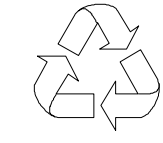
Veriton FP2
Service Guide

Service guide files and updates are available on the AIPG/CSD web; for more information, please refer to http://csd.acer.com.tw



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Conventions

The following conventions are used in this manual:

`Screen messages`	Denotes actual messages that appear on screen.
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.

1. 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, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please 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. If, for whatever reason, 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.

Table of Contents

Table of Contents

System Specifications

Overview

The Acer Veriton FP2 uses Intel newest chipset Intel 815E that not only supports embedded AGP 2X graphics solution but also provides the flexibility for AGP 4X/2X Graphics cards, and Intel ICH2 that supports Ultra DMA 66 and 100, 4 USB ports, and embedded networking solution. Veriton FP2 supports not only PC-100 SDRAM but also PC-133 SDRAM for better performance than other products. With Acer's Hot Swappable Solution, users can easy access or exchange the storage devices, such as FDD, CD-ROM, DVD, CD-RW or even 2nd FDD, through two convenient front-end Hot Swappable Bays without turn off the computer. Moreover, Veriton FP2 provides Acer's long-term partner a total cost of ownership, that is the LCD Panel module can be seperated as a LCD Monitor in the future when the system is out of date after two or three years.

Features

Performance

- ❑ Intel Celeron and Pentium III processor with integrated L2 cache memory
- ❑ Expandable system memory to a maximum of 512 MB
- ❑ Power management function
- ❑ 3.5-inch floppy disk drive
- ❑ Thin-Film-Transistor (TFT) Video Graphics Array (VGA) integrated digial liquid-crystal display (LCD)
- ❑ CD-ROM/DVD-ROM/CD-RW drive
- ❑ High-Capacity, Enhanced-IDE hard disk
- ❑ Instant on feature provides immediately available system

Multimedia

- ❑ 2X Accelerated Graphics Port (AGP) video graphic accelerator provides upgradability to 4x AGP cards
- ❑ Both cathode-ray tube (CRT) and LCD display support
- ❑ 3-D quality audio system via onboard audio controller
- ❑ Built-in speakers
- ❑ Line-in, Line-out, Microphone-in, and Headphone-out interfaces

Connectivity

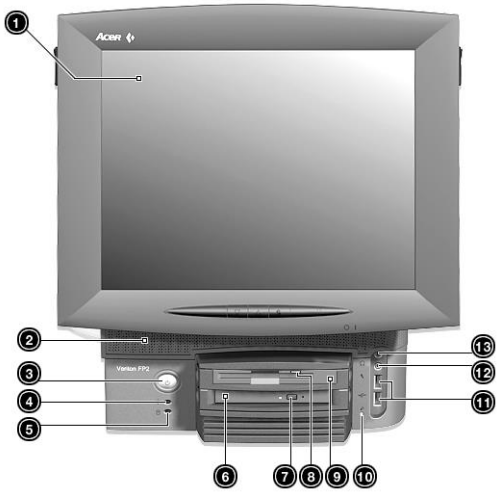
- ❑ 10Base-T/100Base-TX network support with remote wake-up function
- ❑ One serial and one parallel interface
- ❑ Universal Serial Bus (USB) ports (available on front and rear panels)
- ❑ High-speed fax/data PCI modem (optional)

Human-centric design and ergonomics

- ❑ Slim, smooth and stylish design
- ❑ Adjustable rotary stand
- ❑ Space-saver solution
- ❑ Low-emission and low-radiation
- ❑ Easy to open housing for quick upgrade

Front Panel

The computer's front panel consists of the following:



Label	Icon	Color	Description
1			LCD Panel
2		Lime	Speaker
3			Power button
4			Power activity light-emitting diode (LED)
5			Hard disk drive activity light-emitting diode (LED)
6			CD-ROM/DVD-ROM drive
7			CD-ROM/DVD-ROM drive eject button
8			3.5-inch floppy disk drive button
9			3.5-inch floppy disk drive (slim type)
10			Reset button(for wireless keyboard and mouse)
11		Black	USB ports

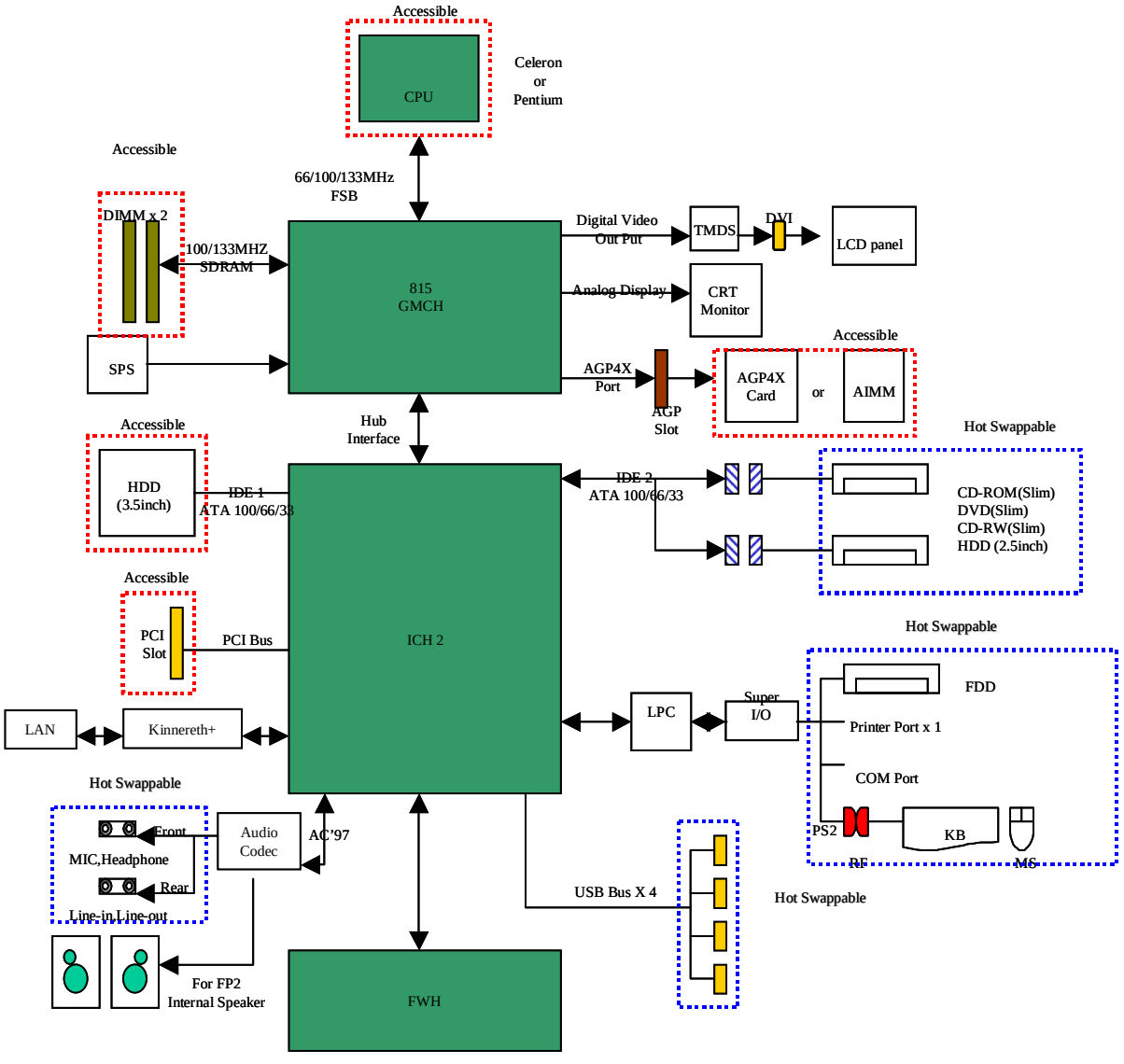
Label	Icon	Color	Description
12		Pink	Microphone-in jack
13		orange	Headphone-out jack

Rear Panel

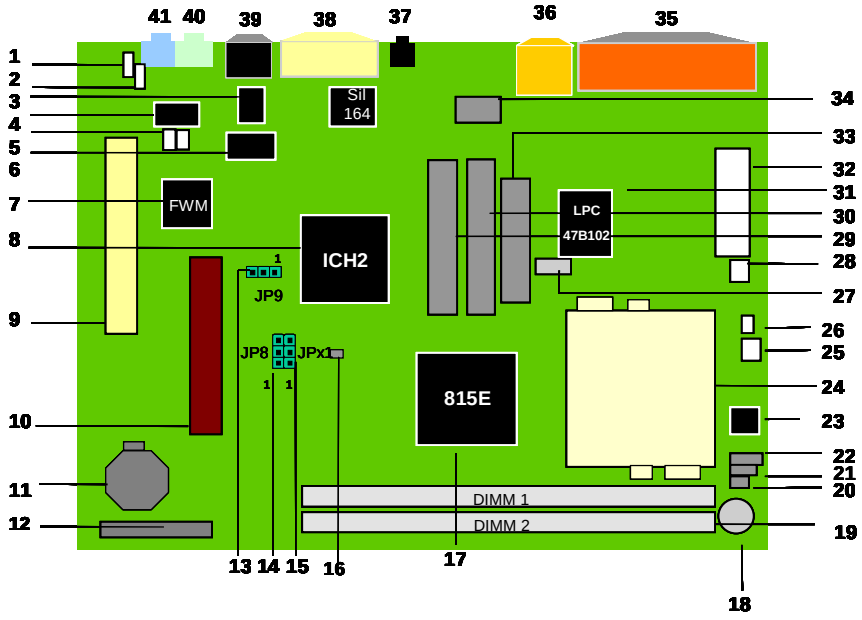
Label	Icon	Color	Description
1		Light blue	Audio-out/Line-out port
2		Lime	Audio-in/Line-in port
3		Black	Network port
4		White	DVI-type Liquid Crystal Display (LCD) port
5			12 Voltage DC-in Port
6		Black	USB ports
7		Blue	CRT Monitor port
8		Teal or Turquoise	Serial port
9			Fax port (optional)
10			Modem port (optional)
11			Expansion slots

Label	Icon	Color	Description
12		Burgundy	Parallel/printer port

Block Diagram



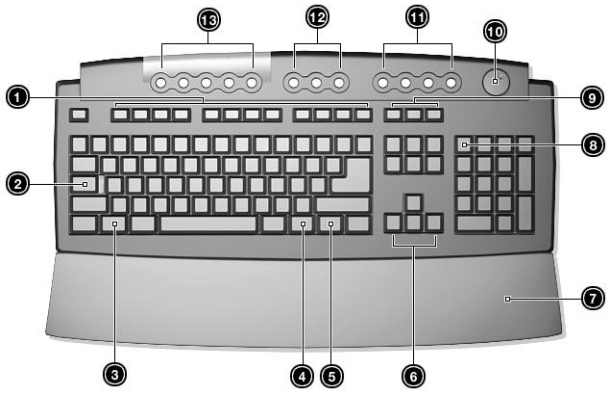
Main Board Layout



1	Audio line-in joint Audio/USB daughter board	22	HDD LED
2	Audio line-out joint Audio/USB daughter board	23	Hardware monitor ADM1024
3	Transformer	24	Socket 370 CPU
4	Amplifier	25	3 Pin CPU fan connector
5	Speaker out	26	2 Pin CPU fan connector(function is removed when shop out)
6	Lan Kinnereth	27	Hot swap board interface connector
7	Intel FWH	28	System fan connector
8	Intel ICH2	29	IDE2 connector
9	PCI slot	30	IDE1 connector
10	AGP right angle slot	31	LPC SMC LPC 47B102
11	3.0 V battery	32	Power connector
12	Audio/USB daughter board interface connector	33	FDD connector
13	JP9	34	RF connector
14	JP8	35	LPT1/VGA/COM1
15	JPX1	36	USB*2
16	Intrusion micro switch cable connector	37	12V power supply
17	Intel 815E	38	DVI connector
18	Buzzer	39	RJ45
19	2 DIMM slots	40	Line-out
20	Power switch	41	Line-in
21	Power LED		

Keyboard

The keyboard has full-sized keys that include separate cursor keys, two Windows keys, and twelve function keys.



1. Fuction keys F1-F12
2. Caps lock
3. .Windows logo key
4. Windows logo key
5. .Application key
6. Cursor keys
7. Palm rest
8. Num lock
9. Scroll lock
10. Volume control/Mute
11. Multimedia keys
12. Internet/Suspend keys
13. Programmable keys

Palm rest

Provides a comfortable place to rest your hands on while typing and is detachable.

Programmable keys

Access a URL (Web site) or launch any program, file or application in your system. The fifth key is set to launch the Microsoft Media Player. To configure the setting of each key, right click on the magic Keyboard icon located on yout Windows desktop.

Internet/Suspend keys

Consist of three buttons:

Icon	Key	Description
	Email button	Email button launches your email allpication
WWW	Web browser button	Web browser button launches your current default browser
	Suspend/Resume button	Suspend/Resume button puts the system to sleep when pressed. To wake the system press it again.

Multimedia keys

Allows you to do the following without using your keyboard:

Icon	Key	Description
⏯	Play/Pause button	Press to start playing the audio or video file. Press again to pause.
■	Stop button	Press to stop playing the audio or video file.
⏭	Forward button	Press to skip forward to the next file and start playing.
⏮	Backward button	Press to skip backward to the previous file and start playing.

Volume control /Mute

The volume control/mute knob controls the speaker volume. Turn it clockwise or counterclockwise to adjust the volume. Press it to toggle between mute and sound.

Cursor keys

The cursor keys, also called the arrow keys, lets you move the cursor around the screen. They serve the same function as the arrow keys on the numeric keypad when the Num Lock is toggled off.

Lock keys

The keyboard has three lock keys which you can toggle on and off to switch between two functions.

Lock Key	Description
Caps Lock	When activated, all alphabetic characters typed appear in uppercase (same function as pressing **Shift** + <letter>).
Num Lock	When activated, the keypad is set to numeric mode, i.e., the keys will function as a calculator (complete with arithmetic operators such as +, -, x, and /).
Scroll Lock	When activated, the screen moves one line up or down when you press the up arrow or down arrow respectively. Take note that Scroll Lock may not work with some applications.

Windows keys

The keyboard has two keys that perform Windows-specific functions.

Key	Description
Windows logo key 	Start button. Combinations with this key perform special functions, such as: ❑ **Windows** + **Tab**: Activate the next Taskbar button ❑ **Windows** + **E**: Explores My Computer ❑ **Windows** + **F**: Finds a Document ❑ **Windows** + **M**: Minimizes All ❑ **Shift** + **Windows** + **M**: Undo Minimize All ❑ **Windows** + **R**: Displays the Run dialog box
Application key 	Opens the application's context menu (same function as clicking the right button of the mouse).

Hardware Specifications and Configurations

Processor

Item	Specification
Type	Intel Pentium III- Coppermine processors
Slot	Socket 370
Speed	Internal: Internal : 450/500/533/550/600/667/733/800/866/933 MHz External: 66/100/133 MHz
Minimum operating speed	0 MHz (If **Stop CPU Clock in Sleep State the BIOS Setup** is set to **Enabled**.)
Voltage	Processor voltage can be detected by the system without setting any jumper.

BIOS

Item	Specification
BIOS code programmer	Acer
BIOS version	V4.0
BIOS ROM type	Flash ROM
BIOS ROM size	256 Kbytes
BIOS ROM package	Intel N82802AB FWH or SST 49LF004 FWH
Support protocol	EPA, PnP 1a, USB 1.1, DMI 2.3, APM 1.2, ACPI 1.0b, PCI 2.2, Bootable CD-ROM 1.0,WfM 2.0
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).

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+F8	Enable hidden page of BIOS Setup Utility	Press in BIOS Setup Utility main menu screen, the Advanced Options menu then appears. The items on the Advanced Options menu are: Memory/Cache Options PnP/PCI Options
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 on the Advanced Options menu are: Memory/Cache Options PnP/PCI Options Chips Options

System Memory

Item	Specification
Memory socket number	2 DIMM sockets
Support memory size per socket	64/128/256/512 MB
Support maximum memory size	512 (256 MB x 2)
Support memory type	SDRAM
Support memory speed	100/133MHz (PC100) (for Local Bus speed 66/100/133MHz)
Support memory voltage	3.3 V
Support memory module package	168-pin DIMM
Support to parity check feature	NO
Support to Error Correction Code (ECC) feature.	NO
Memory module combinations	You can install memory modules in any combination as long as they match the below specifications.

Memory Combinations

DIMM 1	DIMM 2	TOTAL
0M	64M	64M
64M	0M	64M
0M	128M	128M
64M	64M	128M
128M	0M	128M
64M	128M	192M
128M	64M	192M
0M	256M	256M
128M	128M	256M
256M	0M	256M
64M	256M	320M
256M	64M	320M
128M	256M	384M
256M	128M	384M
256M	256M	512M

Cache Memory

Item	Specification
First-Level Cache Configurations	
Cache function control	Enable/Disable by BIOS Setup (Advanced options)
Second-Level Cache Configurations Below information is only applicable to system with installed Pentium III processor.	
L2 Cache RAM type	PBSRAM
L2 Cache RAM size	128/256 KB
L2 Cache RAM speed	One-half the processor core clock frequency
L2 Cache RAM voltage	Pentium III processor: 1.65V
L2 Cache function control	Enable/Disable by BIOS Setup
L2 Cache scheme	Fixed in write-back

Video Memory

Item	Specification
Memory size	1MB
Memory type	SDRAM (Synchronous Dynamic RAM)
Memory configuration	No Cache
Fixed on-board or upgradeable	Fixed on-board by BIOS setting
Memory speed	100/133 MHz
Memory voltage	3.3V
Memory package	54 pin FPGA

This section has two table lists, the video interface specification and its supported display modes.

Video Interface

Item	Specification
Video controller	Embedded in Solano-2 (815E)
Video controller resident bus	AGP bus
Video interface support	CRT Output, Digital Output(TMDS) with DVI Connector

*32 - 24bpp color data is processed using a 32bpp data format.

LCD Panel

Display Screen Resolution	Bits Per Pixel (Frequency in Hz)	Bits Per Pixel (Frequency in Hz) 16-bit Indexed)	Bits Per Pixel (Frequency in Hz) 24-bit Indexed
640x480	60	60	60
800x600	60	60	60
1024x768	60	60	60

CRT Monitor

Display Screen Resolution	Bits Per Pixel (Frequency in Hz) 8-bit Indexed	Bits Per Pixel (Frequency in Hz) 16-bit Indexed)	Bits Per Pixel (Frequency in Hz) 24-bit Indexed
640x480	60,70,75,85	60,70,75,85	60,70,75,85
800x600	60,70,75,85	60,70,75,85	60,70,75,85
1024x768	60,70,75,85	60,70,75,85	60,70,75,85
1152x864	60,70,75,85	60,70,75,85	60,70,75,85
1028x1024	60,70,75,85	60,70,75,85	60,70,75,85
1600x1200	60,70,75,85	Not available	Not available

Audio Interface

Item	Specification
Audio controller	Embedded in Intel 82801BA ICH II
Audio controller resident bus	AC'97 link
Audio function control	Enable/disable by BIOS setup
Mono or stereo	Stereo
Resolution	16 bits

Audio Interface

Item	Specification
Compatibility	AC'97 2.1 compliant Sound Blaster Pro compatible Mixed digital and analog high performance chip Enhanced stereo full duplex operation High performance PCI audio accelerator Full native DOS games compatibility High-Quality ESFM music synthesizer MPU-401(UART mode) interface for wavetable synthesizers and MIDI devices Integrated dual game port Meets PC 97/PC98 and WHQL specifications
Music synthesizer	Yes
Sampling rate	44.1KHz
MPU-401 UART support	Yes
Microphone jack	Supported On audio-I/O board (connects via JK2)
Headphone jack	Supported On audio-I/O board (connects via JK1)
Package	QFP64

IDE Interface

Item	Specification
IDE controller	Embedded in Intel ICH2
IDE controller resident bus	PCI bus
Number of IDE channel	2
Support IDE interface	E-IDE (PIO mode0/1/2/3/4, DMA multiword 0/1/2 and Ultra DMA 33/66/100) ATA rev.4.0 ATAPI
Support bootable CD-ROM	Yes

FDD Interface

Item	Specification
Floppy disk drive controller	Embedded in LPC 47B102
Floppy disk drive controller resident bus	LPC
Support FDD format	1.44MB as well as 3 mode for Japanese market

Parallel Port

Item	Specification
Parallel port controller	Embedded in LPC 47B102
Parallel port controller resident bus	LPC
Number of parallel ports	1
Support ECP/EPP	Yes
Connector type	D-sub 25 pin
Parallel port function control	Enable/Disable by BIOS setup
Optional ECP DMA channel (in BIOS Setup)	DMA Channel 1 DMA Channel 3

Parallel Port

Item	Specification
Optional parallel port I/O address (via BIOS Setup)	3BCh, 378h, 278h
Optional parallel port IRQ (via BIOS Setup)	7 or 5

Serial Port

Item	Specification
Serial port controller	Embedded in 47B102
Serial port controller resident bus	ISA bus
Number of serial port	1
Serial ports location	CN2
16550 UART support	Yes
Connector type	D-sub 9 pin
Optional serial port I/O address (via BIOS Setup)	3F8h, 2F8h, 3E8h. 2E8h
Optional serial port IRQ (via BIOS Setup)	4 or 3

Modem

Item	Specification
Fax modem data baud rate (bps)	14.4K bps
Data modem data baud rate (bps)	56K bps
Voice modem	No
Modem connector type	RJ11
Full duplex	Applicable

USB Port

Item	Specification
Universal HCI	USB 1.0
USB Class	Support legacy keyboard for legacy mode

Memory Address Map

Address	Size	Function
000000 - 07FFFF	512KBytes	Host Memory
080000 - 09FFFF	128KBytes	Host/PCI Memory
0A0000 - 0BFFFF	128KBytes	PCI/ISA Video Buffer Memory
0C0000 - 0C7FFF	32KBytes	Video BIOS Memory
0C8000 - 0DFFFF	96KBytes	ISA Card BIOS & Buffer Memory
0E0000 - 0EFFFF	64KBytes	BIOS Extension Memory Setup and Post Memory PCI Development BIOS

Memory Address Map

Address	Size	Function
0F0000 - 0FFFFF	64KBytes	System BIOS Memory
100000 - UPPER LIMIT		Main Memory
UPPER LIMIT - 4GBytes		PCI Memory

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PCI INTx# and IDSEL Assignment Map

PCI INTx #	PCI Devices	Device IDSEL: ADxx
INTA#	PCI Slot 1	AD16

PCI Slot IRQ Routing Map

PCI INTX#	INTA	INTB	INTC	INTD	Bus Mastering
PCI 1	Route 1	Route 2	Route 3	Route 4	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-Porcessor
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

IRQ Assignment Map

IRQx	System Devices	Add-On-Card Devices
IRQ0	Timer	N(Notes)
IRQ1	Keyboard	N
IRQ2	Cascade Interrupt Control	N
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	N
IRQ9	N	Reserved
IRQ10	N	Reserved
IRQ11	N	Reserved
IRQ12	PS/2 Mouse	Reserved
IRQ13	Math Coprocessor Exception	N
IRQ14	Fix Diskette	Reserved
IRQ15	Fix Diskette	Reserved

NOTE: N - Not in use

DMA Assignment Map

DRQx	System Devices	Add-On-Card Devices
DMA0	N(Notes)	Reserved
DMA1	N	Reserved
DMA2	Floppy Diskette	N
DMA3	N	Reserved
DMA4	Cascade	N
DMA5	N	Reserved
DMA6	N	Reserved
DMA7	N	Reserved

NOTE: N - Not in use

Main Board Major Chips

Item	Controller
System core logic	Intel Solano-2 (815E)
Video controller	Embedded in Intel Solano-2
Super I/O controller	SMSC CPC 47M112
Audio controller	Embedded in Intel ICH2
LAN controller	Embedded in Intel Kinnereth+ chip
HDD controller	Embedded in Intel ICH2
Keyboard controller	SMSC CPC 47M112
RTC	Embedded in Intel ICH2

Environmental Requirements

Item	Specifications
Temperature	
Operating	+10 ~ +35°C
Non-operating	-10 ~ +60°C -20 ~ +60°C (Storage package)
Humidity	
Operating	20% to 80% RH, non-condensing
Non-operating	20% to 80% RH, non-condensing (Unpacked) 20% to 90% RH, non-condensing (Storage package)
Vibration	
Operating (unpacked)	5 ~ 16.2 Hz: 0.38 mm 16.2 ~ 250 Hz: 0.2 G
Non-operating (packed)	5 ~ 27.1 Hz: 0.6 G 27.1 ~ 50 Hz: 0.4 mm 50 ~ 500 Hz: 2 G

Mechanical Specifications

Item	Specification
Weight One 3.5 FDD and one 3.5 HDD (without packing)	10.5Kg(Full Configuration)
Dimensions (main footprint)	390mmx446mmx234mm

Switching Power Supply 120W

Input Frequency	Frequency Variation Range
50Hz	47Hz to 53Hz
60Hz	57Hz to 63Hz

Input Voltage	Variation Range
100 - 120 VRMS	90 - 132 VRMS
200 - 240 VRMS	180 - 264 VRMS

Input Current	Measuring Range
4A	90 - 132 VRMS
3A	180 - 264 VRMS

(This is for 120W power supply)

NOTE: Measure at line input 90 VRMS and maximum load condition

Output Requirements	Regulation	Current Rating
+5V	+-5%	11A

Output Requirements	Regulation	Current Rating
+12V	+-5%	3.5A
-12V	+-10%	0.3A
+3.3V	+-4%	8A
-5V	+-10%	0A
+5Vaux	+-5%	2A

Power Management Function (ACPI support function)

Device Standby Mode

- Independent power management timer for hard disk drive devices (0-15 minutes, time step=1 minute).
- Hard disk drive goes into Standby mode (for ATA standard interface).
- Disable V-sync to control the VESA DPMS monitor.
- Resume method: device activated (Keyboard for DOS, keyboard & mouse for Windows).
- Resume recovery time: 3-5 sec.

Global Standby Mode

- Global power management timer (2-120 minutes, time step=10 minute).
- Hard disk drive goes into Standby mode (for ATA standard interface).
- Disable H-sync and V-sync signals to control the VESA DPMS monitor.
- Resume method: Return to original state by pushing power switch button, KB and Mouse at APM mode.
- Resume recovery time: 7-10 sec.

Suspend Mode

- Independent power management timer (2-120 minutes, time step=10 minutes) or pushing external switch button
- CPU goes into SMM.
- CPU asserts STPCLK# and goes into the Stop Grant State.
- System and LCD monitor's Power LED are change from green to orange color.
- Hard disk drive goes into SLEEP mode (for ATA standard interface).
- Disable H-sync and V-sync signals to control the VESA DPMS monitor.
- Ultra I/O and VGA chip go into power saving mode.
- Resume method: Return to original state by pushing external switch button, K/B and mouse, Wake on Lan PME event.

Suspend to RAM

- The system context is maintained in system memory
- Power is shut to non-critical circuits.
- Memory is retained, and refreshes continually.
- All clocks shut except RTC.
- Return to original state by pushing external switch button & "PME" events at ACPI mode.

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.

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.

NOTE: You must press CTRL ALT ESC simultaneously while the system is booting.

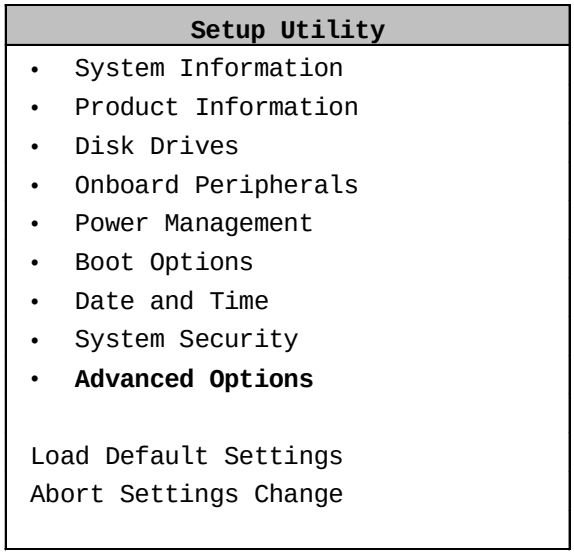
The Setup Utility main menu then appears:

The system supports two BIOS Utility levels: Basic and Advanced. The above screen is the BIOS Utility Basic Level screen. It 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 Advanced Level. To view the Advanced Level menu, press **F8** or the **Alt + F4** keys simultaneously.

NOTE: The **F8** and **Alt + F4** keys work only when you are in the main menu. This means that you can activate the advanced level and hidden information only when you are in the main menu.

The following screen shows the Advanced Level 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.

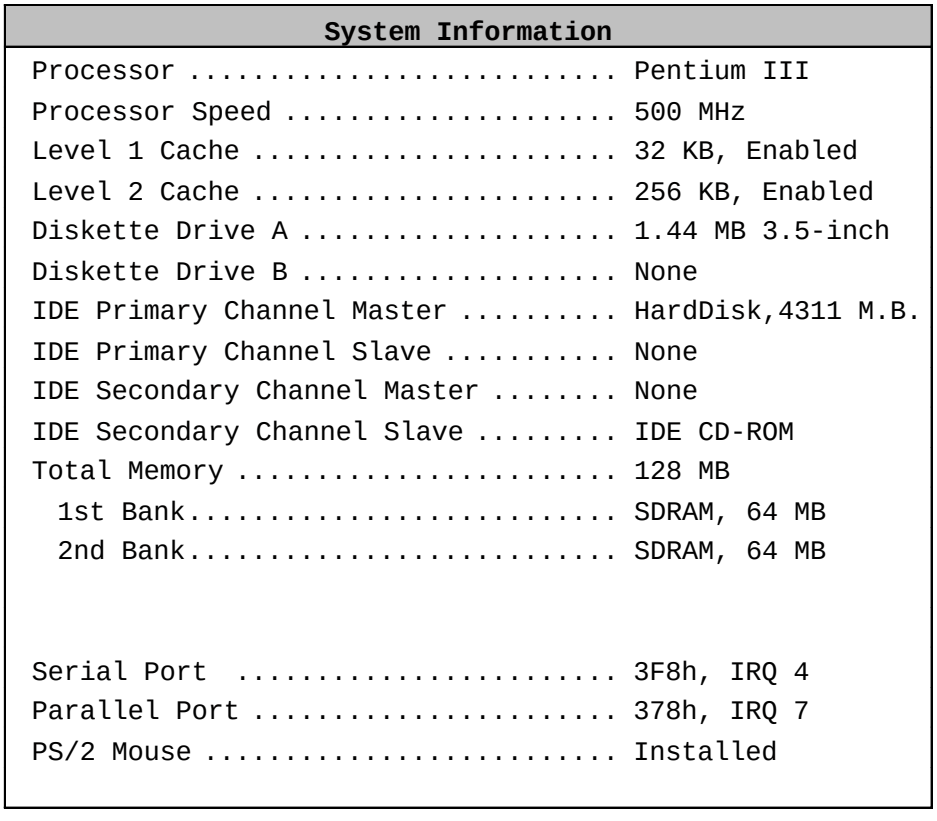
- To select an option, move the highlight bar by pressing ↑ or ↓ then press ENTER.
- Press PGDN to move to the next page or PGUP to return to the previous page.
- To change a parameter setting, press ← or → until the desired setting is found.
- Press ESC to return to the main menu. If you are already in the main menu, press ESC 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 are fixed settings and not user-configurable.

System Information

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



This page shows the current basic configuration of your system.

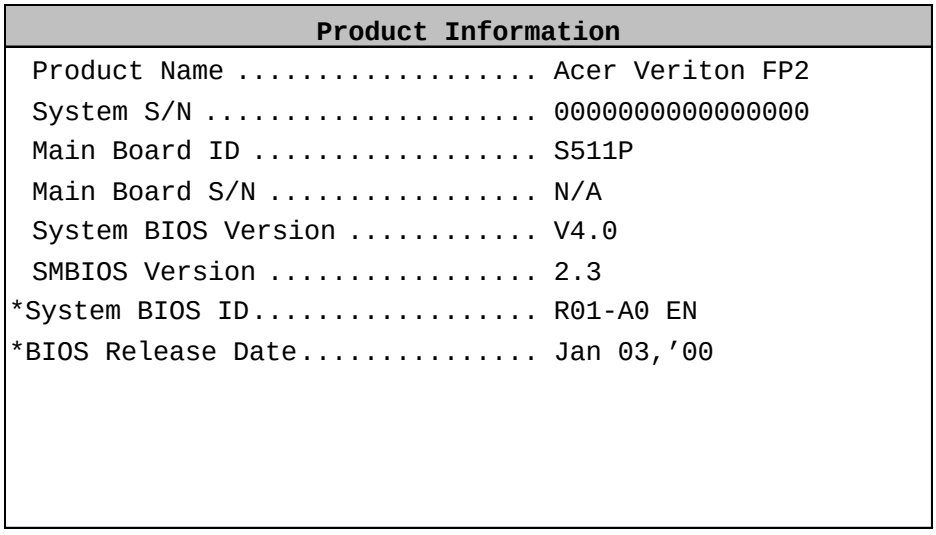
The following table describes the parameters found in the System Information pages:

Parameter	Description	Format
Processor	Specifies the type of processor currently installed in your system.	
Processor Speed	Specifies the speed of the processor currently installed in your system.	
Level 1 Cache	Specifies the first-level or the internal memory (i.e., the memory integrated into the processor) size, and whether it is enabled or disabled.	Cache size in KB
Level 2 Cache	Specifies the second-level cache memory size currently supported by the system.	Cache size in KB
Diskette Drive A	Shows the diskette drive A type.	Capacity, dimension
Diskette Drive B	Shows the diskette drive B type.	Capacity, dimension
IDE Primary Channel Master	Specifies the current configuration of the IDE device connected to the master port of the primary IDE channel.	Drive type, capacity
IDE Primary Channel Slave	Specifies the current configuration of the IDE device connected to the slave port of the primary IDE channel.	Drive type, capacity

Parameter	Description	Format
IDE Secondary Channel Master	Specifies the current configuration of the IDE device connected to the master port of the secondary IDE channel.	Drive type, capacity
IDE Secondary Channel Slave	Specifies the current configuration of the IDE device connected to the slave port of the secondary IDE channel.	Drive type, capacity
Total Memory	Specifies the total amount of onboard memory. The memory size is automatically detected by BIOS during the POST. If you install additional memory, the system automatically adjusts this parameter to display the new memory size.	Memory size in MB
1st Bank	Indicates the type of DRAM installed in the DIMM 1 socket. The None setting indicates that there is no DRAM installed.	DIMM type, capacity in MB
2nd Bank	Indicates the type of DRAM installed in the DIMM 2 socket. The None setting indicates that there is no DRAM installed.	DIMM type, capacity in MB
Serial Port	If enabled, indicates the IRQ assigned to serial port .	IRQ
Parallel Port	If enabled, indicates the IRQ and Direct Memory Address (DMA) assigned to the parallel port.	DMA, IRQ
PS/2 Mouse	Specifies the presence of a PS/2 mouse	Installed or Disabled

Product Information

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



NOTE: The asterisk (*) mark indicates that the parameter appears only when you are in the Advanced Level.

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

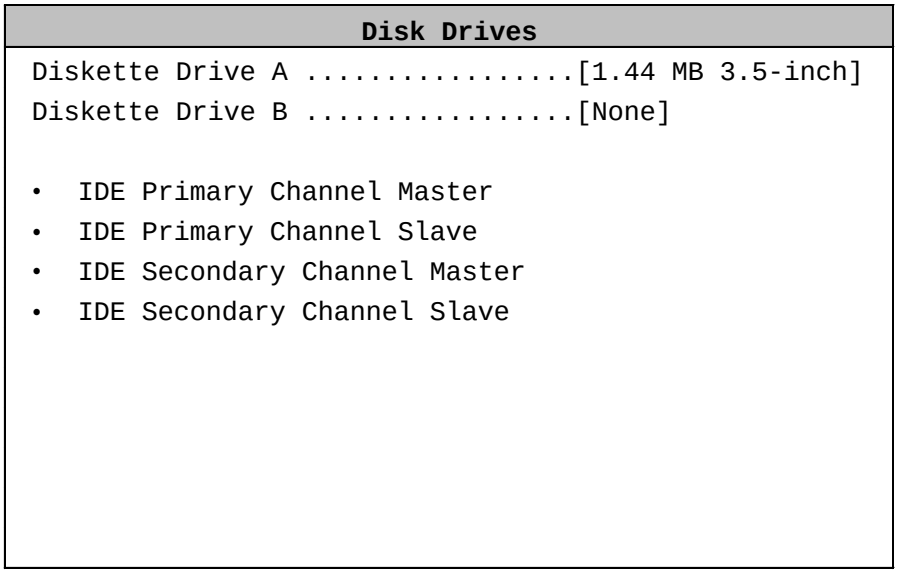
The following table describes the parameters found in this menu:

Parameter	Description
Product Name	Displays the model name of your system.
System S/N	Displays your system's serial number.
Main Board ID	Displays the main board's identification number.
Main Board S/N	Displays your main board's serial number.
System BIOS Version	Specifies the version of your BIOS utility.
SMBIOS version	The System Management Interface (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	Specifies the version of the BIOS.
BIOS Release Date	Displays the release date of the BIOS.

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:

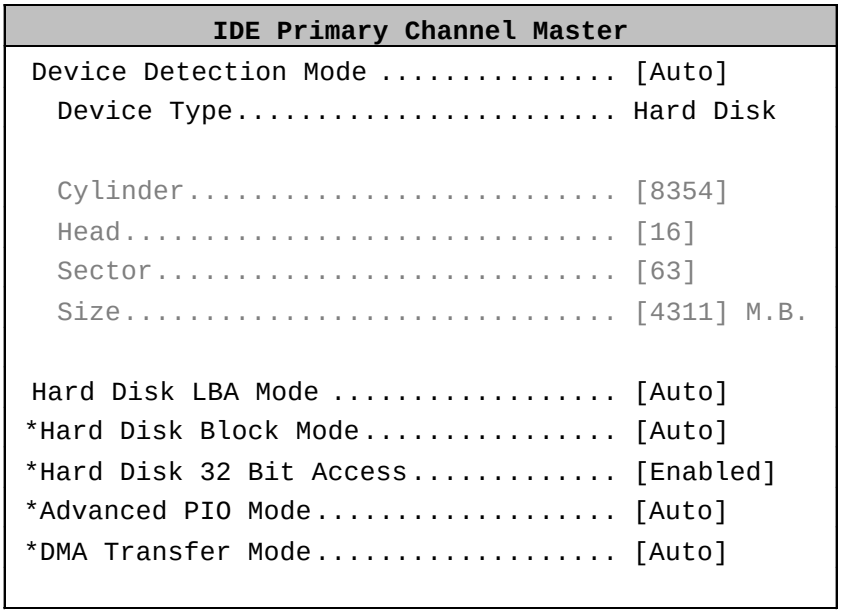


NOTE: The asterisk (*) mark indicates that the parameter appears only when you are in the Advanced Level.

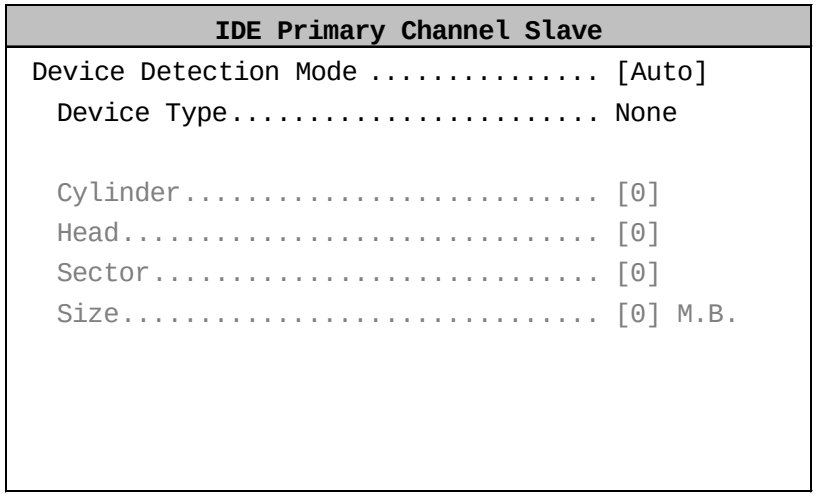
The following table describes the parameters found in this menu.

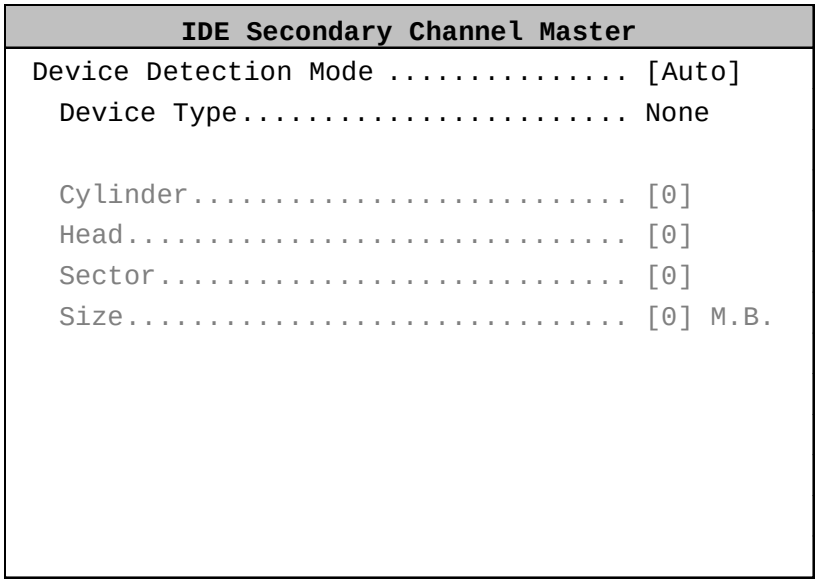
Parameter	Description	Options
Diskette Drive A / B	Allows you to configure your floppy drive	None 360 KB, 5.25-inch 1.2 MB, 5.25-inch 720 KB, 3.5-inch **1.44 MB, 3.5-inch** 2.88 MB, 3.5-inch
IDE Primary Channel Master	Lets you configure the hard disk drive connected to the master port of IDE channel 1.	
IDE Primary Channel Slave	Lets you configure the hard disk drive connected to the slave port of IDE channel 1.	
IDE Secondary Channel Master	Lets you configure the hard disk drive connected to the master port of IDE channel 2.	
IDE Secondary Channel Slave	Lets you configure the hard disk drive connected to the slave port of IDE channel 2.	

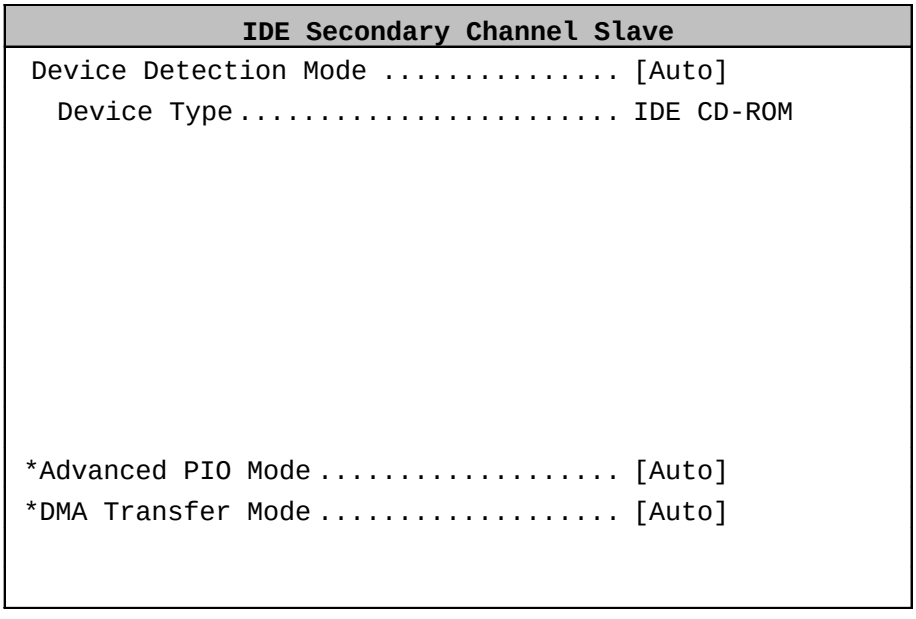
The following screen appears if you select any of the IDE drive parameters:



NOTE: The asterisk (*) mark indicates that the parameter appears only when you are in the Advanced Level.







NOTE: The asterisk (*) mark indicates that the parameter appears only when you are in the Advanced Level.

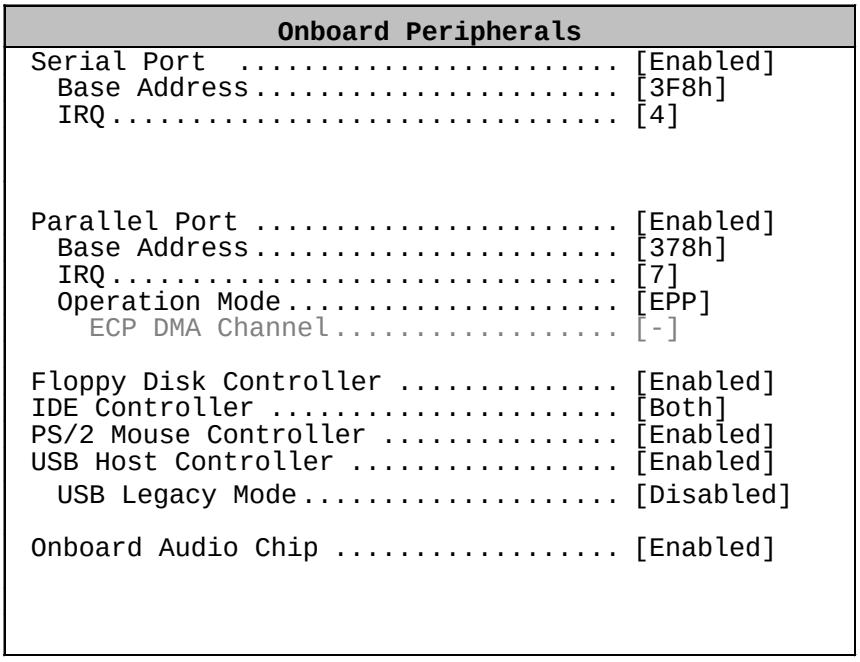
The following table describes the parameters found in this menu.

Parameter	Description	Options
Device Detection Mode	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.	**Auto,** None, or User. The User setting allows you to enter your settings manually if you know your hard disk type. The Auto setting also sets the Cylinder, Head, Sector, and Size parameters.
Device Type	Display the type of device installed.	Not configurable. **BIOS auto detect type**.

Parameter	Description	Options
Cylinder	Specifies your hard disk's number of cylinders, and is automatically set depending on your Type parameter setting.	Only Device Detection Mode is set to User, the item Cylinder will be available; Otherwise it is non-configurable.
Head	Specifies your hard disk's number of heads, and is automatically set depending on your Type parameter setting.	Only Device Detection Mode is set to User, the item Head will be available; Otherwise it is non-configurable.
Sector	Specifies your hard disk's number of sectors, and is automatically set depending on your Type parameter setting.	Only Device Detection Mode is set to User, the item Sector will be available; Otherwise it is non-configurable.
Size	Specifies the size of your hard disk, in MB, and is automatically set depending on your Type parameter setting	It will turn to gray and will be non- configurable.
Hard Disk LBA Mode	Set to "Auto" under DOS and Windows. Set to "Disabled" under Novell Netware and Unix.	**Auto** or 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 blocks (multiple sectors) at a rate of 256 bytes per cycle.	**Auto** or Disabled
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, Windows 95/98, Windows NT, and Novell NetWare.	**Enabled** or Disabled
Advanced PIO Mode	When set to Auto, the BIOS utility automatically detects if the installed hard disk supports the function, it allows for faster data recovery and read/ write timing that reduces hard disk activity time. This results in better hard disk performance.	**Auto**, Mode 0, 1, 2, 3 or 4
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.	**Auto** Multiword Mode 0, 1, 2 Ultra Mode 0, 1, 2, 3, 4 Disabled

Onboard Peripherals

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



The following table describes the parameters found in this menu.

Parameter	Description	Options
Serial Port	Lets you enable or disable the serial port.	**Enabled** or Disabled
Base Address	Lets you set a logical base address for each serial port. This parameter is configurable only if the Serial Port parameter is enabled.	**3F8h**, 2F8h, 3E8h, 2E8h
IRQ	Lets you assign an interrupt for each serial port. This parameter is configurable only if the Serial Port parameter is enabled.	**4** or 3
Parallel Port	Lets you enable or disable the parallel port.	**Enabled** or Disabled
Base Address	Lets you set a logical base address for the parallel port. This parameter is configurable only if the Parallel Port parameter is enabled.	3BCh, **378h**, 278h
IRQ	Lets you assign an interrupt for the parallel port. This parameter is configurable only if the Parallel Port parameter is enabled.	**7** or 5
Operation Mode	Lets you set your parallel port's operation mode. This parameter is configurable only if the Parallel Port parameter is enabled.	**Enhanced Parallel Port (EPP)** Bidirectional Standard Parallel Port (SPP) Extended Capabilities Port (ECP)
ECP DMA Channel	Allows you to assign a DMA channel for the ECP parallel port function. This parameter is configurable only if you select the Extended Capabilities Port (ECP) as the operation mode.	1,3
Floppy Disk Controller	Lets you enable or disable the onboard floppy disk controller.	**Enabled** or Disabled

Parameter	Description	Options
IDE Controller	Lets you enable or disable the onboard primary, secondary or both IDE interfaces.	**Both**, Primary, or Disabled
PS/2 Mouse Controller	Lets you enable or disable the onboard PS/2 mouse controller	**Enabled** or Disabled
USB Host Controller	Lets you enable or disable the onboard USB host controller.	**Enabled** or Disabled
USB Legacy Mode	Lets you activate or deactivate the USB keyboard connected to your system. When activated, the USB keyboard functions in a DOS environment.	**Enabled** or Disabled
Onboard Audio Chip	Lets you enable or disable the onboard audio controller	**Enabled** or Disabled

Power Management

The Power Management menu lets you configure the system power-management feature. It works only under APM mode.

IMPORTANT: If an ACPI-aware operating system such as Windows 98, Windows ME or Windows 2000 is installed in ACPI mode, the operating system will use the ACPI interfaces. Then the settings in Power Management page is non-effective.

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

```
                    Power Management
Power Management Mode ..............  [Enabled]
  IDE Hard Disk Standby Timer ........  [OFF]
  System Sleep Timer .................  [OFF]
    Sleep Mode .......................  [-------]

Power Switch < 4 sec ...............  [Power Off]

System wake-up event
  Modem Ring Indicator ..............  [Enabled]
  PCI Power Management ..............  [Enabled]
  RTC Alarm .........................  [Disabled]
    Resume Day ......................  [--]
    Resume Time .....................  [--:--:--]
  Restart on AC/Power Failure .......  [Previous State]
  ACPI Sleep State ..................  [S1]
```

The following table describes the parameters found in this menu.

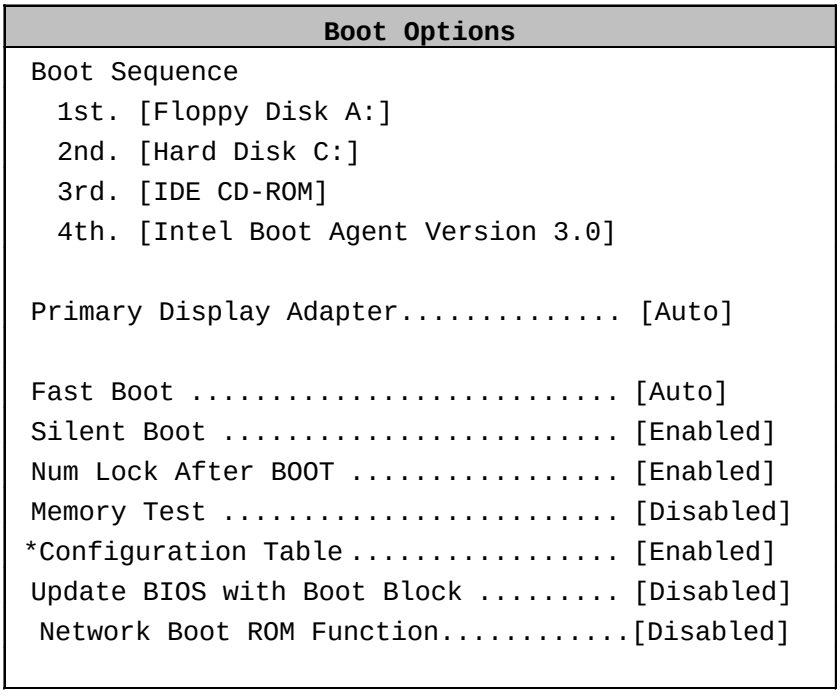
Parameter	Description	Options
Power Management Mode	Allows you to reduce the system's power consumption. When enabled, the IDE hard disk and system timers become configurable.	**Enabled** or Disabled
IDE Hard Disk Standby Timer	Allows the hard disk to enter Standby mode after inactivity of 1 to 15 minutes, depending on your setting.	**Off** or 1 to 15 minutes
System Sleep Timer	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.	**Off**, or 2, 5, 10, 15, 20, 30, 40, 50...120 minutes
Sleep Mode	Lets you specify the power-saving mode that the system will enter after a specified period of inactivity. This parameter is configurable only if the System Sleep Timer is enabled.	standby, suspend
Power Switch < 4 sec.	Lets you specify whether to automatically turn off the machine or put the system to Suspend mode when the power switch is pressed for less than 4 seconds.	Suspend or **Power Off**

Parameter	Description	Options
System Wake-up Event	Lets you specify the activity that will resume the system to normal operation.	
Modem Ring Indicator	Wakes the system from Sleep mode once any fax/modem activity is detected.	Disabled or **Enabled**
PCI Power Management	Allows the system to be awaken by the PME function.	**Enabled** or Disabled
RTC Alarm	Allows you to set a certain time on a certain day to wake-up your system from suspend mode.	**Disabled, Date/Time or Time**
Resume Day	If RTC alarm is Date/Time, the system will resume operation at the Date/Time indicated here.	
Resume Time	If RTC alarm is Date/Time or Time, the system will resume operation at the Date/ Time or Time indicated here.	
Restart on AC/ Power Failure	When power failure occurs, your system automatically stops functioning. Setting this parameter to Always On lets you set your computer to automatically turn on once power resumes. The Always Off setting leaves the computer off. The Previous State setting keeps the last time system state. Which means if your system is Off when AC failure occure, the system still keep off when AC power on again; if your system is On when AC failure occure, the system will automatically power on when AC power on again.	**Previous State,** Always On or Always Off
ACPI Sleep State	When set to S1, system enters standby mode when power management mode is enabled. When set to S3, system enters suspend to RAM mode.	**S1** or S3

Boot Options

This option allows you to specify your preferred settings for bootup.

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



NOTE: The asterisk (*) mark indicates that the parameter appears only when you are in the Advanced Level.

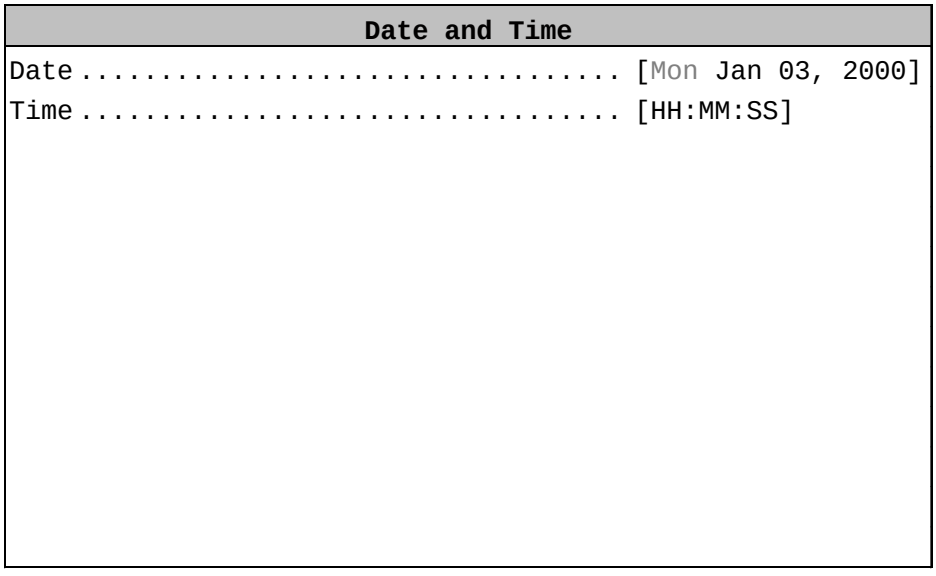
The following table describes the parameters found in this menu.

Parameter	Description	Options
Boot Sequence	Allows you to specify the boot search sequence.	**Floppy Disk** Hard Disk IDE CD-ROM Intel (R) Boot Agent Version 3.0 (boot from LAN)(when Network Boot ROM Function is enabled)
Primary Display Adapter	Lets you activate the onboard video controller as your primary adapter, or automatically disable it once BIOS detects that there is a video card installed in your system.	**Auto** or Onboard
Fast Boot	Allows you to define your system's booting process, whether to skip some POST routines or proceed with the normal booting process.	**Auto** or Disabled
Silent Boot	When 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). If any error occurs while booting, the system automatically switches to the text mode. You may also switch to the text mode while booting by pressing **F9** after you hear a beep that indicates the activation of the keyboard.	**Enabled** or Disabled

Parameter	Description	Options
Num Lock After Boot	Allows you to activate or deactivate the Num Lock function upon booting.	**Enabled** or Disabled
Memory Test	Lets you specify whether you want BIOS to perform or bypass the memory test. This parameter is only available when Fast Boot is disabled.	**Disabled** or Enabled
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.	**Enabled** or Disabled
Update BIOS w/ Boot Block	When enabled, it automatically flashed the BIOS file from the hard disk drive in case the system fails to boot up.	**Disabled** or Enabled
Network Boot ROM Function	When Disabled, BIOS doesn't initialize LAN's boot ROM. When enabled, BIOS will initialze LAN's boot ROM. After enabling this function, the system need to exit SUTUP utility. System reboot. Enter System utility again and choose "Boot Options" menu. User will see a new(the 4th) Boot Sequence item, [Intel (R) Boot Agent Version 3.0]	**Disabled** or Enabled

Date and Time

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



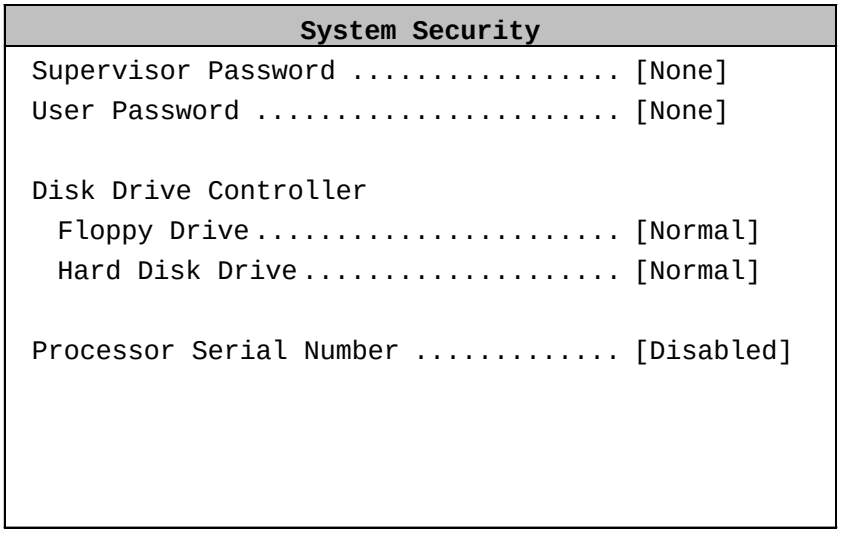
The following table describes the parameters found in this menu:

Parameter	Description	Options
Date	Lets you set the date following the weekday-month-day-year format.	Weekday: Sun, Mon, Tue, Wed, Thu, Fri, Sat Month: Jan, Feb...Dec Day: 1 to 31 Year: 1980 to 2099
Time	Lets you set the time following the hour-minute-second format.	Hour: 0 to 23 Minute: 0 to 59 Second: 0 to 59

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:

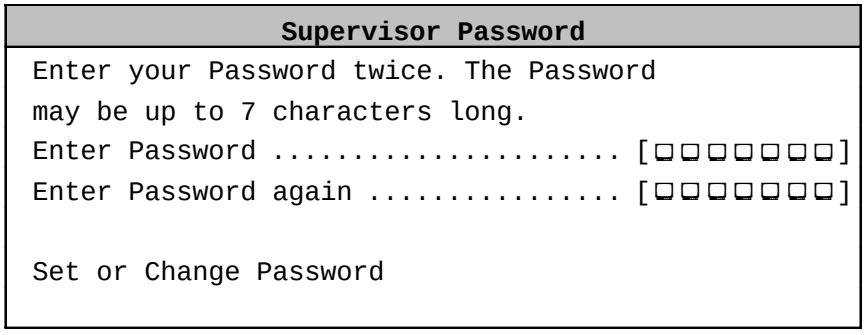


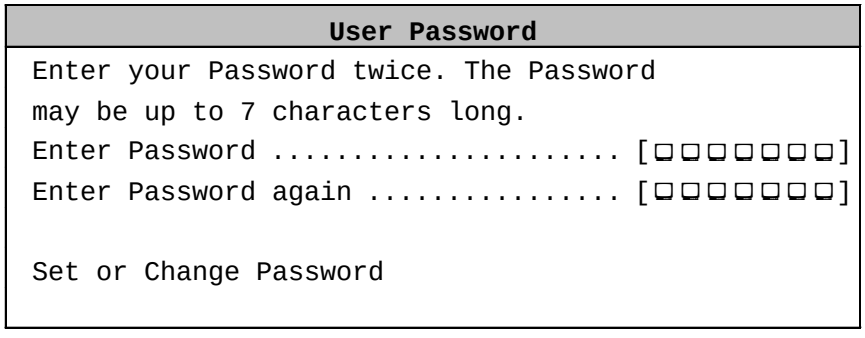
The following table describes the parameters found in this menu.

Parameter	Description	Options
Supervisor Password	Prevents unauthorized access to the BIOS utility.	**None** or Present. The Present setting allows you to set a Setup password. For instructions on how to set a Setup password, refer to “Setting a Password” on page 38.
User Password	Secures your system against unauthorized use. Once you set this password, you have to type it whenever you boot the system. User Password is available only when Supervisor Password is available.	**None** or Present. The Present setting allows you to set a Setup password. For instructions on how to set a Setup password, refer to “Setting a Password” on page 38
Disk Drive Controller	Allows you to protect your system’s floppy drive and hard disk data from being modified (possible under DOS mode only).	
Floppy Drive	Protects your floppy drive data from being modified.	**Normal**, Write Protect All Sectors, Write Protect Boot Sectors
Hard Disk Drive	Protects your hard disk data from being modified.	**Normal**, Write Protect All Sectors, Write Protect Boot Sectors
Processor Serial Number		**Disabled or Enabled**

Setting a Password

1. Enter the BIOS utility and select “System Security” .
2. Highlight the “Supervisor Password” parameter to set a Setup password, or “User Password” to set a power-on password. Then press the left or right arrow key. The following screen appears:





3. Type a password. The password may consist of up to seven characters. Then press **Enter**.
4. Retype the password then press **Enter**.
5. After setting the password, highlight the “Set or Change Password” option.
6. Press **Esc** to return to the System Security screen. If you have set a Supervisor password (and/or User password), the Supervisor Password (and/or User password) setting automatically changes to **Present**.
7. Press **Esc** to return to the Main menu.
8. Press **Esc** to exit the BIOS utility. A dialog box appears asking if you want to save the CMOS data.
9. Select “Yes” to save the changes and reboot the system.

If you have set a Supervisor password, the next time you want to enter the BIOS utility, you must key-in your Supervisor password.

If you have set a User password, you will be prompted to enter that password every time you boot your system.

Changing or Removing the Password

If you want to **change one of your passwords**, do the following:

1. Enter the BIOS utility and select “System Security”.
2. Highlight the “Supervisor Password” parameter (for Supervisor password) or the “User Password” parameter (a Supervisor Password must be set first before you can change the User password). The Password menu appears.
3. From the 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 “Supervisor Password” parameter (for Supervisor password) or the “User Password” parameter (a Supervisor Password must be set first before you can change the User password) from the System Security menu and set it to “None”.

Bypassing the Password

If you forgot your password, you can bypass the password security feature thru hardware configuration.

RTC Battery

Follow these steps to bypass the password:

1. Turn off and unplug the system.
2. Open the system housing. Take off battery and short it.
3. Place on RTC battery, reboot the system and enter setup menu, to load default setting.

Clear CMOS

Follow these steps to bypass the password:

1. Reset CMOS, by adjusting JPX1 to **1-2**
2. Reboot the system.
3. Adjust the JPX1 back to **2-3**

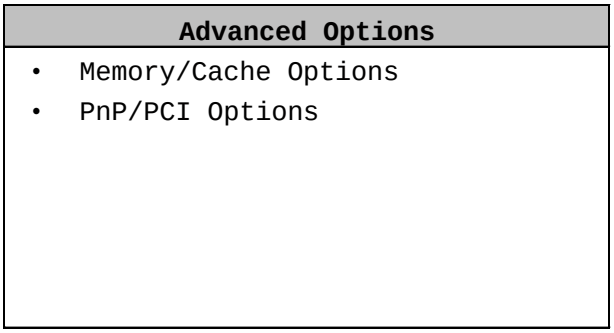
Advanced Options

NOTE: The Advanced Options menu is only available if you press **F8** or **Alt + F4** in the main menu.

The “Advanced Options” menu allows you to configure the system memory and PCI device settings.

The following screen shows the Advanced Options parameters:

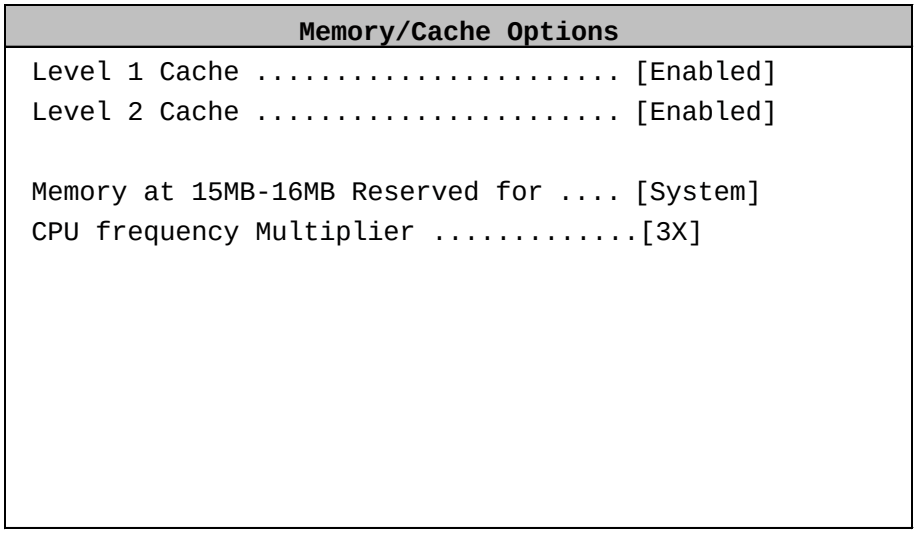
CAUTION: Do not change any settings in the Advanced Options menu if you are not a qualified technician to avoid damaging the system.



Memory/Cache Options

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

This menu lets you configure the system memory.

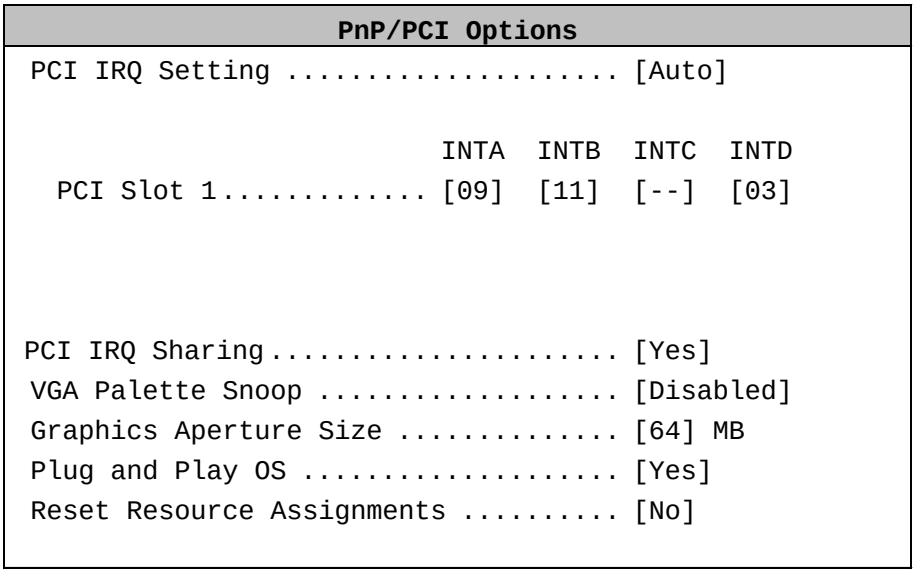


The following table describes the parameters found in this sub-menu.

Parameter	Description	Options
Level 1 Cache (processor Cache)	Lets you enable or disable the primary cache memory, i.e., the processor memory.	**Enabled** or Disabled
Level 2 Cache	Lets you enable or disable the secondary cache memory.	**Enabled** or Disabled
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. Some VGA cards have required settings for this feature. Check your VGA card manual before setting this parameter.	**System** or Expansion board
CPU Frequency Multiplier	Sets the Core/bus ratio of your system. The clock speed of the bus does not necessarily equal the CPU's (core). The bus clock speed is often slower than the CPU clock speed. If you change CPU Frenguency Multiplier but CPU speed is not changed, that means CPU Frequency is fixed, can't be changed.	**3X**, 3.5X, 4X, 4.5X.....8X

PnP/PCI Options

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



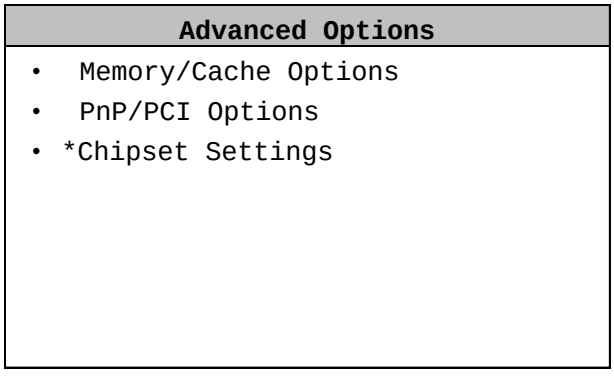
The following table describes the parameters found in this sub-menu.

Parameter	Description	Options
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 PCI card manual for technical information.	**Auto** or Manual
PCI Slot 1	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.	User input
PCI IRQ Sharing	Setting this parameter to Yes allows you to assign the same IRQ to two different devices. To disable the feature, select No. Note: If there are no IRQs available to assign for the remaining device function, we recommend that you enable this parameter.	**Yes** or No
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 RAMDAC (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 RAMDACs. The signal goes through the cards continuously until all RAMDAC data has been updated. This allows the display of multiple images on the screen. **Note:** Some VGA cards have required settings for this feature. Check your VGA card manual before setting this parameter.	**Disabled** or Enabled

Parameter	Description	Options
Graphics Aperture Size	This parameter determines the effective size of the graphics aperture. Graphics aperture is the address range that the AGP video and the CPU use to manage graphical objects. The lowest setting is 4 MB and the highest is 256 MB.	4, 8, 16, 32, **64,** 128, 256 MB
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. Note: Set this parameter to Yes only if your operating system is Windows 95/98/2000.	**Yes** or No
Reset Resource Assignments	Set this parameter to Yes to avoid IRQ conflict 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.	**No** or Yes

Chipset Settings

The Chipset Settings will be shown only if you press **Alt + F4** in main menu:



Press Enter to view the Chipset Settings information.

The following screen displays the Chipset Settings menu:

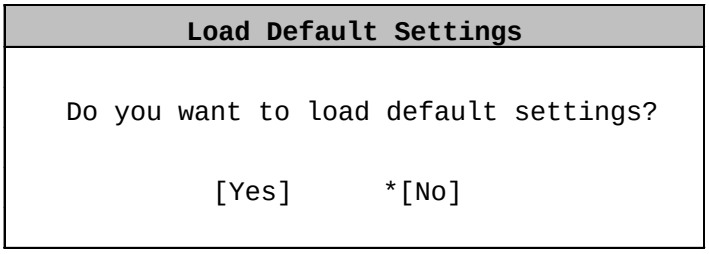
Chipset Settings	
Spread Spectrum	[Enabled]
ICH Audio Codec	[Enabled]
ICH SMBUS Controller	[Enabled]
Delay Transaction	[Enabled]
Determine DIMM Frequency	[Auto]
On Chip VGA BIOS message	
Show VGA BIOS message	[Disabled]
Graphic Device Scaling	[Auto]
TV format	[NTSC]
Display Device Synchronous	[Enabled]
Display Device priority	[FP/CRT/TV]
Unlock Hot Swap Device	[Disabled]

Parameter	Description	Options
Spread Spectrum	This parameter lets you enable or disable the spread spectrum.	**Enabled** or Disabled
ICH Audio Codec	This parameter lets you enable or disable the ICH Audio Codec.	**Enabled** or Disabled
ICH SMBUS Controller	This parameter lets you enable or disable the ICH SMBUS controller.	**Enabled** or Disabled
Delay Transaction	This parameter lets you enable or disable delay transaction.	**Enabled** or Disabled
Determine DIMM Frequency	This parameter lets you set the frequency of DIMM.	**Auto**, PC100 or PC133
Show VGA BIOS message	When Disable, it won't display VGA BIOS Copyright message during POST. When Enabled,it will dispaly VGA BIOS Copyright message druing POST.	**Disabled** or Enabled
Graphic Device Scaling	This setting for LCD monitor When Auto, Scale screen's picture determined by EDID. When Force On, Force Scaling screen picture and regardless of hardware support. When Disable, disable scale function	**Auto**, Force On or Disabled
TV format*		**NTSC**
Display Device Synchronous	When Enabled : Display CRT and Flat Panel at same time. When Disabled : Only one Display Device has picture (CRT or Flat Panel)	**Enabled** or Disabled
Display Device priority	FP : 1st priority CRT : 2nd priority TV : 3th priority	**FP/CRT/TV**
Unlock Hot Swap Device	This is a way you can remove hot swap device. When you select “Enabled”, SETUP utility will give you 20 seconds to remove hot swap device. After that, the option will become “Disabled” and SETUP will lock device again.	**Disabled** or Enabled

NOTE: *: ignore TV related settings

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:

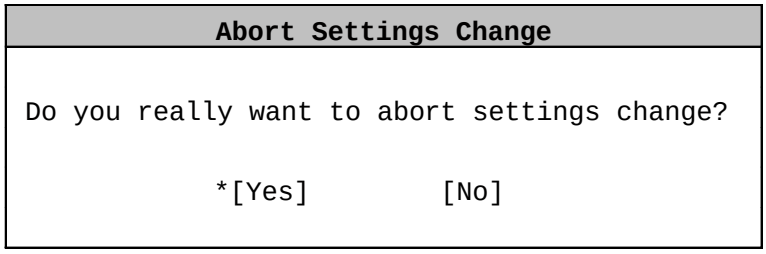


Choosing Yes enables BIOS to automatically detect the hardware changes that you have made in your system. This option also allows you to restore the default settings.

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:

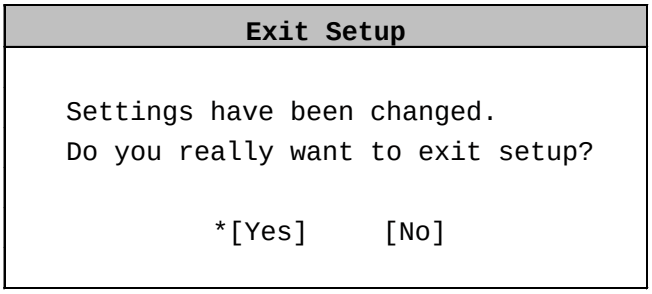


Choosing Yes discards all the changes that you have made and reverts the parameters to their previously saved settings.

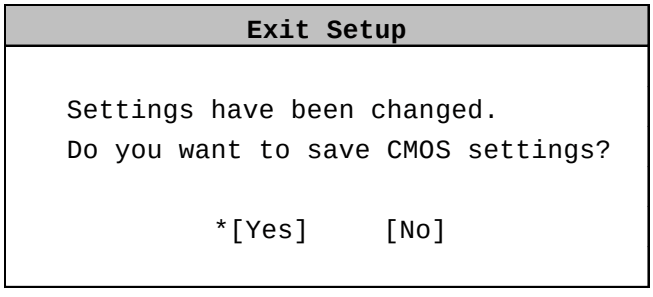
Choosing No returns you to the main menu. BIOS retains all changes that you have made.

Exiting Setup

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



Select Yes to exit Setup. Select No to return to the main menu.



If you have made changes in the parameter settings, you will be asked if you want to keep the changes made to the BIOS. Select Yes to save your changes before you exit Setup. Select No to discard all changes and exit Setup.

Removal and Replacement

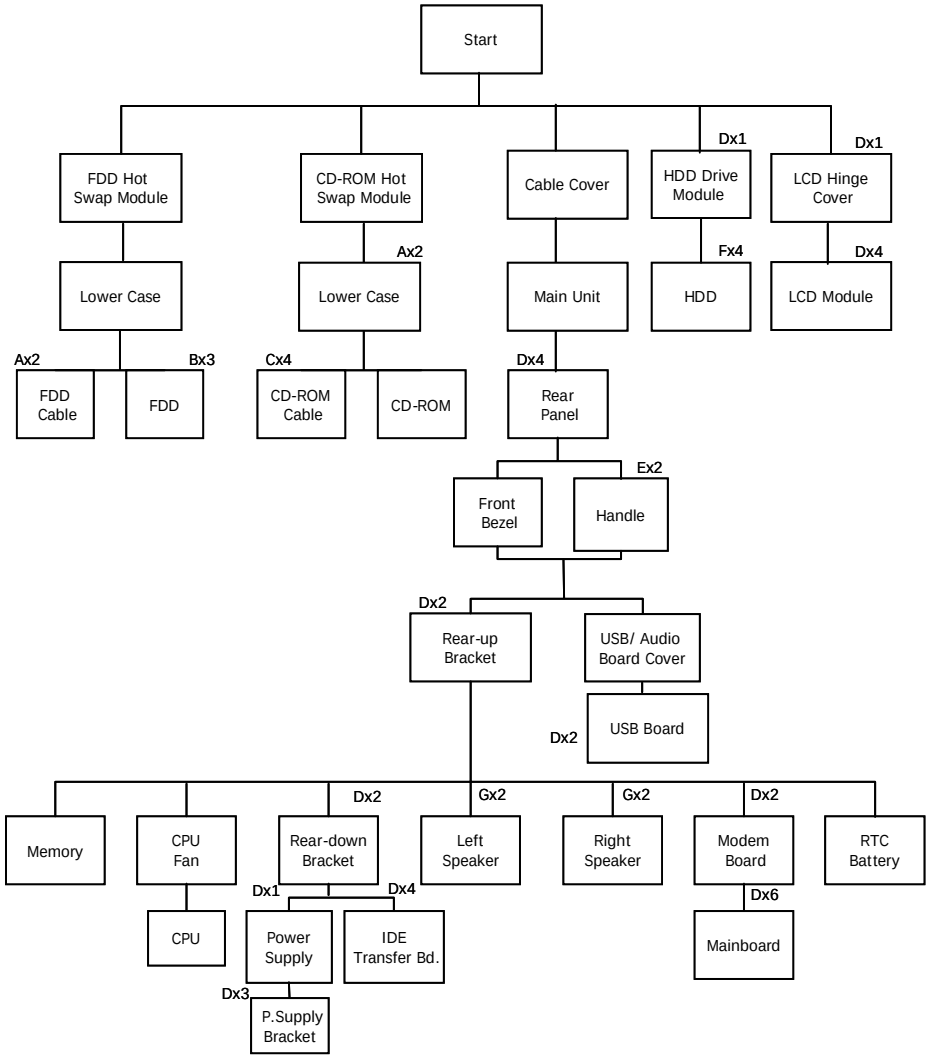
This chapter contains step-by-step procedures on how to disassemble the Veriton-FP2 for maintenance and troubleshooting.

To disassemble the computer, you need to fix the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge
- Flat-bladed screwdriver
- Phillips screwdriver
- Hexagonal screwdriver
- Plastic stick

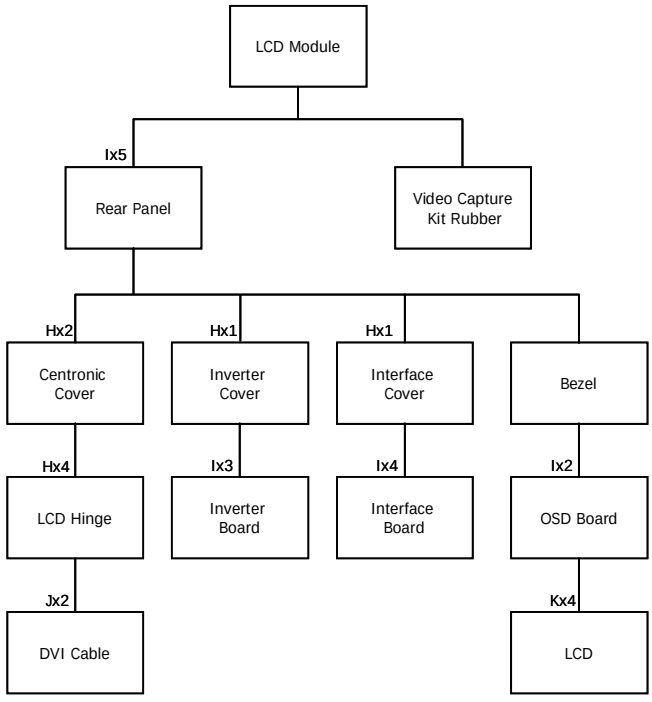
NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatches when putting back the components.

Disassembling Veriton FP2



Screw List	
Item	**Description**
A	M2x10L 86.1A522.100
B	M2.5x3L 86.1A523.3R0
C	M2x2 86.1A522.2R0
D	#6-32x4/16” 86.BA226.016
E	#6-32x4/16” 86.00A17.A60
F	#6-32x11.8 86.00A16.A60
G	M3x.5x6 86.BA224.6R0

Disassembling LCD Module



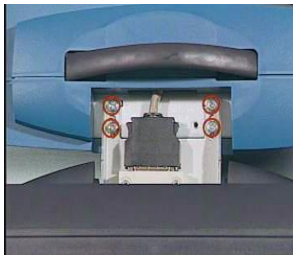
Screw List	
Item	**Description**
H	M3x4 86.BA224.4R0
I	M3x5 86.BA254.5R0
J	M3x16 86.1A234.160
K	M3x12 86.BA224.120

Removing the LCD

CAUTION: Before you proceed, make sure that you have turned off the system and all peripherals connected to it.

1. To remove the LCD, first remove the screw from the LCD hinge cover, then remove the LCD hinge cover from the system.


2. Remove these four screws from the LCD hinge, disconnect the DVI cable from the LCD hinge, then remove the LCD module upward from the system carefully.

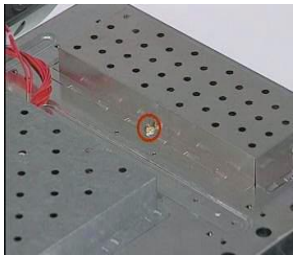
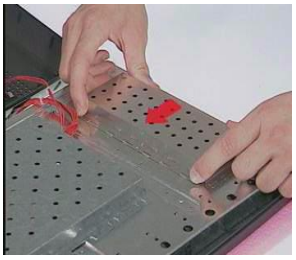


3. Remove the two video capture kit rubbers from the rear panel.

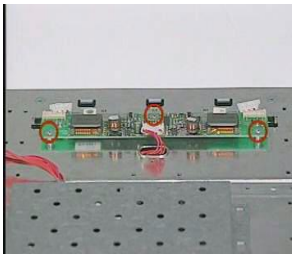

4. Remove the five screws from the rear panel.
5. Remove the rear panel from the LCD module carefully.


Removing the Inverter Board

1. To remove the inverter board, first remove the screw from the inverter cover.
2. Slide the inverter cover rightward to remove it from the system.

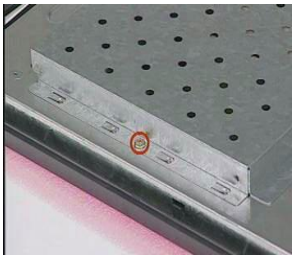



3. Remove the three screws from the inverter.
4. Remove the inverter board from the LCD module.

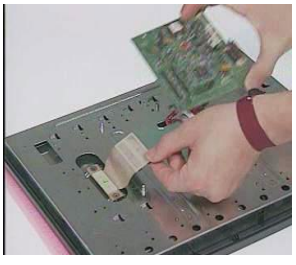



Removing the Interface Board

1. To remove the Interface board, first remove the screw from the interface cover.
2. Remove the interface cover rightward from the LCD module carefully..



3. Remove the interface board, first remove four screws from the interface board.
4. Remove the interface board from the LCD module.

Removing the OSD Board

1. To remove the OSD board, first release eight latches from the bezel as shown, then remove the bezel from the LCD.


2. Remove the two screws from the OSD board.
3. Remove the OSD board from the LCD.


Removing the LCD

1. To remove the LCD, first remove the four screws from the LCD.
2. Remove the LCD from the LCD chassis.


Opening the Housing

This section tells you how to open the housing cover when you need to install additional components inside the system unit.

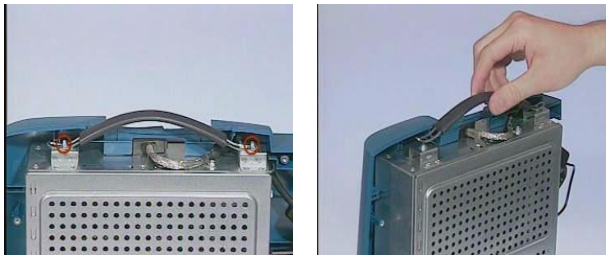
CAUTION: Before you proceed, make sure that you have turned off the system and all peripherals connected to it.

Removing the Handle

1. To remove the handle, first remove the cable cover downward and outward, then remove the cable cover from the system.

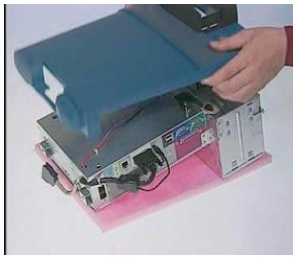
2. Remove the screw from the base of the unit and the three screws from the rear panel, then remove the rear panel from the system.

3. Remove the two screws from the handle, then remove the handle from the system.

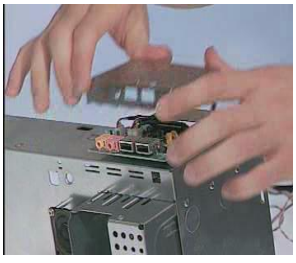


Removing the USB Board

1. To remove the USB board, first remove the front bezel from the panel gently.



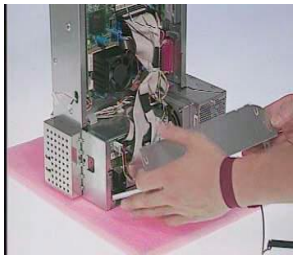
2. Remove the USB /Audio board cover forward, then take it away from the chassis carefully.

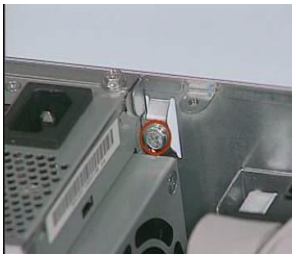
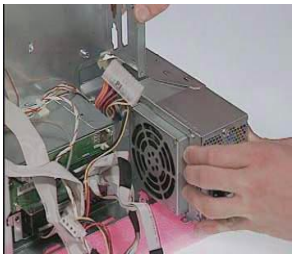
Removing the Power Supply

1. To remove the power supply, first remove the two screws from the rear-up bracket, then remove the rear-up bracket from the system.


2. Remove the two screws from the rear-down bracket, then remove the rear-down bracket from the system.

3. Remove the screw as shown, then remove the power supply from the system.

4. Remove the three screws from the power supply, then remove the power supply bracket from the power supply.


Removing the Modem Board

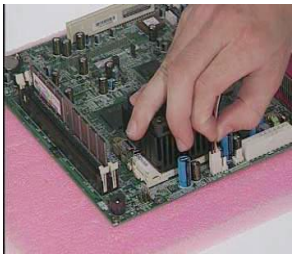
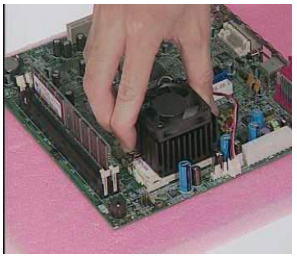
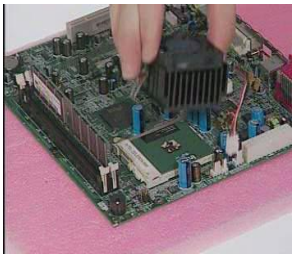
1. To remove the modem board, first remove the two screws as shown, then remove the modem board from the mainboard.


Removing the Mainboard

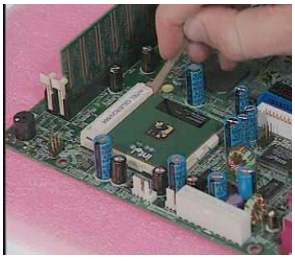
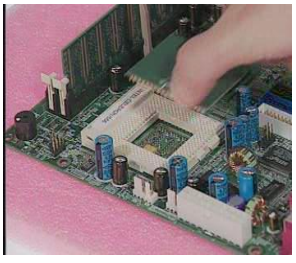
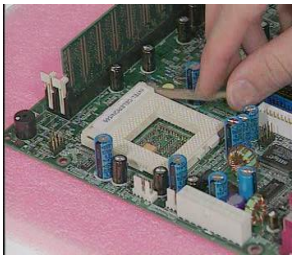
1. To remove the mainboard, first remove six screws from the mainboard, then remove the mainboard from the chasis carefully.


Removing the CPU

1. To remove the CPU, first disconnect the fan cable from the mainboard, press the fan clasp to release the lock of both sides, then remove the fan from the CPU.

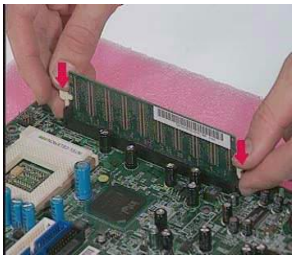
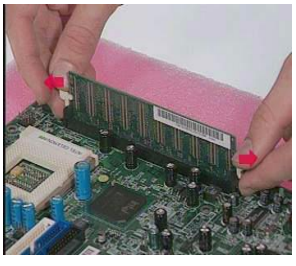
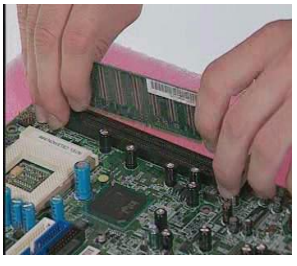




2. Pull the latch out on one side gently, remove the CPU from the socket carefully, then push the latch back.

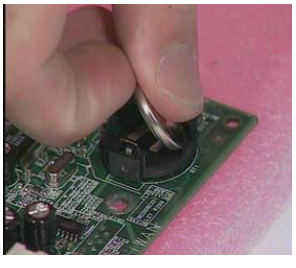
Removing the Memory

1. To release the system memory, press down and out on the levers on both sides of the DIMM socket, then lift the memory to remove it.

Removing the Battery

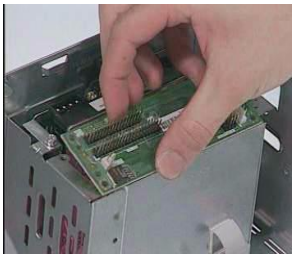
1. To remove the RTC battery from the holder, gently remove it from the holder by hand.



Removing the IDE Transfer Board

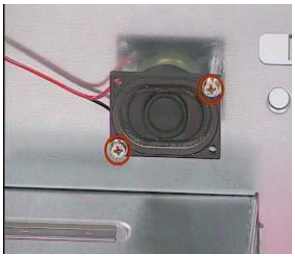
1. Remove the four screws from the IDE transfer board as shown, then remove the IDE transfer board from the chassis

.



Removing the Speaker

1. Remove the two screws from both left and right speakers as shown, then remove both speakers from the case.



Removing the FDD

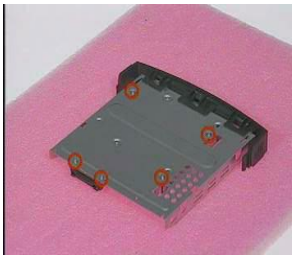
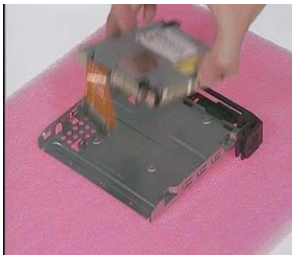
1. To remove the FDD, first push the FDD hot swap module release button as shown, then remove the FDD hot swap module from the system.


2. Press the two latches downward by bladed screw driver carefully.

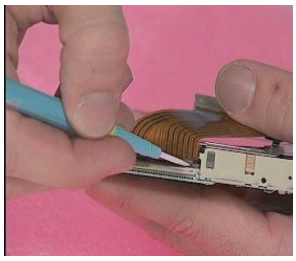
3. Rotate the FDD and move the lower case forward, then remove the it from the FDD module.

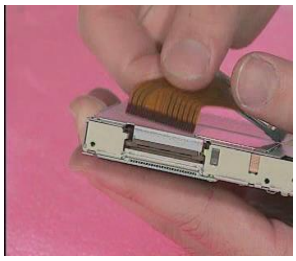


4. Remove the five screws as shown, then remove the FDD from the FDD frame.

5. Disconnect the FDD cable from the FDD, then remove the cable from the FDD



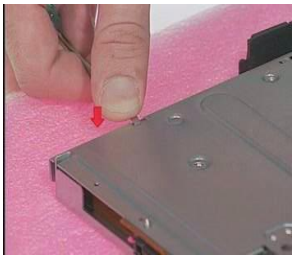


Removing the CD-ROM

1. To remove the CD-ROM, first push the CD-ROM hot swap module release button as shown.
2. Remove the CD-ROM hot swap module from the system.

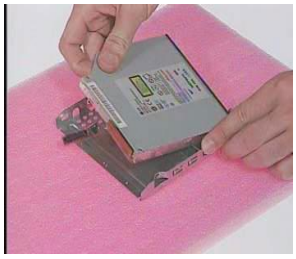

3. Remove the two screws from the CD-ROM modules as shown.

4. Rotate the CD-ROM and press the two latches downward as shown by the bladed screw driver carefully.

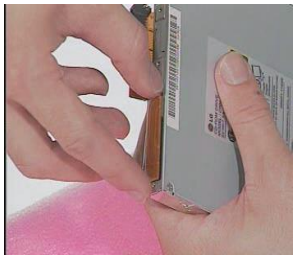


5. Rotate the CD-ROM and move the lower case forward, then remove the lower case from the CD-ROM module.


6. Remove the four screws as shown, then remove the CD-ROM from the CD-ROM frame.

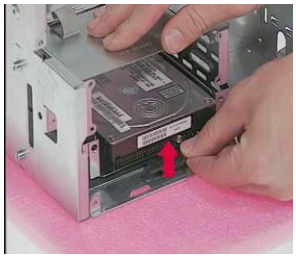
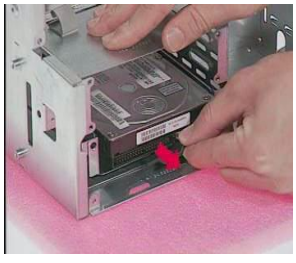
7. Disconnect the CD-ROM FPC cable from the CD-ROM, then remove the cable from the CD-ROM.




Removing the HDD

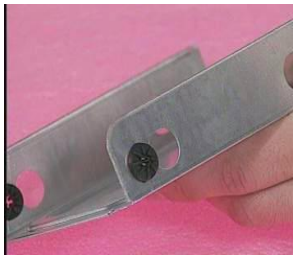
1. To remove the HDD, first remove the hard disk door from the rear panel.

2. Remove the screw from the chassis as shown, pull the hard disk drive module release bar upward and outward, then remove the hard disk drive module from the chassis carefully.


3. Remove the four screws from the HDD case, and then remove the HDD from the case.


4. Remove the HDD screw soft mount from the HDD case.



Troubleshooting

This chapter provides troubleshooting information for the Veriton FP2:

- Power-On Self-Test (POST)
- Index of Error Messages
- Index of Error Codes and Error Beeps
- Index of Error Symptoms
- 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 on screen, generates a check point code at port 80h or even halts the system if the error is fatal.

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

- ❑ Microprocessor with built-in numeric co-processor and cache memory subsystem
- ❑ Direct Memory Access (DMA) controller
- ❑ Interrupt system
- ❑ Three programmable timers
- ❑ 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
- ❑ Serial port
- ❑ Parallel port
- ❑ USB ports

POST Error Messages List

If you cannot run the diagnostics program tests but did receive a POST error message, use “POST Error Messages List” to diagnose system problems. If you did not receive any error message, look for a description of your error symptoms in “Error Symptoms List” on page 71.

NOTE: When you have deemed it necessary to replace an FRU, and have done so, you must run a total system check to ensure that no other activity has been affected by the change. This system check can be done through the diagnostics program.

NOTE: Check all power supply voltages, switch, and jumper settings before you replace the main board. Also check the power supply voltages if you have a “system no-power” condition.

If you are unable to correct the problem by using the “BIOS Messages List” table and “Error Symptoms List” table, go to “Undetermined Problems” on page 75.

NOTE: To diagnose a problem, first find the BIOS error messages in the left column. If directed to a check procedure, replace the FRU indicated in the check procedure. If no check procedure is indicated, the first Action/FRU listed in right column is the most likely cause.

BIOS Messages	Action/FRU
I/O Parity Error	1. System board
CPU Clock Mismatch	1. Enter BIOS Setup and load the default settings. 2. Ensure BIOS setting for processor is set correctly.
Real Time Clock Error CMOS Battery Bad CMOS Checksum Error	1. Enter BIOS Setup and load the default settings. 2. RTC Battery. 3. System Board.
Equipment Configuration Error	1. Ensure the system configuration set in BIOS Setup is correct. 2. Enter BIOS Setup and load the default settings. 3. RTC battery. 4. System board.
System Management Memory Bad Memory Error at MMMM:SSSS:OOOOh	1. Insert the memory modules in the DIMM sockets properly, then reboot the system. 2. Memory module. 3. System board.
RAM Parity Error	1. Enter BIOS Setup to disable parity check. 2. Memory module 3. System board
Onboard xxx... Conflict(s)	1. Enter BIOS Setup and load the default settings. 2. Remove all adapter cards that are NOT factory-installed, then reboot the system.
Floppy Disk Controller Error Floppy Drive A Error Floppy Drive B Error	1. Diskette drive cable/connection. 2. Diskette drive. 3. System board
On Board Parallel Port Conflict(s) On Board Serial Port 1 Conflict(s)	1. Enter BIOS Setup and load the default settings. 2. Remove all adapter cards that are NOT factory-installed, then reboot the system.
Floppy Drive(s) Write Protected Hard Disk Drive(s) Write Protected	1. Ensure that the diskette drive is not set to [Write Protected] in the Security Options in BIOS Setup. 2. Load default settings in Setup.
IDE Drive 0 Error IDE Drive 1 Error IDE Drive 2 Error IDE Drive 3 Error	1. Enter BIOS Setup and load the default settings. 2. Check IDE drive jumper. 3. IDE hard disk drive power. 4. IDE hard disk drive cable/connection. 5. IDE hard disk drive.

BIOS Messages	Action/FRU
IRQ Setting Error Expansion ROM Allocation Fail I/O Resource Conflict(s) Memory Resource Conflict(s)	1. Load default settings in Setup. 2. Enter BIOS Setup and set the **Reset Resource Assignments** of the **PnP/PCI Options** to Yes, then reboot the system. 3. Remove all adapter cards that are NOT factory-installed, then reboot the system 1.
PCI Device Error	1. Load default settings in Setup. 2. Enter BIOS Setup and set the **Reset Resource Assignments** of the **PnP/PCI Options** to Yes, then reboot the system. 3. Remove all adapter cards that are NOT factory-installed, then reboot the system.
DMI Table Was Destroyed	1. Flash BIOS
Press **Ctrl** + **Alt** + **Esc** key to enter Setup or F1 key to continue	1. Press **Ctrl+Alt+Del** to enter Setup and reconfigure the system.
Press **Esc** to turn off NMI, or any key to reboot	1. Press **Esc** to reject NMI error or press any other key to reboot the system.
Insert system diskette and press <Enter> key to reboot	1. Insert a bootable disk into the floppy disk drive or remove this disk if a hard disk is installed.

Error Symptoms List

NOTE: To diagnose a problem, first find the error symptom in the left column. If directed to a check procedure, replace the FRU indicated in the check procedure. If no check procedure is indicated, the first Action/ FRU listed in right column is the most likely cause.

Error Symptom	Action/FRU
Processor / Processor Fan	
NOTE: Normally, the processor fan should be operative, and the processor clock setting should be exactly set to match its speed requirement before diagnosing any processor problems.	
Processor fan does not run but power supply fan runs.	1. Ensure the system is not in power saving mode. See “Power Management” in chapter 2. 2. With the system power on, measure the voltage of processor fan connector. Its reading should be +12Vdc. 3. System board.
Processor test failed.	1. Processor. 2. System board.
System Board and Memory	
NOTE: Ensure the memory modules are installed properly and the contact leads are clean before diagnosing any system problems.	
Memory test failed.	1. See "Memory" 2. System board
Incorrect memory size shown or repeated during POST.	1. Insert the memory modules in the DIMM sockets properly, then reboot the system. 2. Memory module. 3. System board.
System works but fails to enter power saving mode when the `Power Management Mode` is set to `Enabled`, and power saving timer set in BIOS has elapsed.	1. Enter BIOS Setup and load default settings. In Windows 98, check settings in Power Management Property of Control Panel. 2. Reload software from Recovery CD.
System hangs before system boot.	1. See "Index of Symptoms" 2. See "Undetermined Problems"
System hangs after system boot.	1. Execute a system test and set it to stop at “Halt on Error” to see the potential cause of the problem. 2. See “Undetermined Problems”.
Blinking cursor only; system does not work.	1. Diskette/IDE drive connection/cables 2. Diskette/IDE disk drives 3. See “Undetermined Problems”. 4. System board
Diskette Drive	
NOTE: Ensure the diskette drive is configured correctly in BIOS Setup and its read/write head is clean before diagnosing any diskette drive problems.	
Media and drive are mismatched.	1. Ensure the diskette drive is configured correctly in the Disk Drives of BIOS Setup. 2. Ensure the diskette drive is correctly formatted. 3. Diskette drive connection/cable 4. Diskette drive 5. System board
Diskette drive does not work.	1. Ensure the diskette drive is not set to `None` in the Disk Drives of BIOS Setup. 2. Diskette drive power 3. Diskette drive connection/cable 4. Diskette drive 5. System board

Error Symptom	Action/FRU
Diskette drive read/write error.	1. Diskette. 2. Ensure the diskette drive is not set to `Write protect` in the Security Options of BIOS Setup. 3. Diskette drive cable. 4. Diskette drive. 5. System board.
Diskette drive LED comes on for more than 2 minutes when reading data.	1. Diskette 2. Diskette drive connection/cable 3. Diskette drive 4. System board
Diskette drive LED fails to light, and the drive is unable to access for more than 2 minutes.	1. Diskette 2. Diskette drive power 3. Diskette drive connection/cable 4. Diskette drive 5. System board
Diskette drive test failed.	1. Diskette 2. Diskette drive 3. Diskette drive cable 4. System board
Hard Disk Drive	
NOTE: Ensure hard disk drive is configured correctly in BIOS Setup, cable/jumper are set correctly before diagnosing any hard disk drive problems.	
Hard disk drive test failed.	1. Enter BIOS Setup and Load default settings. 2. Hard disk drive cable. 3. Hard disk drive. 4. System board.
Hard disk drive cannot format completely.	1. Enter BIOS Setup and Load default settings. 2. Hard disk drive cable. 3. Hard disk drive. 4. System board.
Hard disk drive has write error.	1. Enter BIOS Setup and Load default settings. 2. Hard disk drive.
Hard disk drive LED fails to light, but system operates normally.	1. With the system power on, measure the voltage of hard disk LED connector. 2. Hard drive LED cable.
CD/DVD-ROM Drive	
NOTE: Ensure CD/DVD-ROM drive is configured correctly in BIOS Setup, cable/jumper are set correctly and its laser beam is clean before diagnosing any CD/DVD-ROM drive problems.	
CD/DVD-ROM drive LED doesn't come on but works normally.	1. CD/DVD-ROM drive
CD/DVD-ROM drive LED flashes for more than 30 seconds before LED shutting off. Software asks to reinstall disc. Software displays a reading CD/DVD error.	1. CD/DVD-ROM may have dirt or foreign material on it. Check with a known good disc. 2. CD/DVD-ROM is not inserted properly. 3. CD/DVD-ROM is damaged.
CD/DVD-ROM drive cannot load or eject when the system is turned on and its eject button is pressed and held.	1. Disconnect all cables from CD/DVD-ROM drive except power cable, then press eject button to try to unload the disk. 2. CD/DVD-ROM drive power. 3. CD/DVD-ROM drive
CD/DVD-ROM drive does not read and there are no messages are displayed.	1. CD may have dirt or foreign material on it. Check with a known good disc. 2. Ensure the CD/DVD-ROM driver is installed properly. 3. CD/DVD-ROM drive.

Error Symptom	Action/FRU
CD/DVD-ROM drive can play audio CD but no sound output.	1. Ensure the headphone jack of the CD/DVD-ROM has an output. 2. Turn up the sound volume. 3. Speaker power/connection/cable. 4. CD/DVD-ROM drive.
Real-Time Clock	
Real-time clock is inaccurate.	1. Ensure the information in the `Date and Time` of BIOS Setup is set correctly. 2. RTC battery. 3. System board
Audio	
Audio software program invokes but no sound comes from speakers.	1. Speaker power/connection/cable.
Modem	
Modem ring cannot wake up system from suspend mode.	1. Ensure the `Modem Ring Indicator` in BIOS Setup or `Power Management` is set to `Enabled`. 2. If PCI modem card is used, reinsert the modem card to PCI slot firmly or replace the modem card. 3. If ISA modem card is used, ensure the modem ring-in cable from the modem card to system board is connected properly. 4. In Win 98, ensure the telephone application is configured correctly for your modem and set to receive messages and/or fax.
Data/fax modem software program invokes but cannot receive/send data/fax	1. Ensure the modem card is installed properly.
Fax/voice modem software program invokes but has no sound output. (Data files are received normally; voice from modem cannot be produced, but system sound feature works normally.)	1. Ensure the modem voice-in cable from modem adapter card to system board
Video and Monitor	
Video memory test failed. Video adapter failed.	1. Remove all non-factory-installed cards. 2. Load default settings (if screen is readable). 3. System board
Display problem: - Incorrect colors No high intensity Missing, broken, or incorrect characters Blank monitor(dark) Blank monitor(bright) Distorted image Unreadable monitor Other monitor problems	1. Monitor signal connection/cable. 2. Monitor 3. Video adapter card 4. System board
Display changing colors.	1. Monitor signal connection/cable 2. Monitor 3. System board
Display problem not listed above (including blank or illegible monitor).	1. “Monitor". 2. Load default settings (if screen is readable). 3. System board

Error Symptom	Action/FRU
Parallel/Serial Ports	
Execute “Load BIOS Default Settings” in BIOS Setup to confirm ports presence before diagnosing any parallel/serial ports problems.	
Serial or parallel port loop-back test failed.	1. Make sure that the LPT# or COM# you test is the same as the setting in BIOS Setup. 2. Loop-back. 3. System board.
Printing failed.	1. Ensure the printer driver is properly installed. Refer to the printer service manual. 2. Printer. 3. Printer cable. 4. System board.
Printer problems.	1. Refer to the service manual for the printer.
Keyboard	
Some or all keys on keyboard do not work.	1. Keyboard
Power Supply	
Pressing power switch does not turn off system. (Only unplugging the power cord from electrical outlet can turn off the system.)	1. Ensure the `Power Switch < 4 sec.` in BIOS Setup of `Power Management` is not set to `Suspend`. 2. Power switch cable assembly
Pressing power switch does not turn on the system.	1. Ensure the power override switch (situated at the back of the machine, just above the connector for the power cable) is not set to OFF. 2. Power switch cable assembly.
Executing software shutdown from Windows98 Start menu does not turn off the system. (Only pressing power switch can turn off the system).	1. Load default settings. 2. Reload software from Recovery CD.
No system power, or power supply fan is not running.	1. Power Supply 2. System Board
Other Problems	
Any other problems.	1. Undetermined Problems

Undetermined Problems

If an error message is present, go to “POST Error Messages List” on page 69. If you did not receive any messages, see if the symptom is listed in “or “Error Symptoms List” on page 71. If you still cannot solve the problem, continue with this check:

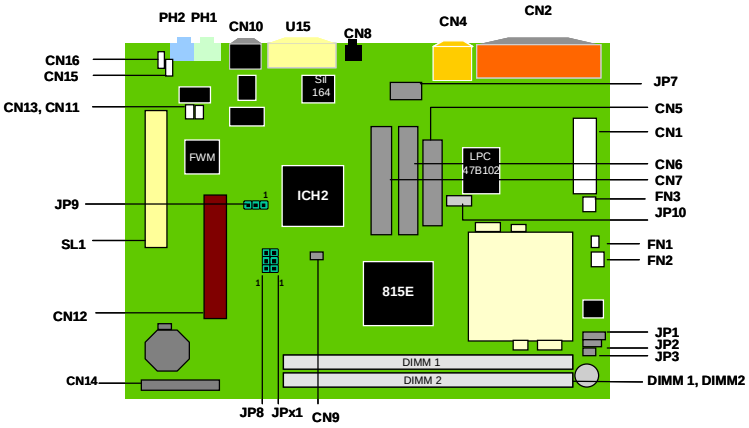
1. Check the power supply voltages. If the voltages are correct continue with the following steps:
2. Power off the system unit.
3. Perform the following checks, one by one, until you have isolated the problem FRU.
4. Load default settings in setup.
5. Check all system board jumper positions and switch settings.
6. Check all adapter card jumper positions.
7. Check all device jumper positions.
8. Check all cables and connectors for proper installation.
9. If the jumpers, switches and voltage settings are correct, remove or disconnect the following, one at a time:
10. Non-Acer devices
    - ❑ External devices
    - ❑ Any adapter card (modem card, LAN card or video card, if installed)
    - ❑ CD/DVD-ROM drive
    - ❑ Diskette drive
    - ❑ Hard disk drive
    - ❑ DIMM
    - ❑ Processor
    - ❑ System board
11. Power on the system unit.
12. Repeat steps 2 through 5 until you find the failing device or adapter.

Jumper and Connector Information

Jumpers and Connectors

Refer to the following figure for the location of the jumpers and connectors on the main board:

Main board



Connector Description

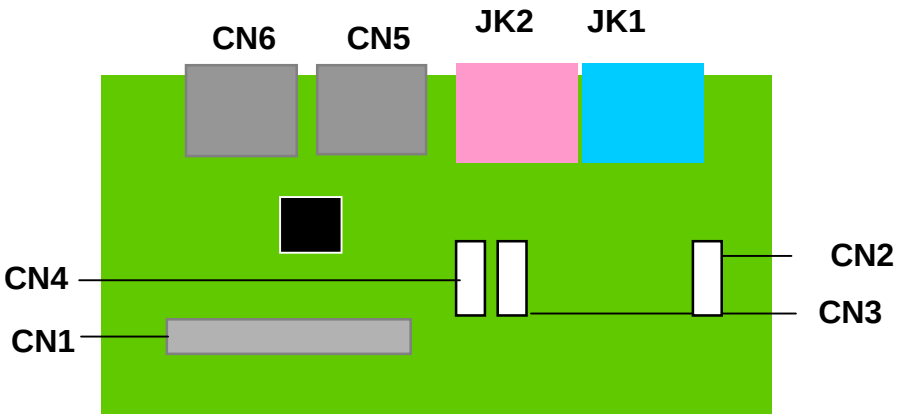
Connector No.	Description
CN1	Power Connector
CN2	LPT1/VGA/COM1
CN4	USB*2
CN5	FDD Connector
CN6	IDE1 Connector
CN7	IDE2 Connector
CN8	12V power supply
CN9	Intrusion Alert Micro Switch Cable Connector
CN10	RJ45 (10/100 LAN Connector)
CN11	Speaker Out (Right Channel)
CN12	AGP Right Angle Slot
CN13	Speaker Out (Left Channel)
CN14	Audio/USB daughter board interface connector
CN15	Audio Line-out, joint audio daughter board
CN16	Audio Line-in, joint audio daughter board
DIMM1, DIMM2	2 DIMM Slots
FN1	2 Pin CPU Fan Connector(Function is removed when shop out)
FN2	3 Pin CPU Fan Connector
FN3	System Fan Connector
PH1	Line-Out
PH2	Line-In
SL1	PCI Slot
U15	DVI

Jumper Setting

Jumper	Function and settings
JP1	HDD LED
JP2	Power LED
JP3	Power Switch
JP7	RF Header
JP8 1-2 2-3	 SAFE MODE NORMAL*
JP9 1-2 2-3	Boot Block Select Boot From Top Block Notmal*
JP10	Hot Swap Interface Header
JPX1 1-2 2-3	 CLEAR CMOS NORMAL*

NOTE: *: Default Settings

Audio Board



Connector No.	Description
CN1	Joint Motherboard Connector
CN2	Line-Out
CN3	Line-In
CN4	CD-In
CN5	USB
CN6	USB
JK1	Headphone
JK2	MIC-In

FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of Veriton FP2 . Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

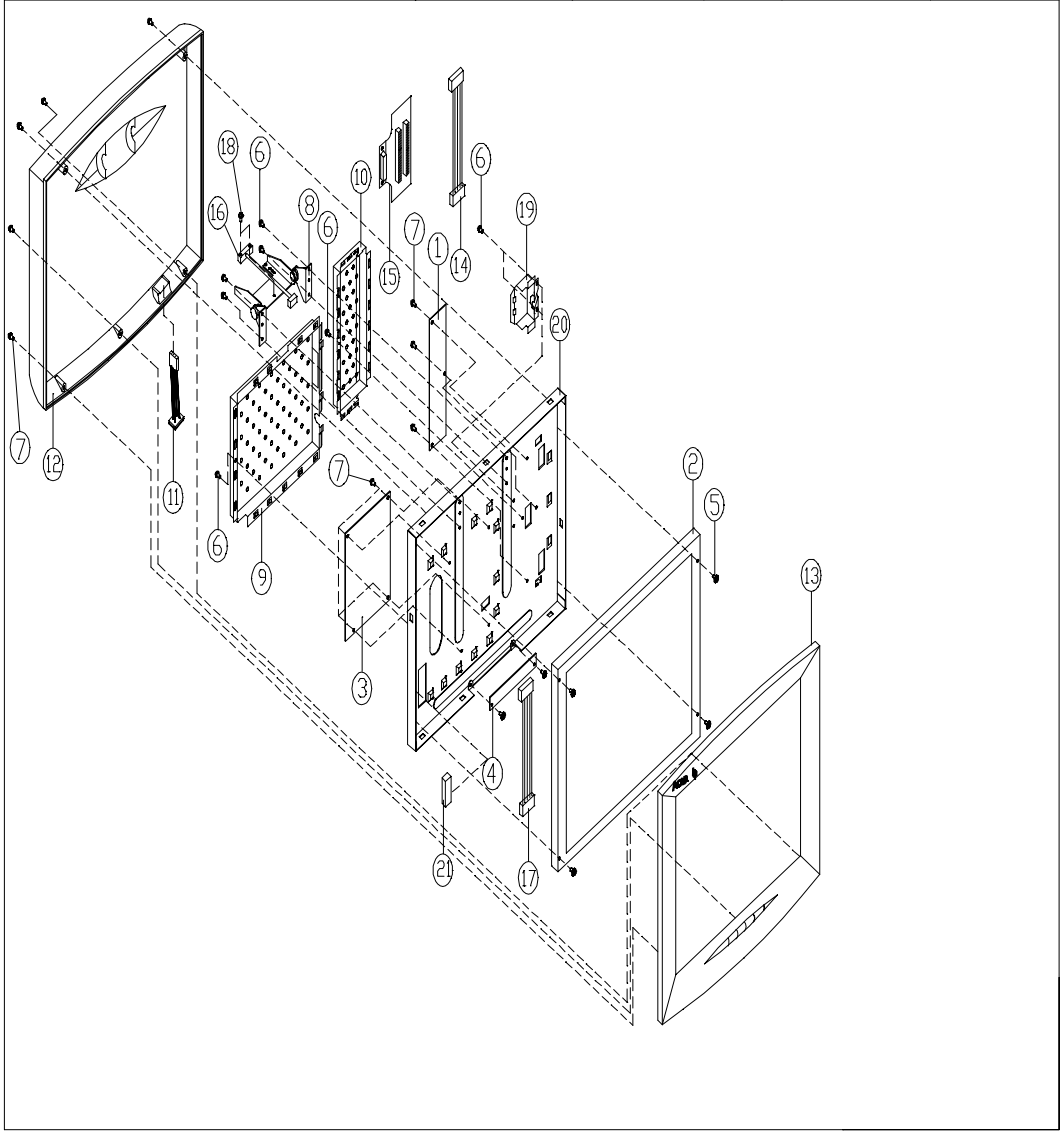
IMPORTANT: Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office 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.

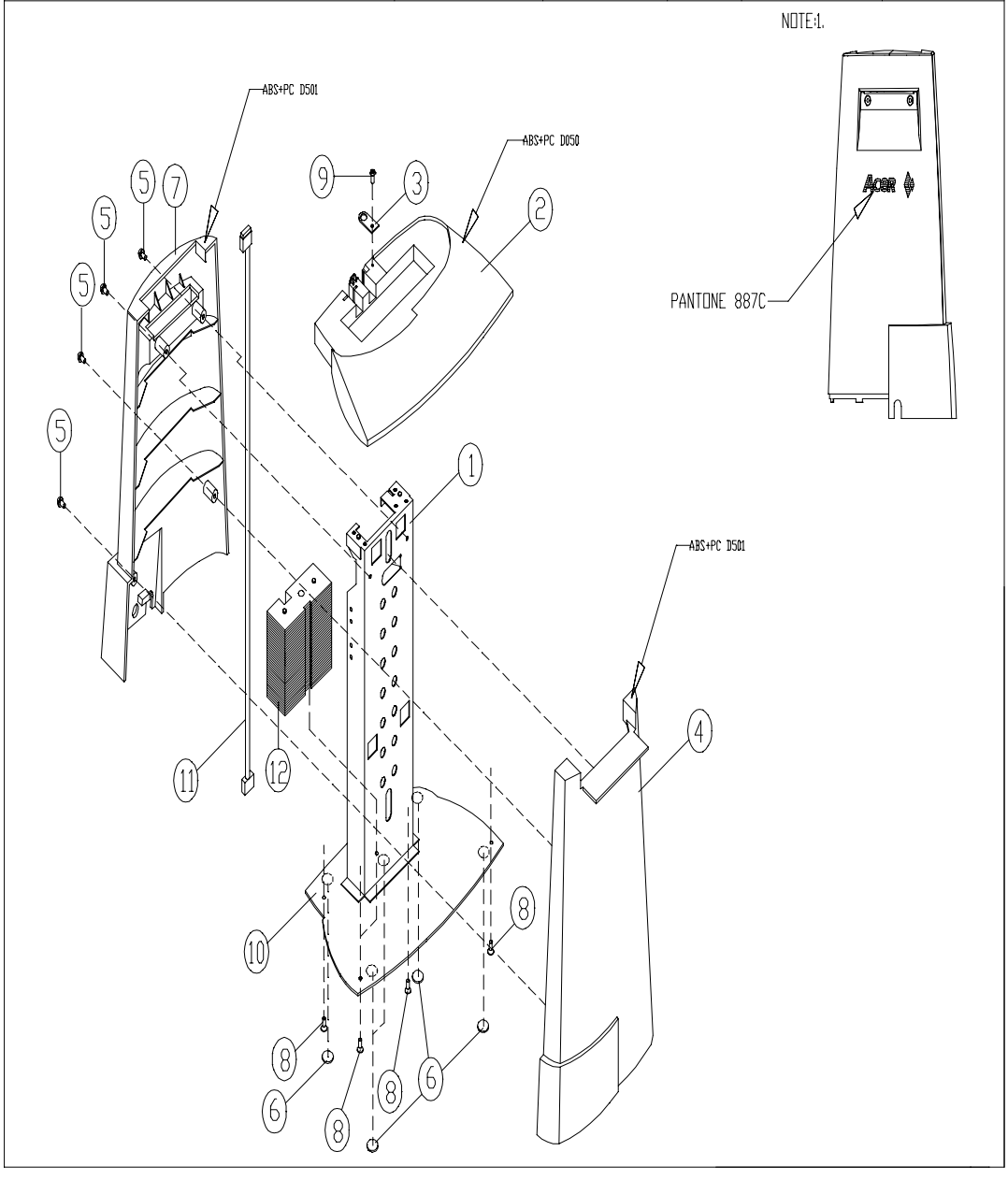
NOTE: The number indicates the location shown on exploded diagram or “NS” indicates “Not shown” on it.

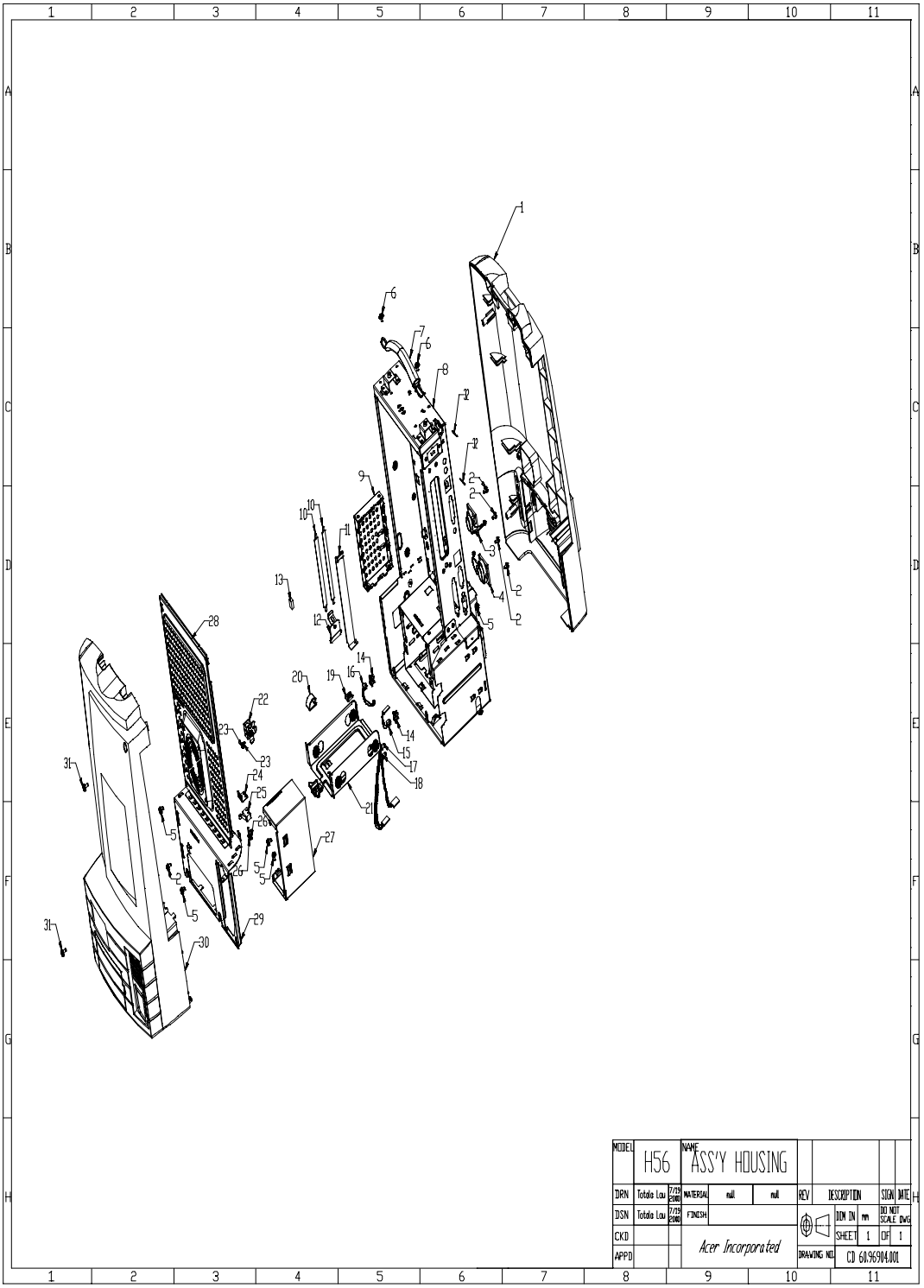
Veriton FP2 Exploded Diagram

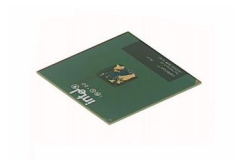
SUBJECT: EXPLODED DRAWING FOR H56 LCD MODULE FOR FUJI LCD PROJECT CODE: 91.96920.001	PART NO.: 81.96920.101	DOC. NO.: H405-	REV.: 0	RELEASE DATE:	PAGE 1 OF 1



SUBJECT: EXPLODED DRAWING FOR H56 LCD STAND PROJECT CODE: 81.96920.001	PART NO.: 81.96920.201	DOC. NO.: H405-	REV.: 0	RELEASE DATE:	PAGE 1 OF 1




MODEL H56
NAME ASS'Y HOUSING
DRN Totala Lau 7/29/2005
DSN Totala Lau 7/29/2005
CKD
APPD
MATERIAL null null
FINISH
REV DESCRIPTION SIGN DATE
DIM IN mm
DO NOT SCALE DWG
SHEET 1 OF 1
Acer Incorporated
DRAWING NO. CD 60.W6304.001

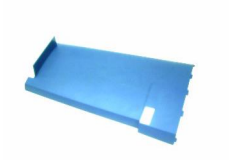
Picture	No.	Partname	Description	Part No.
CPU				
	NS	CPU PIII COPPERMINE933MHZ 256K 133M INTEL	IC CPU COPP933/133/256 FCPGA	01.COPRM.933
		CPU CELERON566MHZ 128K 66M INTEL	IC CPU CELER566/128K/ 66M 0D	01.ICLON.566
		CPU CELERON600MHZ 128K 66M INTEL	IC CPU CELER600/128K/ 66M 0D	01.ICLON.600
		CPU CELERON633MHZ 128K INTEL	IC CPU CELER633/128K OD FCPGA	01.ICLON.633
		CPU CELERON667MHZ 128K INTEL	IC CPU CELER667/128K OD FCPGA	01.ICLON.667
		CPU CELERON700MHZ 128K INTEL	IC CPU CELER700/128K OD FCPGA	01.ICLON.700
		CPU CELERON733MHZ 128K INTEL	IC CPU CELON733/128K FCPGA	01.ICLON.733
		CPU PIII COPPERMINE600MHZ 256K 100M INTEL	IC CPU COP600/100/256 FCPGA B0	01.COPRM.60I
		CPU PIII COPPERMINE600MHZ 256K 133M INTEL	IC CPU COP600EB/133 C0 FCPGA	01.COPRM.60K
		CPU PIII COPPERMINE650MHZ 256K 100M INTEL	IC CPU COP650/100/256 FCPGA B0	01.COPRM.65E
		CPU PIII COPPERMINE650MHZ 256K 100M INTEL	IC CPU COP650/100FSB C0 FCPG	01.COPRM.65G
		CPU PIII COPPERMINE700MHZ 256K 100M INTEL	IC CPU COP700/100256 FCPGA B0	01.COPRM.70G
		CPU PIII COPPERMINE700MHZ 256K 100M INTEL	IC CPU COP700/100FSB C0 FCPG	01.COPRM.70H
		CPU PIII COPPERMINE750MHZ 256K 100M INTEL	IC CPU COP750/100/256 FCPGA B0	01.COPRM.75G
		CPU PIII COPPERMINE750MHZ 256K 100M INTEL	IC CPU COP750/100FSB C0 FCPG	01.COPRM.75H
		CPU PIII COPPERMINE800MHZ 256K 100M INTEL	IC CPU COPP800/100/256/ 0D FCPG	01.COPRM.80B
		CPU PIII COPPERMINE800MHZ 256K 100M INTEL	IC CPU COP800/100FSB C0 FCPG	01.COPRM.80J
		CPU PIII COPPERMINE850MHZ 256K 100M INTEL	IC CPU COPP850/100/256 0D FCPG	01.COPRM.850
		CPU PIII COPPERMINE850MHZ 256K 100M INTEL	IC CPU COP850/100FSB C0 FCPG	01.COPRM.85D

Picture	No.	Partname	Description	Part No.
	NS	CPU PIII COPPERMINE600MHZ 256K 133M INTEL	IC CPU COPPER600EB/ 133 FCPGA	01.COPRM.60E
		CPU PIII COPPERMINE600MHZ 256K 133M INTEL	IC CPU COP600EB/133 C0 FCPGA	01.COPRM.60K
		CPU PIII COPPERMINE667MHZ 256K 133M INTEL	IC CPU COP667/133/256 FCPGA B0	01.COPRM.66C
		CPU PIII COPPERMINE667MHZ 256K 133M INTEL	IC CPU COP667/133FSB C0 FCPG	01.COPRM.66D
		CPU PIII COPPERMINE733MHZ 256K 133M INTEL	IC CPU COP733/133/256 FCPGA B0	01.COPRM.73C
		CPU PIII COPPERMINE733MHZ 256K 133M INTEL	IC CPU COP733/133FSB C0 FCPG	01.COPRM.73D
		CPU PIII COPPERMINE800MHZ 256K 133M INTEL	IC CPU COPP800B/133/ 256/0D FCP	01.COPRM.800
		CPU PIII COPPERMINE800MHZ 256K 133M INTEL	IC CPU COP800/133FSB C0 FCPG	01.COPRM.80K
		CPU PIII COPPERMINE866MHZ 256K 133M INTEL	IC CPU COPP866/133/256/ 0D FCPG	01.COPRM.866
		CPU PIII COPPERMINE866MHZ 256K 133M INTEL	IC CPU COP866/133FSB C0 FCPG	01.COPRM.86B
		CPU PIII COPPERMINE933MHZ 256K 133M INTEL	IC CPU COP933/133FSB C0 FCPG	01.COPRM.93B
		CPU PIII COPPERMINE1GHZ 256K 133M INTEL	IC CPU COPP1GHZ/133 256K FCPGA	01.COPRM.1GB
Memory				
	NS	MEMORY SDIMM 128M PC133 INFINEON	SDIMM 128M 64V16220GU-7.5C(ACE	72.64162.L05
		MEMORY DIMM 64M PC133 MICRON	DIMM 64M MT8LSDT864AG133C7	72.08864.L05
		MEMORY SDIMM 64M PC133 MICRON	SDIMM 64MB MT4LSDT864AG-133B1	72.04864.L01
		MEMORY SDIMM 64M PC133 MICRON	SDIMM 64MB MT4LSDT864AG-133B1	72.04864.A0N
		MEMORY DIMM 128M PC133 MICRON	DIMM 128M MT16LSDT1664AG-133C7	72.16664.L04
		MEMORY SDIMM 128M PC133 MICRON	SDIMM 128M MT8LSDT1664AG-133B1	72.81664.L01
		MEMORY SDIMM 256M PC133 MICRON	SDIMM 128M MT8LSDT1664AG-133B1	72.81664.A0N
		MEMORY SDIMM 256M PC133 MICRON	SDIMM 256M MT16LSDT3264AG-133B	72.16326.L01
		MEMORY SDIMM 256M PC133 MICRON	SDIMM 256M MT16LSDT3264AG-133B	72.16326.00N

Picture	No.	Partname	Description	Part No.
	NS	MEMORY SDIMM 64M PC133 INFINEON	SDIMM 64M 64V8300GU-7.5-C(ACER	72.64830.L04
		MEMORY SDIMM 64M PC133 INFINEON	SDIMM 64M 64V8300GU-7.5-C(IBM	72.64830.C0N
		MEMORY SDIMM 128M PC133 INFINEON	SDIMM 128M 64V16220GU-7.5-C(B)	72.64162.E0N
		MEMORY SDIMM 256M PC133 INFINEON	SDIMM 256M 64V32300GU-7.5-A(A)	72.64323.L02
		MEMORY SDIMM 256M PC133 INFINEON	SDIMM 256M 64V32300GU-7.5-A(B)	72.64323.A0N
		MEMORY SDIMM 64M PC100 MICRON	SDIMM 64M MT8LSDT864AG-10EC7	72.08864.L04
		MEMORY DIMM 64M PC100 MICRON	DIMM 64M MT4LSDT864AG-10EB1	72.16864.L01
		MEMORY DIMM 64M PC100 MICRON	DIMM 64M MT4LSDT864AG-10EB1	72.16864.00N
		MEMORY SDIMM 128M PC100 MICRON	SDIMM 128M MT16LSDT1664AG-10EC	72.16164.L03
		MEMORY DIMM 128M PC100 MICRON	DIMM 128M MT8LSDT1664AG-10EB1	72.81664.L02
		MEMORY DIMM 128M PC100 MICRON	DIMM 128M MT8LSDT1664AG-10EB1	72.81664.B0N
		MEMORY SDRAM 64M PC100 INFINEON	SDRAM 64MB HYS64V8300GU-8-C(A)	72.64830.L03
		MEMORY SDRAM 64M PC100 INFINEON	SDRAM 64MB HYS64V8300GU-8-C(B)	72.64830.B0N
		MEMORY SDRAM 128M PC100 INFINEON	SDRAM 128M HYS64V16220GU-8-C(A	72.64162.L04
		MEMORY SDRAM 128M PC100 INFINEON	SDRAM 128M HYS64V16220GU-8-C(B	72.64162.D0N
		MEMORY SDIMM 256M PC100 INFINEON	SDIMM 256M 64V32300GU-8-A(ACER	72.64323.L01
		MEMORY SDIMM 256M PC100 INFINEON	SDIMM 256M 64V32300GU-8-A(IBM)	72.64323.00N
LCD				
	p.82 -1	INVERTER HITACHI/PH-BLC54 V.C	INVERTER HITACHI/PH-BLC54 V.C	54.05025.001
	p.82-2	LCD 15" FUJITSU/ FLC38XGC6V	LCD 15"FUJITSU/ FLC38XGC6V	56.07338.061

Picture	No.	Partname	Description	Part No.
	p.82 -3	LCD INTERFACE BOARD	LCD INTERFACE BOARD S511P	55.37H05.D01
	p.82 -4	On Screen Display(OSD) CONTROL BOARD	OSD CONTROL BOARD S511P	55.37H06.D01
	p.82 - 8	LCD HINGE	LCD HINGE M H56	34.96903.001
	p.82 - 9	INTERFACE BOARD COVER	CVR INTERFACE H56	34.96901.001
	p.82 -10	INVERTER BOARD COVER	CVR INVERTER H56	34.96902.001
	p.82 -12	LCD PANEL	ASSY LCD REAR H56	60.96903.001
	p.82 -11	POWER SWITCH CABLE 4PIN	W.A 4P POWER SWITCH 15MM H56	50.96904.001

Picture	No.	Partname	Description	Part No.
	p.82 -13	LCD BEZEL	ASSY LCD FRONT H56	60.96902.001
	NS	VIDEO CAPTURE KIT RUBBER	RUBBER CAMERA TM340	47.40F07.002
	p.82 -14	INVERTER CABLE 6/6PIN	W.A 6P/6P INVERTER 15MM H56	50.96903.001
	p.82 -15	LCD FPC CABLE 80PIN	C.A 80P FPC TO LCD PANEL H56	50.96905.001
	p.82 -16	INTERFACE BOARD CABLE 36/36PIN	C.A 36P/36P INTERFACE 15MM H56	50.96901.001
	p.82 -17	OSD BOARD CABLE 12/ 12PIN	W.A 12P/12P OSD WIRE 15MM H56	50.96902.001
	p.82 -19	CENTRONIC COVER	CENTRONIC CVR H56	34.96913.001

Picture	No.	Partname	Description	Part No.
	p.82 -20	LCD CHASSIS	ASSY LCD BASE FJ	60.96920.011
LCD Foot Stand				
	NS	LCD FOOT STAND	H56 LCD STAND	81.96920.201
	p.83 -1	LCD STAND CASE	ASSY LCDSTAND METAL H56	60.96926.001
	p.83 -2	LCD STAND BASE COVER	LCDSTAND BASE MCS-050 H56	42.96906.011
	p.83 -7	LCD STAND PANEL	ASSY LCDSTAND REAR H56	60.96916.001
	p.83 -11	DVI/DC CABLE 36PIN 180CM	C.A 36P DVI/DC JACK 180CM H56	50.96906.001
	p.83 -3	BASE COVER BRACKET	FOOT LOCK H56	31.96904.001

Picture	No.	Partname	Description	Part No.
	p.83-12	WEIGHT PLATE	WEIGHT PLATE H56	31.96905.001
	p.83	LCD STAND BEZEL	LCDSTAND FRONT ACS-D501 H56	42.96905.011
	p.83 -9	BASE COVER BRACKET SCREW	M3X5LTAPE	86.VA524.5R0
	p.83 -8	LCD STAND CASE SCREW	M3x5L	86.5A524.5R0
	p.82 -7	LCD STAND PANEL SCREW	SCREW TAP HEX WHITE ZINC M3*.5	86.BA254.5R0
FDD/Floppy Disk Drive				
	NS	FDD 1.44M SLIM PANASONIC//JU226A252FC	FDD 1.44SLIM MCI/ JU226A252FC(H	56.01041.671
HDD/Hard Disk Drive				
	NS	HDD 30G ATA100 MAXTOR/ ATV33073H4	HDD 30G MX5400/ ATV33073H4 DE	56.02B93.031
		HDD 6G IBM/DARA206K A51A	HDD SM9.5MM6GIBM/ DARA206K A51A	56.02A02.042
		HDD 12G IBM/DARA212KA51	HDD SM9.5MM12G IBM/ DARA212KA51	56.02A24.002
		HDD 18G IBM/DARA218000	HDD SM 12.5MM18GIBM/ DARA218000	56.02A42.091
		HDD 6GB HITACHI/DK-23AA-606G	HDD 2.5" 6G HITAC/DK-23AA-606G	56.02A07.022
		HDD 12G HITACHI/DK23AA-1212G	HDD 2.5"12G HITAC/ DK23AA-1212G	56.02A25.002
		HDD 7.5G MAXTOR/ ATV30768H1 DE	HDD 7.5G MX5400/ ATV30768H1 DE	56.02A61.011
		HDD 10.2G MAXTOR/ ALT31024H2	HDD 10.2G5400RPM MX/ ALT31024H2	56.02A72.101
		HDD 15G MAXTOR/ ATV31536H2 DE	HDD 15G MX5400/ ATV31536H2 DE	56.02B61.031
		HDD 20G MAXTOR/ ATV32049H3 DE	HDD 20G MX5400/ ATV32049H3 DE	56.02B32.061
		HDD 10GB QUANTUM/10.2AT LC10A	HDD 10GB 4400 QUA/ 10.2AT LC10A	56.02A71.111

Picture	No.	Partname	Description	Part No.
	NS	HDD 15G QUANTUM/15.0AT LC15A	HDD 15G 4400 QTM/ 15.0AT LC15A	56.02B64.021
		HDD 20.4GB QUANTUM/ 20.4ATLC20A	HDD 20.4GB 4400QUA/ 20.4ATLC20A	56.02B33.051
		HDD 30G QUANTUM/30.0AT LC30A	HDD 30G 4400 QTM/ 30.0AT LC30A	56.02B92.021
		HDD 20G MAXTOR/52049U4 ALT0	HDD 20G DRACO MAX/ 52049U4 ALT0	56.02B34.072
		HDD 30G MAXTOR/53073U6 ALTO	HDD 30G DRACO MAX/ 53073U6 ALTO	56.02B93.001
CD-ROM Drive				
	NS	CD-ROM 24X LG/CRN-8241B(A51)	CD-ROM 24X LG/CRN-8241B(A51)	56.10201.201
CD-RW Drive				
	NS	CD-RW 4/2/24X PAASONIC/ UJDA310L-AC1	CD-RW 4/2/24X KME/ UJDA310L-AC1	56.1942F.011
DVD-ROM Drive				
	NS	DVD ROM 6X PANASONIC/ SR8174BAA	DVD ROM 12.7MM6X MKE/SR8174BAA	56.2242F.032
Heatsink				
	NS	FANSINK 3PIN SKT370	Fan Sink SKT370 3-pin AI	90.00028.632
Cables				
	NS	RF/USB CABLE 10/10PIN	W.A 10P/10P 140MM RF(USB)H56	50.96913.001
	NS	AUDIO CABLE 4/4PIN	C.A 4/4P 300MM AUDI W/ SHD H22A	50.96603.001
	NS	IDE CABLE 40PIN 2C	C.A. 40P 2C 280MM W/ CUT H26	50.96805.001

Picture	No.	Partname	Description	Part No.
	NS	IDE TRANSFER BOARD CONTROL CABLE 8/8PIN	CABLE 8/8P SWAP CTRL 300MM H26	50.96801.001
	NS	IDE ULTRA66 CABLE 40PIN 2C	C.A 80P 2C 300MM ULTRA66 H26	50.96804.001
	NS	FDD CABLE 34PIN 2C	C.A. 34P 2C W/CUT 280MM H26	50.96806.001
	NS	LINE-IN/LINEOUT CABLE 4/4PIN	W.A 4/4P(JAE) 590MM W/SHD H56	50.96908.001
	NS	USB/AUDIO BOARD CONTROL CABLE 26PIN	C.A 26P 2PITCH 380MM H56	50.96907.001
	NS	RF/PS2 CONTROL CABLE 8PIN	W.A 8P(JAE)/8P(P-H) 420MM RF	50.96912.001
	NS	INTRUSION ALERT MICRO SWITCH CABLE	ASSY INTRUSION ALERT MODULE	6M.33J01.001
	NS	POWER LED CABLE 3PIN	W.A 3P/PWR LED 300MM H61	50.92204.031

Picture	No.	Partname	Description	Part No.
	p.84 -18	HDD LED CABLE 4PIN	W.A 4P/LED(HDD)300MM H61	50.92202.002
	p.84 -15	POWER SWITCH CABLE 2PIN	W.A 2P(P-H)/PWR SW 250MM H56	50.96910.001
	p.84 -16	RF RESET CABLE 2PIN	W.A 2P(JAE)/PWR SW 200MM H56	50.96911.001
	NS	LCD DVI CABLE 36PIN W/DC CABLE	C.A 36P/DVI/DC12 260/ 90MM	50.96906.011
Main Board				
	NS	MAINBOARD/S511P	MAIN BOARD S511P	55.37H01.D01
Boards				
	NS	AUDIO/USB DAUGHTER BOARD	AUDIO/USB DAUGHTER BD S511P	55.37H04.D01
	NS	IDE/FDD TRANSFER BOARD	S511P HOT SWAP BOARD	55.37H03.D01
	NS	AGP RISER BOARD	AGP RISER CARD S511P	55.37H02.D01

Picture	No.	Partname	Description	Part No.
	NS	MODEM 56K AMBIT/ T62M154.02	MODEM 56K WW AMBIT/ T62M154.02	54.09011.341
	NS	MODEM 56K ASKEY/ 1456VQH20E-1	MODEM 56K ASKEY/ 1456VQH20E-1	54.09262.061
	NS	VGA BOARD 32MB SDR + TV Out + DVI LEADTEK/Winfast GeForce 256	VGA WINFAST GEFORCE256 DVI S61	54.02023.061
Power Supply				
	NS	POWER SUPPLY 120W HI-POWER/SFX-120M1 R.A0	SPS 120W HI-P/SFX-120M1 R.A0	56.04120.401
		POWER SUPPLY 120W API/ API-0PC03-070	SPS 120W API/API-0PC03-070	56.04120.511
Battery				
	NS	RTC BATTERY LI 3V	BATTERY LI 3V CR2032 200MAH	23.20023.001
Case/Cover/Bracket Assembly				
	NS	CABLE COVER	COVER CABLE H56 D952	42.96909.011
	p.84 -11	ADD-ON PORT BRACKET	BKT PORT SECC H51	33.94600.001

Picture	No.	Partname	Description	Part No.
	p.84 -28	REAR-UP BRACKET	COVER SHIELD REAR UP H56	34.96908.001
	p.84 -27	POWER SUPPLY BRACKET	BKT PWR H56	33.96903.001
	p.84 -29	REAR-DOWN BRACKET	COVER SHIELD REAR DOWN H56	34.96909.001
	p.84 -9	USB/AUDIO BOARD FRAME	COVER SHIELD USB H56	34.96910.001
	p.84 -12	HING I/O BRACKET	HING IO SECC TOOL H26	34.96805.001
	p.84 -30	REAR PANEL	ASS'Y BEZEL REAR	60.96909.001
	NS	HDD DOOR	ASS'Y DOOR HDD	60.96910.001

Picture	No.	Partname	Description	Part No.
	p.84 -21	HDD BRACKET	ASS'Y BKT HDD	60.96907.001
	p.84 -8	CHASSIS	ASS'Y CHASSIS	60.96906.001
	p.84 -1	FRONT BEZEL	ASS'Y BEZEL FRONT	60.96908.001
	p.84 -22	SOLENOID MODULE	ASS'Y SOLENOID	60.96919.001
	NS	FDD SWAP TRAY MODULE	ASSY SWAP FDD TRAY (D050)/H26	60.96805.001
	NS	CDROM SWAP TRAY MODULE	ASSY SWAP OPTIC TRAY(D050)/H26	60.96806.001
	NS	HDD SWAP TRAY MODULE	ASSY SWAP HDD TRAY(D050)/H26	60.96804.001
	NS	LCD HINGE COVER	LCD HINGE COVER MCS-D708 H56	42.96901.011
Screws				
	NS	SOLENOID SCREW FOR INTERNAL	SCRW MACH CAP M3*6L NI	86.7A524.6R0
	p.84 -26	FDD/HDD/CDROM SWAP TRAY FPC CABLE SCREW	SCRW MACH PAN M2*10L	86.1A522.100
	NS	HDD SCREW	TAP R/WASH SHLDR ZN #6-32*11.8	86.00A16.A60

Picture	No.	Partname	Description	Part No.
	NS	MAINBOARD,HOT SWAP BOARD,REAR PANEL SCREW	SCRW TAP HEX ZN #6*3/16"	86.BA226.012
	p.84 -23	SOLENOID SCREW FOR EXTERNAL	SCREW M2-3	86.1A522.3R0
	p.84 -2	INTRUSION ALERT CABLE,SPEAKER SCREW	SCREW TAP HEX ZINC M3*P0.5*6	86.BA224.6R0
	p.84 -6	HANDLE SCREW	TAP HEX/WASH-10 ZN #6-32*4/16"	86.00A17.A60
	p.82 -5	LCD SCREW	SCRW TAP HEX ZINC M3*.5*12	86.BA224.120
	p.82 -6	INTERFACE BOARD COVER,HINGE,CENTRONIC ,INVERTER COVER SCREW	SCRW TAP HEX ZINC M3*.5*4	86.BA224.4R0
	p.82 -7	PANEL,INVERTER,INTERFACE BOARD SCREW	SCREW TAP HEX WHITE ZINC M3*.5	86.BA254.5R0
	p.82 -18	INTERFACE CABLE SCREW	SCREW M3 16L H56	86.1A234.160
	NS	FDD SCREW	SCREW MECH PAN M2.5*3L NI	86.1A523.3R0
	NS	CDROM SCREW	SCRW MACHINE PAN M2*2 NI	86.1A522.2R0
	p.83 -5	HDD TRAY SCREW	SCRW TAP HEX ZINC M3*.5*5	86.BA224.5R0
Miscellaneous Parts				
	p.84 -7	HANDLE	ASS'Y HANDLE	60.96905.001
	NS	HDD HOLDER SCREW SOFT MOUNT	CONDUCTIVE RUBBER MOUNT 0.5 IN	47.96902.001
	NS	I/O PORT LABEL	PLT IO 243.6X57.9 POLY H56	40.96901.011
	p.84 -14	POWER SWITCH/RESET CABLE HOLDER	HOLDER POWER ABS (TOOLING) H22	41.95702.001

Picture	No.	Partname	Description	Part No.
Keyboard				
	NS	KEYBOARD 105KEY USB SWISS DARFON/6512-UV60	KB 105KEYS SWI	99.P5181.060
		KEYBOARD 104KEY USB US DARFON/6511-UV61	KB 104 KEYS US	99.P5181.061
		KEYBOARD 105KEY USB SPANISH DARFON/6512-UV62	KB 105KEYS SPA/US	99.P5181.062
		KEYBOARD 104KEY USB THAILAND DARFON/6511-UV63	KB 104 KEYS THAILAND	'99.P5181.063
		KEYBOARD 105KEY USB INTERNATION/US DARFON/6511-UV66	KB 104 KEYS INTERNATIONAL US	'99.P5181.066
		KEYBOARD 104KEY USB CZECH DARFON/6511-UV69	KB 104 KEYS CZECH	'99.P5181.069
		KEYBOARD 104KEY USB ARABIC DARFON/6511-UV6A	KB 104 KEYS ARABIC	'99.P5181.06A
		KEYBOARD 105KEY USB BELGIUM DARFON/6512-UV6B	KB 105KEYS BEL	'99.P5181.06B
		KEYBOARD 104KEY USB CHINESE DARFON/6511-UV6C	KB 104 KEYS BEL	'99.P5181.06C
		KEYBOARD 105KEY USB DANISH DARFON/6512-UV6D	KB 105KEYS DAN	'99.P5181.06D
		KEYBOARD 105KEY USB ITALIAN DARFON/6512-UV6E	KB 105KEYS ITA	'99.P5181.06E
		KEYBOARD 105KEY USB FRENCH DARFON/6512-UV6F	KB 105KEYS FRE	'99.P5181.06F
		KEYBOARD 105KEY USB GERMANY DARFON/6512-UV6G	KB 105KEYS GER	'99.P5181.06G
		KEYBOARD 104KEY USB HEBREW DARFON/6511-UV6H	KB 104 KEYS CHINESE	'99.P5181.06H
		KEYBOARD 105KEY USB POLISH DARFON/6511-UV6I	KB 105KEYS POL	'99.P5181.06I
		KEYBOARD 105KEY USB SLOVENIAN DARFON/6511-UV6J	KB 105KEYS SLO	'99.P518A.06J
		KEYBOARD 105KEY USB ICELAND DARFON/6512-UV6M	KB 105KEYS ICE	'99.P5181.06M
		KEYBOARD 105KEY USB NORWEGIAN DARFON/6512-UV6N	KB 105KEYS NOR	'99.P5181.06N
		KEYBOARD 105KEY USB HOLLAND DARFON/6512-UV6O	KB 105KEYS HOLLAND	'99.P5181.06O
		KEYBOARD 105KEY USB PORTUGUESE DARFON/6512-UV6P	KB 105KEYS PORT	'99.P5181.06P

Picture	No.	Partname	Description	Part No.
	NS	KEYBOARD 104KEY USB RUSSIAN DARFON/6511-UV6R	KB 104 KEYS RUSSIAN	'99.P5181.06R
		KEYBOARD 105KEY USB SPANISH DARFON/6512-UV6S	KB 105KEYS SPA	'99.P5181.06S
		KEYBOARD 105KEY USB TURKEY DARFON/6512-UV6T	KB 105 KEYS TUR	'99.P5181.06T
		KEYBOARD 105KEY USB UK DARFON/6512-UV6U	KB 105 KEYS UK	'99.P5181.06U
		KEYBOARD 105KEY USB CANDIAN/FRENCH DARFON/6512-UV6V	KB 105 KEYS CAN/FRE	'99.P5181.06V
		KEYBOARD 105KEY USB SWEDEN DARFON/6512-UV6W	KB 105 KEYS SWE	'99.P5181.06W
		KEYBOARD 104KEY USB GREEK DARFON/6511-UV6Y	KB 104 KEYS GREEK	'99.P5181.06Y
		KEYBOARD 107KEY USB BRAZIAL DARFON/6514-UV64	KB 107 KEYS BRAZIAL	'99.P518A.064
		KEYBOARD 109KEY USB JANAENSE DARFON/6516-UV6J	KB 109 KEYS JAPANESE	'99.P5181.06J
		BLANK KEYBOARD 104KEYS USB DARFON	TRITON NOT FOUND	'99.P518A.04X
		BLANK KEYBOARD 105KEYS USB DARFON	TRITON NOT FOUND	'99.P518A.04Y
Pointing Device				
	NS	MOUSE USB LOGITEC/U48A	MOUSE LOGITEC/930536-0000 S59P	90.34J26.001
Speaker				
	NS	SPEAKER	ASS'Y SPEAKER	60.96914.001

Model Definition and Configuration

Veriton FP2

The Veriton FP2 Model No. Define:

1. Trade Mark:

2. Brand Name: Acer
3. Description: Acer Veriton FP2, PIII & Celeron Socket 370 Based PC System
4. Model No: VTFP2
5. Product Name: Veriton FP2

Test Compatible Components

This computer's compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested under MS DOS V6.22, Microsoft Windows 98 SE (EN/TW), Microsoft Windows 2000 Professional (EN/TW), Microsoft Win95/NT 4.0 Workstation, Novell Netware 4.2 & 5.1, SCO UNIX/Red Hat Linux, and Microsoft Windows Millennium Build 2513 (EN/TW) environment.

Refer 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 Veriton FP2 Compatibility Test Report released by the Acer Desktop System Testing Department.

MS DOS V6.22 Environment Test

Item	Specifications
Cache	256 KB 128 KB
CPU	CuMine 933/133 CuMine 800/133 CuMine 750/100 Celeron 600/66
EIDE Channel 1 Master	Seagate U10 20.4 GB Quantum LCT15 30 GB
EIDE Channel 1 Slave	Maxtor MX5400 30 GB Seagate 15.3 GB
EIDE Channel 2 Master	MKE DVD-ROM 8X SR-8175-B
EIDE Channel 2 Slave	MKE CD-RW UJDA310L-AC1 LG CD-ROM 24X CRN-8241 MKE DVD-ROM 8X SR-8175-B Mitumin CD-ROM 24X SR243T
FDD	Panasonic JU-226A
Keyboard	Dafon USB 52UV
Memory	256 MB 192 MB 128 MB 64 MB
Monitor	Acer 15” TFT monitor, FJ panel Acer View 19sl Acer View 77C
Mouse	Logitech USB Wheel Mouse M-U48a Primax USB Wheel Mouse MOSXK

Microsoft Windows 98 SE (EN/TW) Environment Test

Item	Specifications
Cache	128 KB 256 KB
CPU	CuMine 933/133 CuMine 866/133 CuMine 800/100 Celeron 667/66
Display Adapter	Intel 815E On-Die VGA (Shared 1 MB) ELSA GeForce 256 32 MB LEADTEK Winfast GeForce 256 32 MB LEADTEK 3D S325 (M64)
EIDE Channel 1 Master	Seagate U10 20.4 GB Seagate 15.3 GB Maxtor MX5400 20 GB Quantum LCT15 15 GB
EIDE Channel 1 Slave	Maxtor MX5400 30 GB Quantum LCT15 20.4 GB
EIDE Channel 2 Master	MKE DVD-ROM 8X SR-8175-B MKE CD-RW UJD310L-AC1
EIDE Channel 2 Slave	MKE CD-RW UJDA310L-AC1 MKE DVD-ROM 8X SR-8175-B LG CD-ROM 24X CRN-8241 Mitumin CD-ROM 24X SR243T
Fax/Modem Adapter	Askey 56K Modem HCF/Universal/Conexant Ambit 56K Modem HCF V90.D/F Conexant R6795-12 Etech 56K Data/Fax/Voice Modem
FDD	Panasonic JU-226A
Keyboard	Dafon USB 52UV
LAN Adapter	Intel 815E On-Die Lan 3COM 3C905C-TXM ALN-325 w/8139B-F
Memory	128 MB 192 MB 256 MB 512 MB
Monitor	Acer View 19sl Acer View 77C Acer 15” TFT monitor, FJ panel
Mouse	Logitech USB Wheel Mouse M-U48a Primax USB Wheel Mouse MOSXK
Sound/MPEG Adapter	On board AD1881A
USB Devices	HP DeskJet 895Cxi Color (USB) Midiland USB Speaker Microsoft USB Mouse Primax USB Mouse 2 Button
USB Joystick Game Pad	Microsoft SideWinder Precision Pro USB Primax RAPTOR 3D USB Gamestick DEXXA USB Joystick J-ZB13

Item	Specifications
Video Adapter	Intel 815E On-Die VGA (Shared 1MB) ELSA GeForce 256 32 MB LEADTEK Winfast GeForce 256 32 MB LEADTEK Winfast 3D S325 (M64)

Microsoft Windows 2000 Professional (EN/TW) Environment Test

Item	Specifications
Cache	128 KB 256 KB
CPU	CuMine 1G/133 CuMine 850/100 CuMine 700/66
Diagnostic and Performance Program	Final Reality v1.01 3D Winbench 2000 v1.1 3D Mark 2000 v1.1 WinStone 99 v1.3 WHQL HCT 9.5
Display Adapter	Intel 815E On-Die VGA (Shared 1 MB) ELSA GeForce 256 32 MB LEADTEK Winfast GeForce 256 32 MB LEADTEK 3D S325 (M64)
EIDE Channel 1 Master	Seagate 10.2 GB Maxtor MX5400 30 GB
EIDE Channel 1 Slave	Quantum 10 GB Quantum LCT15 20.4 GB
EIDE Channel 2 Master	MKE DVD-ROM 8X SR-8175-B
EIDE Channel 2 Slave	MKE CD-RW UJDA310L-AC1 LG CD-ROM 24X CRN-8241 Mitumin CD-ROM 24X SR243T
Fax/Modem Adapter	Askey 56K Modem HCF/Universal/Conexant Ambit 56K Modem HCF V90.D/F Conexant R6795-12 Etech 56K Data/Fax/Voice Modem
FDD	Panasonic JU-226A
Keyboard	Dafon USB 52UV
LAN Adapter	Intel 815E On-Die Lan ALN-325 w/81395B-F 3COM 3C905C-TXM
Memory	128 MB 256 MB 512 MB
Monitor	Acer View 19sl Acer 15” TFT monitor, FJ panel
Mouse	Logitech USB Wheel Mouse M-U48a Primax USB Wheel Mouse MOSXK
Sound Adapter	On board AD 1881A
USB Devices	HP DeskJet 895Cxi Color (USB) Midiland USB Speaker Microsoft USB Mouse Primax USB Mouse 2 Button
USB Joystick/GamePad	Microsoft SideWinder Precision Pro USB Primax RAPTOR 3D USB Gamestick DEXXA USB Joystick J-ZB13

Microsoft Win95/NT 4.0 Workstation Environment Test

Item	Specifications
Cache	256 KB 128 KB
CPU	CuMine 667/133 Celeron 566/66
Display Adapter	Intel 815 On-Die VGA
EIDE Channel 1 Master	Seagate U10 20.4 GB
EIDE Channel 1 Slave	Quantum LCT15 20.4 GB
EIDE Channel 2 Slave	LG CD-ROM 24X CRN-8241 Mitimin CD-ROM 24X SR243T
FDD	Panasonic JU-226A
Keyboard	Dafon USB 52UV
Memory	64 MB 256 MB
Monitor	Acer 15” TFT monitor, FJ panel Acer View 77C
Mouse	Logitech USB Wheel Mouse S48A Primax USB Wheel Mouse MOSXK
Sound Adapter	On board AD1881A

Novell Netware 4.12 & 5.1 Environment Test

Item	Specifications
Cache	128 KB 256 KB
CPU	Celeron 667/66 CuMine 800/100 CuMine 933/133
EIDE Channel 1 Master	Maxtor MX5400 15 GB Seagate U10 20.4 GB Quantum LCT15 30GB
EIDE Channel 1 Slave	Quantum 10 GB Seagate 15.3 GB
EIDE Channel 2 Master	Quantum LCT15 20.4 GB Seagate 15.3 GB Maxtor MX5400 30 GB
EIDE Channel 2 Slave	Seagate 10.2 GB Quantum LCT15 15 GB
FDD	Panasonic JU-226A
Keyboard	API PS/2 62C API PS/2 32TW
LAN Adapter 1	3COM 3C905C-TXM ANI ALN-325
Memory	128 MB 256 MB 512 MB
Monitor	Acer View 15” TFT monitor, FJ panel Acer Vew 19sl
Mouse	Logitech Wheel PS/2 Mouse S48A Primax Wheel PS/2 Mouse MOSXK
Onboard LAN	Intel 815E On-Die Lan
OS	Netware 4.2 Netware 5.1
SCSI Adapter	AHA-3940AUW
SCSI HDD	2x Seagate 8 GB

SCO UNIX/Red Hat Linux Environment Test

Item	Specifications
Cache	128 KB 256 KB
CPU	CuMine 733/133 Celeron 633/66
EIDE Channel 1 Master	Seagate 20.4 GB
EIDE Channel 1 Slave	Quantum LCT15 20.4 GB
EIDE Channel 2 Slave	LG CD-ROM 24X CRN-8241 Mitumin CD-ROM 24X SR243T
FDD	Panasonic JU-226A
Keyboard	API PS/2 62C API PS/2 32TW
Memory	128 MB 256 MB
Monitor	Acer View 19sl Acer 15” TFT monitor, FJ panel
Mouse	Logitech Wheel PS/2 Mouse S48A Primax Wheel PS/2 Mouse MOSXK

Microsoft Windows Millennium Build 2513 (EN/TW) Function Test

Item	Specifications
Cache	256 KB 128 KB
CPU	CuMine 866/133 Celeron 600/66
EIDE Channel 1 Master	Seagate U10 20.4 GB
EIDE Channel 1 Slave	Maxtor Draco 20 GB
EIDE Channel 2 Master	MKE UJDA310L-AC1
EIDE Channel 2 Slave	MKE CR-176-BAA
FDD	Panasonic JU-226A
Keyboard	API 62C API USB Keyboard
Memory	128 MB 256 MB
Monitor	Acer View 19” Acer View 77C
Mouse	Logitech Wheel USB Mouse Logitech Wheel PS/2 Mouse S48A

Online Support Information

This section 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 and Regional Business Units 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.

In the Technical Information section you can download information on all of Acer's Notebook, Desktop and Server models including:

- Service guides for all models
- User's manuals
- Training materials
- Main manuals
- Bios updates
- Software utilities
- Schematics
- Spare parts lists
- Chips
- TABs (Technical Announcement Bulletin)

The service repair section provides you with downloadable information on:

- Troubleshooting guides
- Tooling box information
- Repair instructions for specific models
- Basic repair guidelines
- Debug cards for Acer's latest models

For these purposes, we have included an Acrobat File to facilitate the problem-free downloading of our technical material.

Also contained on this website are:

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

We are always looking for ways to optimize and improve our services, so if you have any suggestions or comments, please do not hesitate to communicate these to us.

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