 slot, the machine can't be booted up.

DIMM Combinations

DIMM1	DIMM2	TOTAL
8M	NONE	8M
16M	NONE	16M
32M	NONE	32M
64M	NONE	64M
128M	NONE	128M
8M	8M	16M
8M	16M	24M
8M	32M	40M
8M	64M	72M
8M	128M	136M
16M	8M	24M
16M	16M	32M
16M	32M	48M
16M	64M	80M
16M	128M	144M
32M	8M	40M
32M	16M	48M
32M	32M	64M
32M	64M	96M
32M	128M	160M
64M	8M	72M
64M	16M	80M
64M	32M	96M
64M	64M	128M
64M	128M	192M
128M	8M	136M
128M	16M	144M
128M	32M	160M
128M	64M	192M
128M	128M	256M

Cache Memory

ltem	Specification	
First-Level Cache Configurations		
Cache function control Enable/disable by BIOS Setup		

Video Memory

ltem	Specification
Memory size	Share frame buffer up to 8MB
Memory type	DIMM SDRAM
Memory speed	100MHz
Memory voltage	3.3V

Video Interface

This section has two table lists: the video interface specifications and its supported display modes.

ltem	Specification
Video controller	SiS530 3D Super AGP VGA
Video controller resident bus	AGP bus

Display Screen Resolution	Врр	V-Freq(Hz)	H-Freq(KHz)	Pixel Clock (MHz)
640x480	8/16/32	60	31.4	25.2
640x480	8/16/32	72	37.7	31.2
640x480	8/16/32	75	37.5	31.5
800x600	8/16/32	56	35.1	36.0
800x600	8/16/32	60	37.8	40.0
800x600	8/16/32	72	48.0	50.0
800x600	8/16/32	75	46.8	49.5
1024x768	8/16/32	43 int	35.5	44.9
1024x768	8/16/32	60	48.3	65.0
1024x768	8/16/32	70	56.4	75.0
1024x768	8/16/32	75	60.0	78.8
1280*1024	8/16/32	43 int	42.6	53.9
1280*1024	8/16/32	60	59.4	75.2
1280*1024	8/16/32	72	71.3	90.3
1280*1024	8/16/32	75	74.3	92.2

Audio Interface

Item	Specification
Audio controller	ESS Solo-1
Audio controller resident bus	PCI bus
Audio function control	Enable/disable by BIOS Setup
Mono or stereo	Stereo
Resolution	16 bits
Compatibility	Compliant to Microsoft Windows Sound System, MPC3, Sound Blaster, Sound Blaster Pro standard
Music synthesizer	Yes, internal FM synthesizer
Sampling rate	48 kHz (max.)
MPU-401 UART support	Yes

IDE Interface

Item	Specification
IDE controller	SiS530
IDE controller resident bus	PCI bus
Number of IDE channels	2 (CN11nd CN12)
Supported IDE interface	E-IDE (up to PIO mode-4, Multiword DMA Mode 2 and Ultra DMA 33/66) Fully compatible with ANSIS ATA Rev. 3.0 Specification / ATAPI Specification
Supports bootable CD-ROM	Yes

FDD Interface

ltem	Specification
FDD controller	SiS6801
FDD controller resident bus	ISA bus
Supported FDD formats	3.5" floppy drive: 720KB, 1.44MB, 2.88MB 5.25" floppy drive: 360KB, 1.2MB

Parallel Port

Item	Specification
Parallel port controller	SiS5595
Parallel port controller resident bus	ISA bus
Number of parallel ports	1
Parallel port location	CN5
Support for ECP/EPP	Yes
Connector type	25-pin D-type female connector
Parallel port function control	Enable/disable by BIOS Setup
Selectable ECP DMA channel (in BIOS Setup)	DMA channel 1 DMA channel 3
Selectable parallel port I/O address (via BIOS Setup)	378h
Selectable parallel port IRQ (via BIOS Setup)	IRQ7

Serial Port

Item	Specification
Serial port controller	SiS5595
Serial port controller resident bus	ISA bus
Number of serial ports	1
Serial port locations	CN5
16C550 UART support	Yes
Connector type	9-pin D-type female connector
Selectable serial port I/O address (via BIOS Setup)	2F8h
Selectable serial port IRQ (via BIOS Setup)	IRQ3

Memory Address Map

Address	Size	Function
000000 - 07FFFF	512K Bytes	Host Memory
080000 - 09FFFF	128K Bytes	Host/PCI Memory
0A0000 - 0BFFFF	128K Bytes	PCI/ISA Video Buffer Memory
0C0000 - 0C7FFF	32K Bytes	Video BIOS Memory
0C8000 - 0DFFFF	96K Bytes	ISA Card BIOS & Buffer Memory
0E0000 - 0EFFFF	64K Bytes	BIOS Extension Memory
		Setup and Post Memory
		PCI Development BIOS
0F0000 - 0FFFFF	64K Bytes	System BIOS Memory
100000 - UPPER LIMIT		Main Memory
UPPER LIMIT - 4GBytes		PCI Memory

NOTE UPPER LIMIT means the maximum size of installed memory. The Main Memory Maximum size are 768M bytes.

PCI INTx# and IDSEL Assignment Map

PCI INTx #	PCI Devices	Device IDSEL : ADxx
INTA#	PCI-Slot1	AD20
INTB#	PCI-Slot2	AD21
INTC#	PCI-Slot3	AD22
INTD#	On-Board Audio	AD23

PCI Slot IRQ Routing Map

PCI INTX#	INTA	INTB	INTC	INTD	Bus Mastering
PCI slot 1	Route 1	Route 2	Route 3	Route4	Enabled
PCI slot 2	Route 2	Route 3	Route 4	Route1	Enabled
PCI slot 3	Route 3	Route 4	Route 1	Route2	Enabled

I/O Address Map

Hex Range	Devices	
000-00F	DMA Controller-1	
020-021	Interrupt Controller-1	
040-043	System Timer	
060-060	Keyboard Controller 8742	
061-061	System Speaker	
070-071	CMOS RAM Address and Real Time Clock	
081-08F	DMA Controller-2	
0A0-0A1	Interrupt Controller-2	
0C0-0DF	DMA Controller-2	
0F0-0FF	Math Co-Processor	
170-177	Secondary IDE	
1F0-1F7	Primary IDE	
278-27F	Parallel Printer Port 2	
2F8-2FF	Serial Asynchronous Port 2	
378-37F	Parallel Printer Port 1	
3F0-3F5	Floppy Disk Controller	
3F6-3F6	Secondary IDE	
3F7-3F7	Primary IDE	
3F8-3FF	Serial Asynchronous Port 1	
0CF8	Configuration Address Register	
0CFC	Configuration Data Register	
778-77A	Parallel Printer Port 1	

Aspire 3300 GPIO (General Purpose I/O) PIN Define

Item		Description
GPIO3/CPUST0	Output PWR_LOCK	L: Unlock (default) power button H: Lock power button
GPIO4/FAN1	Output DIS_AUD#	L: Disable on board audio H: Enable on board audio (default)
GPIO9/THERM# /BTI/SMBALERT#	Output L2 MODE	L: Linear burst mode H: Interleave burst mode (default)
GPIO11/FAN2	Output PWRLED#	L: System suspend H: System working
GPI 12	Input PASSWORD	L: Check password H: Bypass password
IRQ10/GPIO11	Output FANOFF#	L: Stop CPU fan H: Fan enable (default)

IRQx	System Devices	Add-On-Card Devices
IRQ0	Timer	Not to be used
IRQ1	Keyboard	Not to be used
IRQ2	Cascade Interrupt Control	Not to be used
IRQ3	Serial Alternate	Reserved
IRQ4	Serial Primary	Reserved
IRQ5	Parallel Port (Alternate)	Reserved
IRQ6	Floppy Diskette	Reserved
IRQ7	Parallel Port	Reserved
IRQ8	Real Time Clock	Not to be used
IRQ9	Not to be used	Reserved
IRQ10	Not to be used	Reserved
IRQ11	Not to be used	Reserved
IRQ12	PS/2 Mouse	Reserved
IRQ13	Math Coprocessor Exception	Not to be used
IRQ14	Fix Diskette	Reserved
IRQ15	Fix Diskette	Reserved

IRQ Assignment Map

DRQ Assignment Map

DRQx	System Devices	Add-On-Card Devices
DRQ0	Not to be used	Reserved
DRQ1	Not to be used	Reserved
DRQ2	FDD	Not to be used
DRQ3	Not to be used	Reserved
DRQ4	Cascade	Not to be used
DRQ5	Not to be used	Reserved
DRQ6	Not to be used	Reserved
DRQ7	Not to be used	Reserved

System Board Major Chips

ltem	Controller
System core logic	SiS530 / SiS5595
Video controller	Built-in SiS530
Super I/O controller	SiS6801
Audio controller	ESS Solo1
HDD controller	Built-in SiS530
Keyboard controller	Built-in SiS5595
RTC	Built-in SiS5595

Power Management

Power Saving Mode Phenomenon List

Power Saving Mode	Phenomenon
IDE Hard Disk Standby mode	Hard disk drive is in standby mode (spindle turned-off)
Monitor Power Saving mode	Monitor is in suspend mode (V-sync.=0Hz).
System Suspend mode	Power LED flashes in amber color
	Hard disk drive is in standby mode (spindle turned-off)
	Monitor is in off mode (V-sync. and H-sync. =0Hz).
	CPU fan turns off
	CPU internal clock is 0Hz (STPCLK)

NOTE The VGA BIOS should support DPMS (Desktop Power Management System) for the standby and suspend mode function call. When the Display Standby Timer expires, the system BIOS will execute the DPMS service routines.

Environmental Requirements

ltem	Specifications	
Temperature		
Operating	+10 ~ +35°C	
Non-operating	-20 ~ +60°C	
Humidity		
Operating	20% to 80% RH	
Non-operating	20% to 80% RH	
Vibration		
Operating (unpacked)	5 ~ 18 Hz: 0.015 mm 18 ~ 250 Hz: 0.25 G	
Non-operating (packed)	5 ~ 27.1 Hz: 0.6 G 27.1 ~ 50 Hz: 0.016 mm 50 ~ 500 Hz: 2 G	

System Utilities

Most systems are already configured by the manufacturer or the dealer. There is no need to run Setup when starting the computer unless you get a Run Setup message.

The Setup program loads configuration values into the battery-backed nonvolatile memory called CMOS RAM. This memory area is not part of the system RAM.

NOTE If you repeatedly receive Run Setup messages, the battery may be bad. In this case, the system cannot retain configuration values in CMOS. Ask a qualified technician for assistance.

Before you run Setup, make sure that you have saved all open files. The system reboots immediately after you exit Setup.

Entering Setup

To enter Setup, press the key combination CTRL ALT ESC .

IMPORTANTYou must press **CTRL ALT ESC** simultaneously while the system is booting.

The Setup Utility main menu then appears:

Setup Utility		
System Information Product Information Disk Drives Onboard Peripherals Power Management Boot Options Date and Time System Security		
Load Default Settings Abort Settings Change		
$\uparrow\downarrow$ = Move highlight bar \downarrow = Select Esc = Exit		

The system supports two BIOS Utility levels: Basic and Advanced. The above screen is the BIOS Utility Basic Level screen. This allows you to view and change only the basic configuration of your system.

If you are an advanced user, you may want to check the detailed configuration of your system. Detailed system configurations are contained in the Basic Level 2 and Advanced Level. To view the Basic Level 2, press $\boxed{\texttt{F3}}$. To view the Advanced Level, press $\boxed{\texttt{ALT}}$ + $\boxed{\texttt{F4}}$. The following screen shows the Setup Utility Advanced Level main menu.

Setup Utility	
System Information Product Information Disk Drives Onboard Peripherals Power Management Boot Options Date and Time System Security ** Advanced Options	
Load Default Settings Abort Settings Change	
↑↓ = Move highlight bar ↓ = Select Esc = Exit	

NOTE **: Can only be seen when press ALT + F4

NOTE The ALT + A key works only when you are in the main menu. This means that you can activate the Advanced Level only when you are in the main menu.

The command line at the bottom of the menu tells you how to move within a screen and from one screen to another.

- □ Press FGDN to move to the next page or FGUP to return to the previous page.
- □ To change a parameter setting, press ← or → until the desired setting is found.
- □ Press is to return to the main menu. If you are already in the main menu, press is again to exit Setup.

The parameters on the screens show default values. These values may not be the same as those in your system.

The grayed items on the screens have fixed settings and are not userconfigurable.

System Information

The following screen appears if you select System Information from the main menu.

System Information Internal Cache64 KB, Enabled Floppy Drive A1.44 MB, 3.5-inch **Floppy Drive BNone IDE Primary Channel Master Hard Disk **IDE Primary Channel SlaveNone IDE Secondary Channel Master.... IDE CD-ROM **IDE Secondary Channel Slave...None Memory 1st Bank SDRAM, 64MB **2nd BankNone Serial Port2F8h, IRQ3 PqDn/PqUp = Move Screen Esc = Back to Main Menu

NOTE **: Can only be seen when press ALT + F4

The System Information menu shows the current basic configuration of your system.

Processor

The Processor parameter specifies the type of processor currently installed in your system. The system supports Pentium II or Celeron processors.

Processor Speed

The Processor Speed parameter specifies the speed of the processor currently installed in your system.

Internal Cache

This parameter specifies the first-level or the internal memory (i.e., the memory integrated into the CPU) size, and whether it is enabled or disabled.

External Cache

This parameter specifies the second-level cache memory size currently supported by the system.

Floppy Drive A

This parameter specifies the system's current floppy drive A settings.

Floppy Drive B

This parameter specifies the system's current floppy drive B settings

IDE Primary Channel Master

This parameter specifies the current configuration of the IDE device connected to the master port of the primary IDE channel.

IDE Primary Channel Slave

This parameter specifies the current configuration of the IDE device connected to the slave port of the primary IDE channel.

IDE Secondary Channel Master

This parameter specifies the current configuration of the IDE device connected to the master port of the secondary IDE channel.

IDE Secondary Channel Slave

This parameter specifies the current configuration of the IDE device connected to the slave port of the secondary IDE channel.

Total Memory

This parameter specifies the total amount of on-board memory. The memory size is automatically detected by BIOS during the POST (Power-On Self Test). If you install additional memory, the system automatically adjusts this parameter to display the new memory size.

1st Bank

This parameter indicates the type of DRAM installed in the DIMM 1 socket. The **None** setting indicates that there is no DRAM installed.

2nd Bank

This parameter indicates the type of DRAM installed in the DIMM 2 socket. The **None** setting indicates that there is no DRAM installed.

Serial Port

This parameter shows the serial port address and IRQ settings.

Parallel Port

This parameter shows the parallel port address and IRQ settings.

Product Information

The screen below appears if you select Product Information from the main menu.

	Product Information	Page 1/1
Product Name System S/N Main Board ID Main Board S/N System BIOS Vers SMBIOS Version **System BIOS ID **BIOS Release D	xxxxxxxxx xxxxxxxxxx xxxxxxxxxx ion V3.2 2.1 xxxxxxx ate XXXXXX	
Esc = Back to	Main Menu	

NOTE **: Can only be seen when press ALT + F4

The Product Information menu contains the general data about the system, such as the product name, serial number, BIOS version, etc. This information is necessary for troubleshooting (may be required when asking for technical support).

Product Name

This parameter specifies the official name of your system.

System S/N

This parameter specifies your system's serial number.

Main Board ID

This parameter specifies your system board's identification number.

Main Board S/N

This parameter specifies your system board's serial number.

System BIOS Version

This parameter specifies the version of your system's BIOS utility.

SMBIOS Version

The System Management (SM) BIOS allows you to check your system hardware components without actually opening your system. Hardware checking is done via software during start-up. This parameter specifies the version of the SMBIOS utility installed in your system.

System BIOS ID

This parameter specifies your system BIOS' ID.

BIOS Release Date

This parameter specifies the BIOS released date.

Disk Drives

Select Disk Drives from the main menu to configure the drives installed in your system.

The following screen shows the Disk Drives menu:

```
Disk Drives
Page 1/1

Diskette Drive A ..... [xx-MB *Diskette Drive B ..... [None]
xx-inch]

*LS-120 drive as ..... [Normal]
*LS-120 drive as ..... [Normal]

*IDE Primary Channel Master
*IDE Primary Channel Slave

*IDE Secondary Channel Master
*IDE Secondary Channel Slave

*IDE Secondary Channel Slave
F1 = Help

Esc = Exit
> ← = Change Setting,
```


Floppy Drives

To enter the configuration value for the floppy drive (drive A), highlight the Floppy Drive A parameter. Press rightarrow or rightarrow to view the options and select the appropriate value.

Possible settings for the Floppy Drive parameters are:

[None]

- [360 KB, 5.25-inch]
- □ [1.2 MB, 5.25-inch]

□ [720 KB, 3.5-inch]

- □ [1.44 MB, 3.5-inch]
- □ [2.88 MB, 3.5-inch]

LS-120 drive as

This parameter allows you not only to enable the LS-120 device installed in your system, but also to specify the function of the device. The setting affects how BIOS will detect the device.

Possible settings are:

- □ Normal In this setting, BIOS does not support the LS-120 drive. The drive needs the LS-120 device driver to operate.
- Drive A BIOS recognizes the LS-120 drive as drive A. If a standard diskette drive A exists, BIOS automatically identifies it as drive B. If a standard diskette drive B exists, it automatically becomes inaccessible.

If two LS-120 drives exist, BIOS recognizes them as drive A and drive B, respectively.

- Drive B BIOS recognizes the LS-120 drive as drive B. If a standard diskette drive B exists, it becomes inaccessible.
- □ Hard Disk BIOS recognizes the LS-120 drive as a hard disk. In this setting, format the LS-120 drive as any other hard disk and assign it a drive letter C, D, E, and so on.

IDE Drives

To configure the IDE drives connected to your system, select the parameter that represents the channel and port where the desired hard disk to configure is connected. The options are:

IDE Primary Channel Master

This parameter lets you configure the hard disk drive connected to the master port of IDE channel 1.

IDE Primary Channel Slave

This parameter lets you configure the hard disk drive connected to the slave port of IDE channel 1.

IDE Secondary Channel Master

This parameter lets you configure the hard disk drive connected to the master port of IDE channel 2.

IDE Secondary Channel Slave

This parameter lets you configure the hard disk drive connected to the slave port of IDE channel 2.

The following screen appears if you select any of the IDE Drive parameters:

IDE Primary/Second Channel Master/Sl	lary .ave	Page 1/1
<pre>*Type</pre>	Auto] XXXX] XXXX] XXXX] XXXX] MB Auto] Auto] Auto] Auto] Auto]	
↑↓ = Move Highlight Bar F Esc = Exit -	F1 = Help $\rightarrow \leftarrow = Change$	Setting,

NOTE *: Can only be seen when press F3.

Туре

This parameter lets you specify the type of hard disk installed in your system. If you want BIOS to automatically configure your hard disk, select Auto. If you know your hard disk type, you can enter the setting manually.

Setting this parameter also sets the Cylinder, Head, Sector, and Size parameters.

Cylinders

This parameter specifies your hard disk's number of cylinders, and is automatically set depending on your Type parameter setting.

Heads

This parameter specifies your hard disk's number of heads, and is automatically set depending on your Type parameter setting.

Sectors

This parameter specifies your hard disk's number of sectors, and is automatically set depending on your Type parameter setting.

Size

This parameter specifies the size of your hard disk, in MB.

Hard Disk Size > 504 MB

When set to Auto, the BIOS utility automatically detects if the installed hard disk supports the function. If supported, it allows you to use a hard disk with a capacity of more than 504 MB. This is made possible through the Logical Block Address (LBA) mode translation. However, this enhanced IDE feature works only under a DOS or Windows 3.x/95/98 environment. Other operating systems require this parameter to be set to Disabled.

Hard Disk Block Mode

This function enhances disk performance depending on the hard disk in use. If you set this parameter to Auto, the BIOS utility automatically detects if the installed hard disk drive supports the Block Mode function. If supported, it allows data transfer in block (multiple sectors) at a rate of 256 bytes per cycle. To disregard the feature, change the setting to Disabled.

This parameter appears only when you are in the Advanced Level.

Advanced PIO Mode

When set to Auto, the BIOS utility automatically detects if the installed hard disk supports the function. If supported, it allows for faster data recovery and read/write timing that reduces hard disk activity time. This results in better hard disk performance. To disregard the feature, change the setting to Disabled.

This parameter appears only when you are in the Advanced Level.

Hard Disk 32-bit Access

Enabling this parameter improves system performance by allowing the use of the 32-bit hard disk access. This enhanced IDE feature works only under DOS, Windows 3.x/95/98, and Novell NetWare. If your software or hard disk does not support this function, set this parameter to **Disabled**.

This parameter appears only when you are in the Advanced Level.

DMA Transfer Mode

The Ultra DMA and Multi-DMA modes enhance hard disk performance by increasing the transfer rate. However, besides enabling these features in the BIOS Setup, both the Ultra DMA and Multi-DMA modes require the DMA driver to be loaded. By setting this parameter to Auto, BIOS automatically sets the appropriate DMA mode for your hard disk.

Onboard Peripherals

The Onboard Peripherals menu allows you to configure the on-board devices. Selecting this option from the main menu displays the following screen:

 Onboard Peripherals
 Page 1/1

 Serial Port
 [Enabled]

 Base Address
 [2F8h]

 IRQ
 [3]

 Parallel Port
 [S78h]

 IRQ
 [7]

 Operation Mode
 [Bi-directional]

 ECP DMA Channel
 [-]

 • *Onboard Device Settings

 ↑↓ = Move Highlight Bar
 F1 = Help

 Esc = Exit
 → ← = Change Setting,

NOTE *: Can only be seen when press \mathbb{F}^3 .

Serial Port

This parameter allows you to enable or disable the serial port.

Base Address

This function lets you set a logical base address for the serial port. The options are:

- 🗋 2F8h
- 🖵 3E8h
- 🖵 2E8h

IRQ

This function lets you assign an interrupt for the serial port. The options are IRQ 4 and 3.

NOTE The Base Address and IRQ parameters are configurable only if the Serial Port parameter is enabled.

Parallel Port

This parameter allows you to enable or disable the parallel port.

Base Address

This function lets you set a logical base address for the parallel port. The options are:

🗋 378h

🗋 278h

IRQ

This function lets you assign an interrupt for the parallel port. The options are IRQ 5 and 7.

NOTE The Base Address and IRQ parameters are configurable only if the Parallel Port is enabled.

If you install an add-on card that has a parallel port whose address conflicts with the parallel port on board, a warning message appears on the screen.

Check the parallel port address on the add-on card and change the address to one that does not conflict.

Operation Mode

This item allows you to set the operation mode of the parallel port. Following table lists the different operation modes.

Setting	Function
Standard Parallel Port (SPP)	Allows normal speed one-way operation
Standard and Bidirectional	Allows normal speed operation in a two- way mode
Enhanced Parallel Port (EPP)	Allows bidirectional parallel port operation at maximum speed
Extended Capabilities Port (ECP)	Allows parallel port to operate in bidirectional mode and at a speed higher than the maximum data transfer rate

ECP DMA Channel

This item becomes active only if you select **Extended Capabilities Port (ECP)** as the operation mode. It allows you to assign DMA channel 1 or DMA channel 3 for the ECP parallel port function (as required in Windows 95).

Onboard Device Settings

The Onboard Device Settings menu allows you to configure the device controllers available on-board. Selecting this option from the Onboard Peripherals menu displays the following screen:

Onboard Device	Settings	Page 1/1
*Floppy Disk Controller *IDE Controller *Onboard Audio Chip	[Enabled] [Both/Primary/] [Enabled]	Disabled]
↑↓ = Move Highlight Bar Esc = Exit	F1 = Help $\rightarrow \leftarrow$ = Change	e Setting,

NOTE *: Can only be seen when press \mathbb{F}_3 .

Floppy Disk Controller

This parameter lets you enable or disable the on-board floppy disk controller.

IDE Controller

Set this parameter to **Primary** to enable only the primary IDE channel; **Both** to enable both primary and secondary IDE channels; or **Disabled** to disable the on-board IDE controllers.

Onboard Audio Chip

This parameter lets you enable or disable the on-board audio controller. If you installed an audio card into your system, you must disable this parameter for the card to work properly.

Power Management

The Power Management menu lets you configure the system powermanagement feature.

The following screen shows the Power Management parameters and their default settings:

```
      Power Management
      Page 1/1

      Power Management Mode
      [Enabled]

      IDE Hard Disk Standby Timer
      [OFF]

      System Sleep Timer
      [OFF] Minute(s)

      Sleep Mode
      [------]

      Power Switch < 4 Sec</td>
      [Power Off]

      **ACPI BIOS Support
      [Enabled]

      System Wake-Up Event
      [Modem Ring Indicator

      Modem Ring Indicator
      [Enabled]

      ↑↓ = Move Highlight Bar
      F1 = Help

      Esc = Exit
      → ← = Change Setting,
```

NOTE **: Can only be seen when press ALT + F4.

Power Management Mode

This parameter allows you to reduce power consumption. When this parameter is set to **Enabled**, you can configure the IDE hard disk and system timers. Setting it to **Disabled** deactivates the power-management feature and its timers.

IDE Hard Disk Standby Timer

This parameter allows the hard disk to enter standby mode after inactivity of 1 to 15 minutes, depending on your setting. When you access the hard disk again, allow 3 to 5 seconds (depending on the hard disk) for the disk to return to normal speed. Set this parameter to off if your hard disk does not support this function.

System Sleep Timer

This parameter automatically puts the system to power-saving mode after a specified period of inactivity. Any keyboard or mouse action, or any activity detected from the IRQ channels resumes system operation.

Sleep Mode

This parameter lets you specify the power-saving mode that the system will enter after a specified period of inactivity. The options are *standby* or *suspend* mode.

This parameter becomes configurable only if the System Sleep Timer is enabled. Any keyboard or mouse action, or any enabled monitored activity occurring through the IRQ channels resumes system operation.

Power Switch < 4 sec.

When set to **Power Off**, the system automatically turns off when the power switch is pressed. When set to **Suspend**, the system enters the suspend mode.

ACPI BIOS Support

This parameter allows you to access settings of ACPI (Advanced Configuration Power Interface) in BIOS setup.

System Wake-Up Event

This parameter lets you specify the activity that will resume the system to normal operation.

Modem Ring Indicator

When **Enabled**, any fax/modem activity wakes the system from Sleep mode.

Boot Options

This option allows you to specify your preferred settings for boot-up.

The following screen appears if you select Boot Options from the main menu:

```
Boot Options
 Boot Sequence
   1st [IDE CD-ROM]
   2nd [Floppy Disk]
   3rd [Hard Disk]
 *First Hard Disk Drive.....[IDE]
 *Primary Display Adapter.....[Auto]
 *Fast Boot .....[Auto]
 *Silent Boot .....[Disabled ]
 *Num Lock After Boot .....[Enabled ]
 *Memory Test .....[Disabled]
 *Configuration Table .....[Disabled]
\uparrow\downarrow = Move Highlight Bar
                            F1 = Help
Esc = Exit
                            \rightarrow \leftarrow = Change Setting,
```

NOTE *: Can only be seen when press \mathbb{F}_3 .

Boot Sequence

This parameter allows you to specify the boot search sequence. To change the order of devices, simply press \bigcirc or \bigcirc .

First Hard Disk Drive

This parameter specifies whether the BIOS utility will boot from an IDE hard disk drive or a SCSI hard disk drive. The system will automatically boot from an IDE hard disk if your system does not have a SCSI hard disk drive. The default setting is IDE.

Primary Display Adapter

Setting this parameter to Onboard enables the on-board video controller. Normally, the on-board video controller is considered as the primary display adapter. If you installed a video card into your system, set this parameter to Auto. BIOS will automatically disable the on-board video controller and consider the video card as the primary display adapter.

Fast Boot

Setting this parameter to Auto allows the system to boot faster by skipping some POST routines. Select **Disabled** to return to the normal booting process.

Silent Boot

This parameter enables or disables the Silent Boot function. When set to **Enabled**, BIOS is in graphical mode and displays only an identification logo during POST and while booting. Then, the screen displays the operating system prompt (as in DOS) or logo (as in Windows 95). If any error occurred while booting, the system automatically switches to the text mode.

Even if your setting is **Enabled**, you may also switch to the text mode while booting by pressing after you hear a beep that indicates the activation of the keyboard.

When set to **Disabled**, BIOS is in the conventional text mode where you see the system initialization details on the screen.

Num Lock After Boot

This parameter allows you to activate the Num Lock function upon booting. The default setting is Enabled.

Memory Test

When set to **Enabled**, this parameter allows the system to perform a RAM test during the POST routine. When set to **Disabled**, the system detects only the memory size and bypasses the test routine. The default setting is **Disabled**.

Configuration Table

This parameter allows you to enable or disable the display of the configuration table after POST but before booting. The configuration table gives a summary of the hardware devices and settings that BIOS detected during POST.

This parameter appears only when you are in the Advanced Level.

Date and Time

The following screen appears if you select the Date and Time option from the main menu:

	Page 1/1	
Date Time	е [WWW MM DD, YYYY] е[HH:MM:SS]	
↑↓ : Esc	= Move Highlight Bar F1 = Help = Exit $\rightarrow \leftarrow$ = Cha	nge Setting,

Date

Highlight the items on the Date parameter and press $\boxed{}$ or $\boxed{}$ to set the date following the weekday-month-day-year format.

Valid values for weekday, month, day, and year are:

Weekday	Sur	1, I	íon,	Tue,	Wed,	Thu,	Fri,	Sat
Month	1	to	12					
Day	1	to	31					
Year	198	30	to	2079				

Time

Highlight the items on the Time parameter and press \bigcirc or \bigcirc to set the time following the hour-minute-second format.

Valid values for hour, minute, and second are:

Hour	00	to	23
Minute	00	to	59
Second	00	to	5 9

System Security

The Setup program has a number of security features to prevent unauthorized access to the system and its data.

The following screen appears if you select System Security from the main menu:

System Security	Page 1/1
Setup Password [None Power-on Password [None Operation Mode [Norma]] al]
*Disk Drive Control *Floppy Drive [Norma *Hard Disk Drive [Norma	al] al]
	lp Change Setting,

NOTE *: Can only be seen when press **F**.

Setup Password

The Setup Password prevents unauthorized access to the BIOS utility.

Setting a Password

- 1. Make sure that switch 5 of SW1 is set to On (bypass password).
- **IMPORTANT**You cannot enter the BIOS utility if a Setup password does not exist and switch 5 of SW1 is set to off (password check enabled).

By default, switch 5 of SW1 is set to On (bypass password).

2. Enter the BIOS utility and select System Security.

3. Highlight the Setup Password parameter and press ← or ⊃. The following screen appears:

```
      Setup Password

      Enter your new Password twice. Password

      may be up to 7 characters long.

      Enter Password ...... [XXXXXX]

      Enter Password again ..... [XXXXXX]

      Set or Change Password

      ^↓ = Move Highlight Bar
      F1 = Help

      Esc = Exit
      → ← = Change Setting,
```

4. Type a password. The password may consist of up to seven characters. Then press ENTER .

CAUTION Be very careful when typing your password because the characters do not appear on the screen.

- 5. Retype the password then press **ENTER**.
- 6. After setting the password, highlight the Set or Change Password option.
- 7. Press ESC to return to the System Security screen.
- 8. Press ESC to return to the main menu.
- 9. Press Esc to exit the BIOS utility. A dialog box appears asking if you want to save the CMOS data.
- 10. Select **Yes** to save the changes and reboot the system.
- 11. After rebooting, turn off the system then open the housing.
- 12. Set switch 5 of SW1 to Off to enable the password function.

The next time you want to enter the BIOS utility, you must key-in your Setup password.

Changing or Removing the Setup Password

Should you want to change your setup password, do the following:

- 1. Enter the BIOS utility and select System Security.
- 2. Highlight the Setup Password parameter and press ← or →. The Setup Password menu appears.
- 3. From the Setup Password menu, highlight the Set or Change Password option.
- 4. Enter a new password.
- 5. Press ESC to return to the System Security screen.
- 6. Press ESC to return to the main menu.
- 7. Press Esc to exit the BIOS utility. A dialog box appears asking if you want to save the CMOS data.
- 8. Select Yes to save the changes.

To remove the password, simply select the Setup Password parameter from the System Security menu and set it to **None**.

Bypassing the Setup Password

If you forget your setup password, you can bypass the password security feature by hardware. Follow these steps to bypass the password:

- 1. Turn off and unplug the system.
- 2. Open the system housing and set switch 5 of SW1 to On to bypass the password function.
- 3. Turn on the system and enter the BIOS utility. This time, the system does not require you to type in a password.
- **IMPORTANT**You can either change the existing Setup password or remove it by selecting **None**. Refer to the previous section for the procedure.

Power-on Password

The Power-on Password secures your system against unauthorized use. Once you set this password, you have to type it whenever you boot the system. To set this password, enter the BIOS utility, select System Security, then highlight the Power-on Password parameter. Follow the same procedure as in setting the Setup password.

IMPORTANTMake sure switch 5 of SW1 is set to Off to enable the Power-on password.

Operation Mode

This function lets you enable or disable the password prompt display. When set to Normal, the password prompt appears before system boot. When set to **Keyboard Lock**, the password prompt does not appear; however, your system will not respond to any keyboard or mouse input until you enter the correct password.

The default setting is Normal.

Disk Drive Control

The Disk Drive Control parameters allow you to protect the floppy drive and hard disk data from being modified (possible under DOS mode only).

The following table lists the drive control settings and their corresponding functions.

Floppy Drive					
Setting	Description				
Normal	Floppy drive functions normally				
Write Protect All Sectors	Disables the write function on all sectors				
Write Protect Boot Sector	Disables the write function only on the boot sector				
Hard Disk Drive					
Setting	Description				
Normal	Hard disk drive functions normally				
Write Protect All Sectors	Disables the write function on all sectors				
Write Protect Boot Sector	Disables the write function only on the boot sector				

Advanced Options

NOTE The Advanced Options selection is available only in the Advanced Level.

The Advanced Options menu allows you to configure the system memory, onboard peripherals, and PCI device settings.

WARNING Do not change any settings in the Advanced Options if you are not a qualified technician to avoid damaging the system.

The following screen shows the Advanced Options parameters:

Advanced Options	Page 1/1
 **Memory/Cache Options **PnP/PCI Options 	
↑↓ = Move Highlight Bar Esc = Exit	F1 = Help $\rightarrow \leftarrow$ = Change Setting,

NOTE **: Can only be seen when press ALT + F4.

Memory/Cache Options

Selecting Memory/Cache Options from the Advanced Options menu displays the following screen:

```
      Memory/Cache Options
      Page 1/1

      **Internal Cache (CPU Cache).... [Enabled ]
      [Enabled ]

      **External Cache ....... [Write Back]
      "*Cache Scheme ...... [Write Back]

      **Memory at 15MB-16MB Reserved for [System]
      "*System BIOS Cacheable ..... [Enabled ]

      **System BIOS Cacheable ...... [Enabled ]
      "*Video BIOS Cacheable ...... [Enabled ]

      **C8000h-DFFFFh Shadow.......[Disabled]
      "fl = Help

      Esc = Exit
      > ← = Change Setting,
```

NOTE **: Can only be seen when press ALT + F4.

This menu lets you configure the system memory.

Internal Cache (CPU Cache)

This parameter enables or disables the primary cache memory, i.e., the CPU memory. The default setting is **Enabled**.

External Cache

This parameter enables or disables the secondary cache memory.

The default setting is **Enabled**.

Cache Scheme

This parameter displays the cache scheme in Write-back mode. Write-back updates the cache but not the memory when there is a write instruction. It updates the memory only when there is an inconsistency between the cache and the memory.

Memory at 15MB-16MB Reserved for

To prevent memory address conflicts between the system and expansion boards, reserve this memory range for the use of either the system or an expansion board.

IMPORTANTSome VGA cards have required settings for this feature. Check your VGA card manual before setting this parameter.

System BIOS Cacheable

Set the parameter to **Enabled** to direct cache memory (L1 and L2) access System BIOS directly. Enable this function will enhance system performance.

Video BIOS Cacheable

Set the parameter to **Enabled** to direct cache memory (L1 and L2) access Video BIOS directly. Enable this function will enhance system performance.

C8000h-DFFFFh Shadow

Set the parameter to **Enabled** to shadow expansion card to ROM. For some legacy ISA LAN cards, you might need to disable the shadowing in order to work properly. In this case, we recommend that you set this parameter to **Disabled**.

PnP/PCI Options

The PnP/PCI Options allows you to specify the settings for your PCI devices. Selecting this option displays the following screen:

```
PnP/PCI Options
                                       Page 1/1
**PCI IRQ Setting ..... [ Auto ]
                     INTA
                           INTB
                                 INTC
                                       INTD
  [--] [--] [05]
  **PCI Slot 2..... [--] [--]
                                 [05] [--]
  **PCI IRO Sharing .....
                            [Yes]
**VGA Palette Snoop .....
                           [Disabled]
**Graphics Aperture Size..
                           [64]MB
**Plug and Play OS .....
                           [Yes]
**Reset Resource Assignments
                           [No ]
\uparrow\downarrow = Move Highlight Bar
                          F1 = Help
                          \rightarrow \leftarrow = Change Setting,
Esc = Exit
```

NOTE **: Can only be seen when press ALT + F4.

PCI IRQ Setting

Select Auto to let BIOS automatically configure the plug-and-play (PnP) devices installed in your system. Otherwise, select Manual.

NOTE Refer to your manual for technical information about the PCI card.

PCI Slots

When you set the PCI IRQ Setting parameter to Auto, these parameters specify the auto-assigned interrupt for each of the PCI devices. If you set the PCI IRQ Setting parameter to Manual, you need to specify the interrupt that you want to assign for each PCI device installed in your system.

PCI IRQ Sharing

Setting this parameter to $\underline{\mathbf{Yes}}$ allows you to assign the same IRQ to two different devices. To disable the feature, select $\underline{\mathbf{No}}$.

IMPORTANTIf there are no IRQs available to assign for the remaining device function, we recommend that you enable this parameter.

VGA Palette Snoop

This parameter permits you to use the palette snooping feature if you installed more than one VGA card in the system.

The VGA palette snoop function allows the control palette register (CPR) to manage and update the VGA RAM DAC (Digital Analog Converter, a color data storage) of each VGA card installed in the system. The snooping process lets the CPR send a signal to all the VGA cards so that they can update their individual RAM DACs. The signal goes through the cards continuously until all RAM DAC data has been updated. This allows the display of multiple images on the screen.

IMPORTANTSome VGA cards have required settings for this feature. Check your VGA card manual before setting this parameter.

Graphics Aperture Size

This parameter specifies the system memory area reserved for Accelerated Graphics Port (AGP). AGP is a new bus design that enables the system to support 3D applications by speeding up the VGA bus and increasing the bandwidth.

NOTE We recommend you to leave this parameter to its default setting.

Plug and Play OS

When this parameter is set to **Yes**, BIOS initializes only PnP boot devices such as SCSI cards. When set to **No**, BIOS initializes all PnP boot and non-boot devices such as sound cards.

CAUTION Set this parameter to **Yes** only if your operating system is Windows 95 (or higher).

Reset Resource Assignments

Set this parameter to **Yes** to avoid IRQ conflicts when installing non-PnP or PnP ISA cards. This clears all resource assignments and allows BIOS to reassign resources to all installed PnP devices the next time the system boots. After clearing the resource data, the parameter resets to **No**.

Load Default Settings

You need to reload the BIOS default settings every time you make changes to your system hardware configuration (such as memory size, CPU type, hard disk type, etc.); otherwise, BIOS will keep the previous CMOS settings. Selecting this option displays the following dialog box:

```
Do you want to load default settings?
[Yes] [No]
```

Choosing **Yes** enables BIOS to automatically detect the hardware changes that you have made in your system. This option also allows you to restore the default settings.

Choosing No returns you to the main menu without loading the default settings.

Abort Settings Change

Selecting the Abort Settings Change option from the main menu displays the following dialog box:

```
Do you want to abort settings change?
[Yes] [No]
```

Choosing **Yes** discards all the changes that you have made and reverts the parameters to their previously saved settings.

Choosing $\,\mathbf{No}$ returns you to the main menu. BIOS retains all changes that you have made.

Exiting Setup

To exit the BIOS utility, simply press **ESC**. The following dialog box appears:

Do	you	really	want	to	exit	SETUP?
	[`	Yes]			[No	5]

Select \underline{ves} to exit Setup. Select \underline{no} to return to the main menu. If you have made changes in the parameter settings, the following dialog box appears:

Do	Settings ha you want to	ave been changed. save CMOS settings?	
	[Yes]	[No]	

Select \underline{ves} to save your changes before you exit Setup. Select \underline{no} to discard all changes and exit Setup.

Removal and Replacement

This chapter contains step-by-step procedures on how to disassemble the desktop computer for maintenance and troubleshooting.

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge
- □ Flat-bladed screwdriver
- Phillips screwdriver
- □ Hexagonal screwdriver
- Plastic stick
- **NOTE** The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatches when putting the components back together.

Removing an Optional Serial Device (Rare Panel Cover)

- 1. Before you proceed, make sure your computer is completely turned off.
- 2. On the back of your computer, remove the screw that holds the rear panel cover.
- 3. Lift the panel cover to detach it from your computer.



Opening the Housing

IMPORTANTTurn off the system power (unplug the power cord) before opening the system or connecting or removing any peripheral device.

1. Remove the four screws from the rear panel.



- 2. Push the housing cover slightly backward.
- 3. Pull the housing cover upward and remove it from the chassis.





Removing an Expansion Board

- 1. Remove the screw on the bracket of an expansion board. Set the screw aside. You will need it when replacing the expansion board.
- 2. Gently pull out the expansion board to remove it from the expansion slot.



Removing a 3.5-inch Drive

1. Disconnect the disk drive cables and the power cables.



2. Remove the 3.5-inch drive frame from the housing by pressing the tab on top and pivoting the frame outward



NOTE A metal drive cover should be pulled out before you install a new drive into an empty 3.5-inch bay. This cover should be removed if a 3.5-inch drive is installed. The function of the cover is to prevent EMI effects.



3. Remove the screws along the sides of the drive frame and gently pull out the 3.5-inch disk drive.



Removing the CD-ROM Drive

1. Disconnect the power cable and the CD-ROM drive cable.



2. Locate the six tabs that hold the front panel cover to the housing frame, then push the tabs to release the front panel from the housing.



3. Remove the screws on the side, then gently pull out the CD-ROM drive.



Removing the 5.25-inch Drive

1. Disconnect the power cable and the diskette drive cable.



- 2. Remove the screws on the sides.
- 3. Open the disk drive door and gently pull the diskette drive out to remove it from the housing.



Removing the System Board

- 1. Lay the housing to on its side with the open area facing upward.
- 2. Remove the necessary screws and carefully pull out the system board.



Removing a DIMM

- 1. Press the holding clips on both sides of the socket outward to release the DIMM.
- 2. Gently pull the DIMM out of the socket.



NOTE The system automatically detects the amount of memory installed. Run Setup to view the new value for total system memory and make a note of it.

Removing the CPU Heatsink and CPU Board

1. Detach the heatsink and fan from the CPU.



2. Pull up the socket lever.



3. Remove the CPU.



Removing a Daughterboard

1. Remove two screws from the daughterboard.



2. Pull up the daughterboard.
Troubleshooting

This chapter provides troubleshooting information for the Aspire 3300:

- Power-On Self-Test (POST)
- □ Index of Symptoms, Messages, Error Codes, or Beeps
- Diagnostics
- Undetermined Problems

Power-On Self-Test (POST)

Each time you turn on the system, the power-on self test (POST) is initiated. Several items are tested during POST, but is for the most part transparent to the user.

The Power-On Self Test (POST) is a BIOS procedure that boots the system, initializes and diagnoses the system components, and controls the operation of the power-on password option. If POST discovers errors in system operations at power-on, it displays error messages, generates a check point code at port 80h or even halts the system if the error is fatal.

The main components on the system board that must be diagnosed and/or initialized by POST to ensure system functionality are as follows:

- Microprocessor with built-in numeric coprocessor and cache memory subsystem
- Direct memory access (DMA) controller (8237 module)
- □ Interrupt system (8259 module)
- □ Three programmable timers (system timer and 8254 module)
- ROM subsystem
- RAM subsystem
- □ RTC RAM subsystem and real time clock/calendar with battery backup
- Onboard serial interface controller
- Onboard parallel interface controller
- □ Embedded hard disk interface and one diskette drive interface
- □ Keyboard and auxiliary device controllers
- I/O ports
 - PS/2-compatible mouse port
 - □ PS/2-compatible keyboard port

- serial ports
- parallel ports
- □ USB port

Error Message	Possible Cause	Corrective Action
Equipment Configuration Error	-The hardware configuration does not match with BIOS Setup configuration data.	-Run BIOS Setup and re- configure the system.
Memory Error at MMMM:SSSS:OOOOh (R:xxxxh, W:xxxxh)	-DRAM, SIMMs, or add-on memory card may be defective.	-Replace the DRAM chips or the SIMMs.
PS/2 Keyboard Interface Error	-POST detects an error in the interface between the system board and the keyboard. The keyboard circuit module may be defective.	-Check the keyboard interface circuit or change the keyboard.
PS/2 Keyboard Error or Keyboard Not Connected	-POST detects an error in the keyboard or the keyboard is not connected.	-Connect the keyboard again or change it.
PS/2 Pointing Device Error	-The pointing device may be bad or the device is not connected properly.	-Connect the pointing device again or change it.
PS/2 Pointing Device Interface Error	-POST detects an error in the interface between the system board and the pointing device.	-Check the pointing device interface circuit or change it.
Floppy Disk Controller Error	 This error is caused by any of the following: (1) The power supply cable is not connected to the floppy drive. (2) The floppy drive cable is not connected to the floppy drive or to the system board. (3) The floppy drive controller is defective. 	-Check the floppy drive cable and the connections. If the cable is good and properly connected, the floppy drive controller could be the problem. Disable the on-board floppy drive controller by using BIOS Setup and install another add-on card with the controller.
Floppy Drive A Error	-Floppy A or B may be bad.	-Replace the floppy drive(s).
Floppy Drive(s) Write Protected	-The floppy drive is set to Write Protected in BIOS Setup.	-Enter BIOS Setup and restore the setting to Normal.
IDE Primary Channel Master Drive Error IDE Primary Channel Slave Drive Error	-The hard disk drive(s) may be bad, type mismatched, or not properly installed.	-Check hard disk drive cable(s) and power cable(s) connections and BIOS Setup hard disk

Error Message	Possible Cause	Corrective Action
IDE Secondary Channel Master Drive Error IDE Secondary Channel Slave Drive Error		drive(s) configuration. If it still fails, replace the hard disk drive(s) or the system board.
Hard Disk Drive(s) Write Protected	-Hard disk(s) is set to Write Protected in BIOS Setup.	-Enter BIOS Setup and restore the setting to Normal.
CPU Clock Mismatch	-CPU type or CPU internal/external frequency is changed.	-Enter BIOS Setup and this warning message will be cleared automatically.
Real Time Clock Error	-The system detects a real time clock error.	-Check the RTC circuit or replace the system board.
CMOS Battery Bad	-CMOS battery power lost.	-Replace the on-board CMOS battery.
CMOS Checksum Error	-CMOS checksum is not correct.	-Run Setup again and re- configure the system.
I/O Parity Error	-The system detects an I/O parity error.	-Replace the system board.
Insert system diskette and press Enter key to reboot	-The system can not find any boot device.	-Check hard disk(s) configuration and reboot or insert the bootable diskette and press the Enter key to boot up the system.
I/O Resource Conflict(s)	-The system I/O resources conflict with the resources required by the PCI device(s).	-Try to reset resource assignments.
Memory Resource Conflict(s)	-The system memory resources conflict with the resources required by the PCI device(s).	-Try to reset resource assignments.
IRQ Setting Error	-Incorrect IRQ setting for the PCI device.	-Run BIOS Setup to re- configure the system.
Expansion ROM Allocation Failed	-The system failed to allocate I/O expansion ROM for PCI device(s).	-Change the I/O expansion ROM address.
Onboard Serial Port IRQ Conflict(s)	-The IRQ allocated for on- board serial port conflicts with another device.	-Enter BIOS Setup to change the on-board serial port IRQ assignment or disable it.
Onboard Parallel Port IRQ Conflict(s)	-The IRQ allocated for on- board parallel port conflicts with another device.	-Enter BIOS Setup to change the on-board parallel port IRQ assignment or disable it.

Error Message	Possible Cause	Corrective Action
Onboard Floppy Drive IRQ Conflict(s)	-The IRQ allocated for the on-board floppy drive conflicts with another device.	-Enter BIOS Setup to disable the on-board floppy disk controller.
Onboard Pointing Device IRQ Conflict(s)	-The IRQ allocated for the on-board pointing device conflicts with another device.	-Enter BIOS Setup to disable the on-board pointing device.
Onboard IDE Secondary Channel IRQ Conflict(s)	-The IRQ allocated for the on-board IDE secondary channel conflicts with another device.	-Enter BIOS Setup to disable the on-board IDE secondary channel.
Onboard ECP Parallel Port DMA Conflict(s)	-The DMA allocated for the on-board parallel port conflicts with another device.	-Enter BIOS Setup to change the on-board ECP parallel port DMA assignment or disable it.
Onboard Floppy Drive DMA Conflict(s)	-The DMA allocated for the on-board floppy drive conflicts with another device.	-Enter BIOS Setup to disable the on-board floppy disk controller.
Onboard Floppy Drive I/O Address Conflict(s)	-The I/O address allocated for the on-board floppy drive conflicts with another device.	-Enter BIOS Setup to disable the on-board floppy disk controller.
Onboard IDE Secondary Channel I/O Address Conflict(s)	-The I/O address allocated for the on-board IDE secondary channel conflicts with another device.	-Enter BIOS Setup to disable the on-board IDE secondary channel.
Onboard Serial Port I/O Address Conflict(s)	-The I/O address allocated for the on-board serial port conflicts with another device.	-Enter BIOS Setup to change the on-board serial port I/O address or disable it.
Onboard Parallel Port I/O Address Conflict(s)	-The I/O address allocated for the on-board parallel port conflicts with another device.	-Enter BIOS Setup to change the on-board parallel port I/O address or disable it.
Onboard Serial Port Conflict(s)	-The on-board serial port resource conflicts with the add-on card serial port.	-Change the on-board serial port I/O address in BIOS Setup or change the add-on card serial port I/O address.
Onboard Parallel Port Conflict(s)	-The on-board parallel port resource conflicts with the add-on card parallel port.	-Change the on-board parallel port I/O address in BIOS Setup or change the add-on card parallel port I/O address.

Error Message	Possible Cause	Corrective Action
Onboard IDE Primary Channel IRQ Conflict(s)	-The IRQ allocated for the on-board IDE primary channel conflicts with another device.	-Enter BIOS Setup to disable the on-board IDE primary channel.
Onboard IDE Primary Channel I/O Address Conflict(s)	-The I/O address allocated for the on-board IDE primary channel conflicts with another device.	-Enter BIOS Setup to disable the on-board IDE primary channel.
PnP ISA Card(s) Disabled	-System resources are not enough, BIOS disabled PnP ISA card(s).	-Check if the system resources are enough for the current system configuration.

Troubleshooting

Jumper and Connector Information



Jumper Settings

The following table lists the possible jumper settings:

Jumper	Setting	Function
JP1, JP2	1-2 & 4-5 2-3 & 5-6 *	Speaker Type Passive Speaker Active Speaker *
JP4	1-2 * 2-3	Password Bypass * Check

	SW1 Settings						
			CPU Core	Clock Multip	olier		
	CPU	Туре			BIT#		
M2		K6		B1	B2		B3
3.5		3.5 '	ŧ	OFF *	OFF *		OFF *
2.0		4.0		ON	OFF		ON
3.0		3.0		OFF	ON		OFF
2.5		2.5		ON	ON		OFF
		4.5		ON	ON		ON
		2.0		ON	OFF		OFF
		5.0		OFF	ON		ON
		5.5		OFF	OFF		ON
			CPU Core	e Voltage Set	ting		
B4	B5		B6	B7	B8	۷	oltage
OFF	ON		ON	OFF	ON	3	.3
OFF	ON		OFF	OFF	ON	2	.9
OFF	ON		OFF	OFF	OFF	2	.8
OFF	OFF		OFF	ON	ON	2	.3
OFF *	OFF *		OFF *	ON *	OFF *	2	.2 *
ON	ON		OFF	OFF	OFF	1	.7

NOTE *: Default Settings

SW3 Settings						
IC Works W153B				F	requency (MH	z)
B1	B2	B3	B4	CPU	SDRAM	PCI
OFF	ON	ON	ON	66.6	66.6	33.3
ON	ON	OFF	OFF	66.6	100	33.3
OFF	ON	OFF	ON	83.3	83.3	33.3
ON	ON	ON	ON	90	90	30
OFF	ON	OFF	OFF	95	95	31.7
OFF *	OFF *	ON *	ON *	100 *	100 *	33.3 *

NOTE *: Default Settings

Connector List

Connector	Function
CN1	USB Port
CN2	USB Hub
CN3	PS/2
CN4	ATX Power
CN5	I/O Port
CN6	HDD LED
CN7	COM1
CN9	Reset Button
CN10	FDD
CN11	IDE1
CN12	IDE2
CN15	Audio & Midi Port
CN16	Power LED
CN17	Power Button
CN18	Wake-Up on LAN
CN19	Modem Ring-in
CN20	CD-IN
CN21	Fax-Voice Modem
FN2	2 Pin Fan

FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of Aspire 3300. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

- **IMPORTANT**Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.
- **NOTE** To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how best to dispose it, or follow the rules set by your regional Acer office on how to return it.

Picture	Part Name	Description	Part No.
CPUs			
AMDA	K6-2XT 350MHZ 100FSB AMD	IC CPU AMD-K6- 2XT/350M PGA 70D	01.A00K6.Z0B
AMD - K 6 ¹¹⁴ - 2 ADD - K 6 ¹¹⁴ - 2 A 92 COR(7.3 X) V/0 A 92 COR(7.	K6-2XT 366MHZ 66FSB AMD	IC CPU AMD-K6- 2XT/380M PGA 70D	01.A00K6.36A
* 260300- N	K6-2XT 380MHZ 95FSB AMD	IC CPU AMD-K6- 2XT/380M PGA 70D	01.A00K6.380
	K6-2XT 400MHZ 100FSB AMD	IC CPU AMD-K6- 2XT/400M PGA 60D	01.A00K6.400
	K6-2XT 400MHZ 100FSB AMD	IC CPU AMD-K6- 2XT/400 65D PGA	01.A00K6.40A
	K6-2XT 450MHZ 100FSB AMD	IC CPU AMD-K6- 2XT/450M PGA 65D	01.A00K6.450
MEMORY			
	32MB DIMM PC- 100 Simens	SDIMM 32M HYS64V4200GU-8 PC100	72.64420.00N
	64MB DIMM PC- 100 Simens	SDIMM 64M HYS64V8200GU-8 PC100	72.64820.A0N
	128MB DIMM PC- 100 Simens	SDIMM 128M HYS64V1620GU-8 (SIM)	72.64162.00N
	32MB DIMM PC- 100 NEC	SDIMM 32M 243469(NEC)	72.24346.00N
	64MB DIMM PC- 100 NEC	SDIMM 64M 243539(NEC)	72.24355.00N
	128MB DIMM PC- 100 NEC	SDIMM 128M 243639(NEC)	72.24363.00N
	32MB DIMM PC- 100 Micro	SDIMM 32M MT4LSDT464AG- 10CB2	72.04464.C0N
	64MB DIMM PC- 100 Micro	SDIMM 64M MT8LSDT864AG- 10CB4	72.08864.E0N
	128MB DIMM PC- 100 Micro	SDIMM 128M MT16LSDT164AG- 10CB4	72.16164.00N
MONITORS			
	15" monitor 55s131 API	55s-131	91.71602.402
	15" monitor 55s619 API	55s-419	91.71602.404

Picture	Part Name	Description	Part No.
	15" monitor 55s519 API	55s-619	91.71602.405
	15" monitor 55s151 API	55s-519	91.71602.406
	15" monitor 55s151 API	55s-151	91.71602.403
	17" monitor 77s431 API	77s-431	91.70603.103
	17" monitor 77s430 API	77s-430	91.70602.102
	17" monitor 77s630 API	77s-630	91.70602.106
	17" monitor 77s530 API	77s-530	91.70602.105
	17" monitor 77s451 API	77s-451	91.70602.104
STORAGE DEVICES			
ji ji	3.5" FDD 3 mode Panasonic	FDD 1.44M 3.5 JU256A446P D065	56.01057.251
1810	3.5" 4.2G HDD Keystone Seagate	HDD 4.3G MAXTOR/90432D2	56.02831.181
	3.5" 8.3G HDD Keystone Seagate		56.02A32.021
	3.5" 4.4G HDD Quasar Maxtor	HDD 4.3G MAXTOR/90432D2	56.02837.051
	3.5" 6.4G HDD Quasar Maxtor	HDD 6.4G MAXTOR/90648D3	56.02A03.021
	3.5" 8.4G HDD Quasar Maxtor	HDD 8.4G MAXTOR/90845D4	56.02A33.021
	3.5" 10.8G HDD Quasar Maxtor	HDD 10.8G MAXTOR/91080D5	56.02A72.011
	3.5" 4.3G HDD Corona Quantum	HDD 4.3G QUANTUM/CR4.3AT	56.02833.291
	3.5" 8.4G HDD Corona Quantum	HDD 8640MB QUANTUM/CR8.4AT	56.02A31.041
	40X CD-ROM API	CD DRV API/91.28D37.001 40X	56.10212.001
	40X CD-ROM Acer open	CD-940E/AKUAG4A AA	91.24D37.007

Picture	Part Name	Description	Part No.
	6X DVD-ROM Hitachi	DVD 6/24X HIT/GD2500BX	56.22000.011
CABLES		·	·
	Cable pack	SWITCH/LED CABLE PACK FOR H61	6M.92202.001
	FDD cable	C.A 34P 2C 450MM FDD H61	50.92205.021
РСВ			
	V75M Mainboard	V75M MAINBOARD SIS530/5595 UMA	55.37C01.D02
1 Brant	USB daughter board	V66M USB DAUGHTER CARD	55.38A02.001
MODEM		1	I
	56K PCI 2.1 Modem Rockwell Acer Netxus		54.09281.011
	56K PCI 2.1 Modem Rockwell Acer Netxus	MODEM V.EMEA NET/RA56(AMIRE99)	54.09281.001
	56K PCI 2.1 Modem Rockwell CIS	MODEM 56K CIS/WS- 5614PM3	54.09014.001
	56K PCI 2.1 Modem Rockwell CIS	MODEM 56K CIS/WS- 5614PM3G	54.09241.011
POWER SUPPLY			
	145W power supply Tiger	SPS 145W TG-1458-C REV.A H61	56.04145.901
	145W power supply Hi-power	SPS 145W M1CR0- ATX SIX145M3V.A	56.04145.4S1

Picture	Part Name	Description	Part No.			
HOUSING						
	H61 Housing	ASSY HSG (L2) ASP D065 H61	60.92209.101			
MECHANICAL PARTS	S					
	Case Lower	ASSY LOWER CASE H61	60.92210.001			
	Case Upper D065	CASE UP ASP SECC D065 H61	30.92204.111			
0.0	HDD EMI cover	CVR EMI EMPTY 5.25" (TOOL) H61	34.92203.001			
	CD-ROM EMI bracket	CVR HDD EMI (TOOLING) SUS H61	34.92201.001			
#\ ```	Front Panel D065	ASSY F BZL ASP (D065) H61	60.92211.032			
	Front Panel D065	ASSY F BZL ASP (D065) H61	60.92211.034			
i.	Front Panel D065	ASSY F BZL ASP (D065) H61	60.92211.033			

Picture	Part Name	Description	Part No.
	CD-ROM empty cover D065	CVR EMPTY 525 CHA HIPS D065 H61	42.92221.011
	FDD empty cover D065	CVR EMPTY 35 CHA HIPS D065 H61	42.92222.011
¥ anpire	Main door D065	DOOR MAIN ASP ABS D065 H61	42.92217.022
	Main door D065	DOOR MAIN ASP ABS D065 H61	42.92217.024
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	CD door D065	DOOR CD ASP ABS D065 H61	42.92218.022
	Top cover D065	CVR UPPER ASP ABS D065 H61	42.92214.022
	Drive bracket	ASSY HDD HOLDER H61	60.92208.001
SCREW			
	Screw	SCRW PAN W/FLT SPG M3*6L NI	86.1H524.6R0
	Screw	SCRW MACH PAN W/SPG#6-32*5/16	86.1B526.7R9

Picture	Part Name	Description	Part No.
MISCELLANEOUS PARTS			
	Foot stand	FOOT RUBBER PU H61	42.92223.001
11 2	Power switch knob D065	KNOB PWR ASP ABS D065 H61	42.92215.022
	Power switch knob GEN	KNOB PWR GEN HIPS 002 H61	42.92225.011
	Power switch knob CHA	KNOB PWR CHA HIPS 002 H61	42.92219.011
	Power switch knob spring	SPRING POWER KNOB SUS IDCMT/FU	34.02708.001
	CD door spring	DOOR CD SPRING ASP H61	34.92204.001
R.	Key lock	KEY LOCK SUS430 IDK	34.00115.001
	Bracket port spring	SPRING PBSPS TO.15 IDEMT	34.90203.002
	LED cable catch	HOLDER WIRI NYLON66 IDC-DT	42.02801.011

Picture	Part Name	Description	Part No.
	Bracket port	BRKT PORT SECC 1116SX(CD)	33.11206.002
ACCESSORIES			•
	USB keyboard us API	KB PS2 (US) API ALL	91.22H07.081
	USB 2 button mouse Primax	MOUSE PRIMAX 2 BUTTON D065	90.00026.922
	USB 2 button mouse Logitech	MOUSE USB UB42 BUTTON LOGITEC	90.00426.001
	USB wheel mouse Primax	MOUSE USB 3D PRIMAX/MOSXUB	90.00026.074
	USB wheel mouse Logitech	MOUSE USB UB48 LOG/952458-0000	90.00026.075
	USB power speaker A.L	ACS60	91.35912.001
	USB power speaker Midiland	A-1	91.38A12.003
MAINBOARD COMPO	ONENTS		•
	BIOS	IC FEROM W29C020- 90 256	02.29020.210
	RTC battery	BATTERY LI 3V CR2032 2	23.20023.001
	PCI Audio chip	IC AUDIO AMP TDA7268 DI	71.0SOLO.A0 G
	Super I/O chip	IC SUPER I/O SIS6801 V	71.06801.A0E
	PCI to ISA controller	IC I/O SIS5595 V.B2 PQF	71.05595.00E
	SRAM	IC SRAM T35L6464A- 5Q 64	72.06464.A05
	SRAM	IC SRAM SB61L256A- 8 32	72.61256.J0B

Picture	Part Name	Description	Part No.
	Voltage resistor	IC V.R NJM78M05DLA TO-2	74.07805.03M
	Graph and memory controller	GRAPH&MEM CTRL SIS53	71.00530.00U
	Clock generator	IC CLK GEN W153B SSOP 4	71.00153.001

# **Model Number and Configurations**

This appendix provides the BASIC model number and the configuration to Aspire 3300 decided for Acer's "global" product offering. Contact your regional offices or the responsible personnel/channel to provide you with further extension model numbers and configurations

- Brand name: ACER
- Product Name: Aspire
- Description: 64 Bit Computer System
- □ Model Number: Aspire 3300 Series.

# **Test Compatible Components List**

Aspire 3300 compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested under Windows[®]95 (4.00.950C), Windows[®]98 and Windows[®]NT 4.0 environments. In addition to these tests, the network communication functions are also tested under Novell[®]Netware[®]3.12 and Novell[®]Netware[®]4.11 environments and the Year 2000 support capability has been verified, too.

IMPORTANTRefer to the following lists for components, adapter cards, and peripherals which have passed these tests. Regarding configuration, combination and test procedures, please refer to the "V66MA Compatibility Test Report" released by the Acer Desktop System Testing Department.

Item	Specifications
Cache	512 K
CD-ROM	Hitachi GD-2500 Aopen CD-940E/AKU API 640A
CPU	AMD K6-2 400 AMD K6-2 380 Cyrix MII PR350
DVD-ROM	Hitachi GD-2500
FDD	Mitsumi D353M3 Panasonic JU-256A
HDD	Seagate ST34310A Quantum CR 4.3 AT Maxtor 90845D4
Keyboard	API USB Keyboard API PS/2 6511-P
Memory	32 MB 64 MB 128 MB
Monitor	Aspire 17s 17" AcerView 77c 17" Aspire 15s 15"
Mouse	Primax MUSXT USB Mouse Logitech M-S42 PS/2 Mouse Logitech M-UB48 Wheel USB Mouse

## MS DOS®V6.22 Environment Test

## Microsoft[®]Windows[®]98 (En/Jp) Environment Test

Item	Specifications
Aftermarket Devices	Primax RAPTOR 3D USB Gamestick ALTEC LANSING Subwoofer ACS-62 Acer USB Digital Camera Model: DVC-V2 API USB Scanner Model: 310U Iomega Zip Plus 100MB Driver (Parallel) Mitsubishi MF357G LS-120 (IDE)
Cache	512 K
CD-ROM	AOpen CD-940E/AKU API 640A-147
CPU	AMD K6-3 400 AMD K6-2 450 AMD K6-2 400 AMD K6-2 380 AMD K6-2 366 AMD K6-2 350 Cyrix MII PR350 Cyrix MII PR300
Display	ATI 3D Rage Pro PCI Diamond Stealth II S220
DVD-ROM	Hitachi GD-2500
Fax/Modem	Acer Netxus 56K Rockwell HCF PCI AMI-RA03P Acer Netxus 56K Rockwell HCF PCI AMI-PA07P Acer Netxus 56K Rockwell HCF PCI EMEA AMI-RE99P CIS 56K Rockwell HCF PCI WS-5614PM3 CIS 56K Rockwell HCF PCI EMEA WS-5614PM3G Etech 56K Data/Fax/Voice Modem
FDD	Mitsumi D353M3 Panasonic JU-256A
HDD	Seagate ST310230A Seagate ST34310A Seagate ST34311A (U4) Seagate ST38421A Seagate ST38421A (U4) Seagate ST36422A Quantum CR4.3 AT Quantum CR8.4 AT Quantum EX10.2 AT Maxtor 90432D2 Maxtor 90648D3 Maxtor 90845D4

Item	Specifications
	Maxtor 91080D5
Joystick/GamePad	Microsoft USB SideWinder Precision Pro Microsoft SideWinder Force Feedback Pro Microsoft SideWinder Precision pro Microsoft SideWinder Game Pad Primax RAPTOR 3D USB Gamestick
Keyboard	API USB Keyboard API PS/2 6511-P
LAN	Intel 82558 Ether Express 100B 3COM 3C905-TX 3COM 3C339 Acer NIC-918 Acer NIC-558 Netxus ALN-310 IBM PCI Token-Ring Card D-Link DFE 500TX
Memory	32 MB 64 MB 96 MB 128 MB 256 MB
Monitor	Aspire 17s 17" AcerView 77c 17" Aspire 15s 15"
Mouse	Primax MUSXT USB Mouse Primax MUSXT Wheel USB Mouse Logitech M-S48 Wheel PS/2 Mouse Logitech M-UD42 USB Mouse Logitech M-UB48 Wheel USB Mouse
Multi-Media	Diamond Monster Sound M80 PCI Card Creative (Sound Blaster) PCI 64 Creative (Sound Blaster) AWE 64
USB Devices	API USB Keyboard Microsoft USB Natural Keyboard Intel USB Digital Camera Model: YC-76 Acer USB Digital Camera Model: DVC-V2 API USB Scanner Model: 310U Primax USB Scanner Model: G2-300/USB HP DeskJet 895 Cxi Color (USB) Microsoft USB SideWinder Precision Pro Primax RAPTOR 3D USB Gamestick Microsoft USB Mouse Primax USB Mouse 2 Button Logitech USB Wheel Mouse Logitech USB wheel Mouse

## Microsoft[®]Windows[®]NT 4.0 Workstation Environment Test

Item	Specifications
Cache	512 K
CD-ROM	AOpen CD-940E/AKU API 640A-147
CPU	AMD K6-2 450 Cyrix MII PR350
Display	Onboard SiS 530
Fax/Modem	Acer Netxus 56K Rockwell HCF PCI AMI-RA03P CIS 56K Rockwell HCF PCI WS-5614PM3
FDD	Mitsumi D353M3 Panasonic JU-256A
HDD	Maxtor 90845D4 Quantum EX6.4 AT Seagate ST38420A Maxtor 90648D3
Keyboard	API PS/2 6511-P
LAN	Intel 82558 Ether Express 100B Acer NIC-918 Acer NIC-558 Netxus ALN-310 IBM PCI Token-Ring
Memory	128 MB 256 MB
Monitor	Aspire 15s 15" Aspire 17s 17"
Mouse	Logitech PS/2 M-S42 Microsoft Serial Mouse
Multi-Media	On board ESS Solo-1

# Microsoft[®]Windows[®]2000 Professional Beta 3 Build 2000 Environment Test

ltem	Specifications
Cache	512 K
CD-ROM	AOpen CD-940E/AKU API 640A-147
CPU	AMD K6-2 400 Cyrix MII PR300
Display	Onboard SiS 530
Fax/Modem	Acer Netxus 56K Rockwell HCF PCI AMI-RA03P CIS 56K Rockwell HCF PCI WS-5614PM3
FDD	Mitsumi D353M3 Panasonic JU-256A
HDD	Maxtor 90845D4 Quantum CR8.4 AT Seagate ST34310A Maxtor 90432D2
Keyboard	API PS/2 6511-P
Memory	128 MB 256 MB
Monitor	Aspire 15s 15" Aspire 17s 17"
Mouse	Logitech PS/2 M-S42 Microsoft Serial Mouse
Multi-Media	On board ESS Solo-1

# Microsoft[®]Windows[®]95 Environment Test

Item	Specifications
Cache	512 K
CD-ROM	AOpen CD-940E/AKU API 640A-147
CPU	AMD K6-2 380 AMD K6-2 450 Cyrix MII PR350
FDD	Mitsumi D353M3 Panasonic JU-256A
HDD	Quantum CR4.3 AT Quantum CR8.4 AT Quantum EX6.4 AT Seagate ST34310A Seagate ST38420A Maxtor 90845D4
Keyboard	API PS/2 6511-P
Memory	32 MB 64 MB 128 MB
Monitor	Aspire 15s 15" Aspire 17s 17" AcerView 77c 17"
Mouse	Logitech PS/2 M-S42 Logitech M-S48 Wheel PS/2 Mouse Microsoft Serial Mouse

# IBM[®]OS/2 Warp 4.0 Environment Test

Items	Specifications
Cache	512 K
CD-ROM	AOpen CD-940E/AKU API 640A-147
CPU	AMD K6-2 400 AMD K6-2 366 Cyrix MII PR300
FDD	Mitsumi D353M3 Panasonic JU-256A
HDD	Maxtor 90845D4 Seagate ST34310A Quantum CR 8.4AT
Keyboard	API PS/2 6511-P
Memory	32 MB 64 MB 128 MB
Monitor	Aspire 15s 15" Aspire 17s 17" AcerView 77c 17"
Mouse	Microsoft Serial Mouse Logitech PS/2 M-S42 Logitech PS/2 Wheel M-S48

## Novell[®]Netware[®]3.12 & 4.11 & 5.0 Environment Test

Items	Specifications
Cache	512 K
CPU	AMD K6-2 450 AMD K6-2 350 Cyrix MII PR350
FDD	Mitsumi D353M3
	Panasonic JU-256A
HDD	Seagate ST310230A Seagate ST34310A Seagate ST38420A Seagate ST36422A Quantum CR4.3 AT Quantum CR8.4 AT Quantum EX6.4 AT Quantum EX10 AT Maxtor 90648D3 Maxtor 90845D4 Maxtor 91080D5
SCSI-HDD	IBM DCAS-32160 Seagate ST19171W
Keyboard	API PS/2 6511-P
LAN	3COM 3C339 3COM 3C905-TX Acer NIC-558 Acer NIC-918 ALN-310 IBM Turbo 16/4 Intel PILA 8460
Memory	64 MB 128 MB 256 MB
SCSI Adapter	AHA-1542CP AHA-3940UW

## **SCO UNIX Environment Test**

Items	Specifications
Cache	512 K
CD-ROM	AOpen CD-940E/AKU API 640A-147
CPU	AMD K6-2 380 AMD K6-2 400 Cyrix MII PR300
FDD	Mitsumi D353M3 Panasonic JU-256A
HDD	Seagate ST34310A Seagate ST38420A Quantum CR4.3 AT Quantum CR8.4 AT Maxtor 90648D3 Maxtor 90845D4
SCSI HDD	Quantum HN2275S Seagate ST19101W
Keyboard	API PS/2 6511-P
LAN	Acer NIC-918 Acer NIC-558 Intel EtherExpress PRO/100B
Memory	32 MB 64 MB 128 MB
Monitor	Aspire 15s 15" Aspire 17s 17" AcerView 77c 17"
Mouse	Microsoft Serial Mouse Logitech PS/2 M-S42 Logitech M-S34
SCSI Adapter	AHA-1542CP AHA-3940UW

# **Online Support Information**

This appendix describes online technical support services available to help you repair your Acer Systems.

If you are a distributor, dealer, ASP or TPM, please refer your technical queries to your local Acer branch office. Acer Branch Offices, Regional Offices and Regional Group may access our website. However some information sources will require a user I.D. and password. These can be obtained directly from Acer CSD Taiwan.

Acer's Website offers you convenient and valuable support resources whenever you need them.

You can the information on all of Acer's Notebook, Desktop and Server models including;

- Service guides for all models
- User's manuals
- Training materials
- BIOS updates
- Software utilities

Also contained on this website is

- Detailed information on Acer's International Traveler's Warranty (ITW)
- □ An overview of all the support services we offer, accompanied by a list of telephone, fax and email contacts for all your technical queries.

Here is the Acer headquarters' Customer Service Division Internet address for your support information:

#### http://csd.acer.com.tw

If you have any suggestions or comments, please do not hesitate to communicate these to <u>TerryMasi@acer.com.tw</u>, or fax to (886) 2 86911799.

Index

## Α

ACPI, 36 Advanced Options, 44 Advanced PIO Mode, 31 AGP, 47 API, 1 Audio Interface, 11

#### В

BIOS, 7 BIOS Hotkey List, 6 BIOS updates, 96 Boot Options, 37

## С

Cache, 10 CMOS, 21 control palette register, 47 Copyright, II

#### D

Date and Time, 39 DIMM Combinations, 9 Disk Drive Control, 43 Disk Drives, 28 Floppy Drives, 29 IDE Drives, 29 LS-120 drive, 29 DMA Transfer Mode, 32 DPMS, 19 DRQ Assignment Map, 18

### Ε

ECP, 34 Entering Setup, 22 Environmental Requirements, 20 Exiting Setup, 50 External Cache, 25

### F

Fast Boot, 38 FDD Interface, 12 Front Panel, 3 FRU, 75 Preface, IV

#### G

GPIO, 16 Graphics Aperture Size, 47

### I

I/O Address Map, 15
I/O ports, 65
IBM[®]OS/2 Warp 4.0 Environment Test, 93
IDE Interface, 11
Internal Cache, 25
IRQ Assignment Map, 17
ITW, 96

## J

Jumper and Connector Information, 71 Connector List, 74 Jumper Settings, 72

#### Μ

Machine Disassembly, 52 3.5-inch Drive, 54 5.25-inch Drive, 58 CD-ROM Drive, 56 CPU Heatsink and CPU Board, 61 Daughterboard, 63 DIMM, 60 Expansion Board, 54 Rare Panel Cover, 52 System Board, 59 Major Chips, 18 Memory Address Map, 13 Model Number and Configurations, 85 MS DOS[®]V6.22 Environment Test, 87 MS[®]Windows[®]2000 Professional Beta 3 Build 2000 Environment Test, 91 MS[®]Windows[®]95 Environment Test, 92 MS[®]Windows[®]98 (En/Jp) Environment Test, 88 MS[®]Windows[®]NT 4.0 Workstation Environment Test, 90

## Ν

Netware[®]3.12 & 4.11 & 5.0 Environment Test, 94

## 0

Onboard Peripherals, 32 Online Support, 96

#### Ρ

Parallel Port, 12 Password, 40 Bypassing, 42 Changing or Removing, 42 Setting, 40 PCI, 14 IDSEL Assignment, 14 IRQ, 14 Plug-and-Play, 1 PnP/PCI Options, 46 POST, 65 Power Management, 19, 35 Power Saving Mode Phenomenon List, 19 Sleep, 36 Standby, 35 Power-on Password, 43 preface, IV Processor, 6 Product Information, 27

#### R

Rear Panel, 4 RMA, 75

### S

SCO UNIX Environment Test, 95 Serial Port, 13 Service guide, 96 Silent Boot, 38 SMM, 1 Software utilities, 96 System Board Layout, 5 System Information, 24 System Memory, 8 System Security, 40

## Т

Test Compatible Components List, 87 Training material, 96 Troubleshooting, 65

## U

User's manual, 96

### V

VGA Palette Snoop, 47 Video, 10 Video Interface, 10