System Specifications

Overview

VTX800 series are business-ready desktop PCs built with latest, high-performance technology for managing demanding workloads. It is standalone or network-ready for SMB and includes video and audio features for business multimedia.

In “stable technology”, we choose Intel Pentium4 processor, Intel 945G + ICH7 chipset architecture. The combination can run at 1066/800 MHz front side bus, which gives more performance than other processors. We also provide 1 PCI-Express x16 slot for add-on graphic solution, 1 PCI-Express x1 slot and 2 PCI slots, 4 Dual channel DDR2 memory slots, one parallel ATA port, four serial ATA2 prots, and onboard Gigabit LAN, onboard Audio function.

There are three knids of chassis for Veriton series: Veriton 7800 for Mini-tower, Veriton 5800 for Desktop and Veriton 6800 for Micro-tower which can fulfill all segment customers: expandability, middle-to-heavy performance, and space saving.

Features

CPU

- Socket Type : Intel Socket T
- Supports Intel Pentium 4 Prescott 775 / Smithfield FSB 800/1066MHz
- Supports Intel Celeron Prescott 775 / FSB 533MHz
- Pentium 4 2.66GHz ~3.8GHz speed
- Celeron D2.53GHz ~ 3.2GHz
- L2 Cache varies with CPU

Chipset

- Northbridge: Intel Lakeport-G
- Southbridge: Intel ICH7

Memory

- Socket Type : DDR II,1.8 Voltage
- Socket Quantity : 4, support Dual Channel
- Capacity support : 256MB ~ 4GB
- Support Memory Speed : 400/533/667 MHz

Graphic Solution

- Intel Lakeport-G on-die graphic solution
- PCI-E x16 VGA Add-On Card

Slots

- 1 PCI Express x16 slot
- 1 PCI Express x1 slot
- 2 PCI 2.2 5V slots

FDD

- One 1.44MB 3.5” device

PATA IDE

- Slot Type : 40pin PATA IDE slot
- Slot Quantity : 2
- Transfer rate support PIO mode 0 (3.33MB/s) /1 (5.22MB/s) /2 (8.33MB/s) /3 (11.1MB/s) / 4 (16.7MB/s)
- ATA mode : 33/66/100/133
- Device Type Support : HDD/CD-ROM/DVD-ROM/Combo/DVD burner

SATA IDE

- Slot Type: SATA IDE slot
- Slot Quantity : 4
- Storage Type Support : HDD/CD-ROM/CD-RW/DVD-ROM/DVD-RW/DVD+RW/DVD Dual/DVD Supermultiplus

Audio

- Codec : Realtek ALC880 (HD Codec)
- One UAJ (Universal Audio Jack) support (rear only)

Remark UAJ : UAJ not only provides the ideal solution for multi-media and also user-friendliness for audio speaker installation.

- 7.1 Channel Audio Support
- Reserved disable function on BIOS side. Default is enabled.

LAN

- Controller : PCI-E Giga LAN chip with manageability function
- LAN Chip : Marvell 88E8052
- Should be worked under 10/100/1000 Mbs environment
- Reserved disabled function on both hardware & BIOS side. Default is enabled

USB

- Controller : Intel ICH7
- Connectors Quantity : 8
- Four for front daughter board (Pin:2*5)
- USB 2.0/1.1

System LED Definition

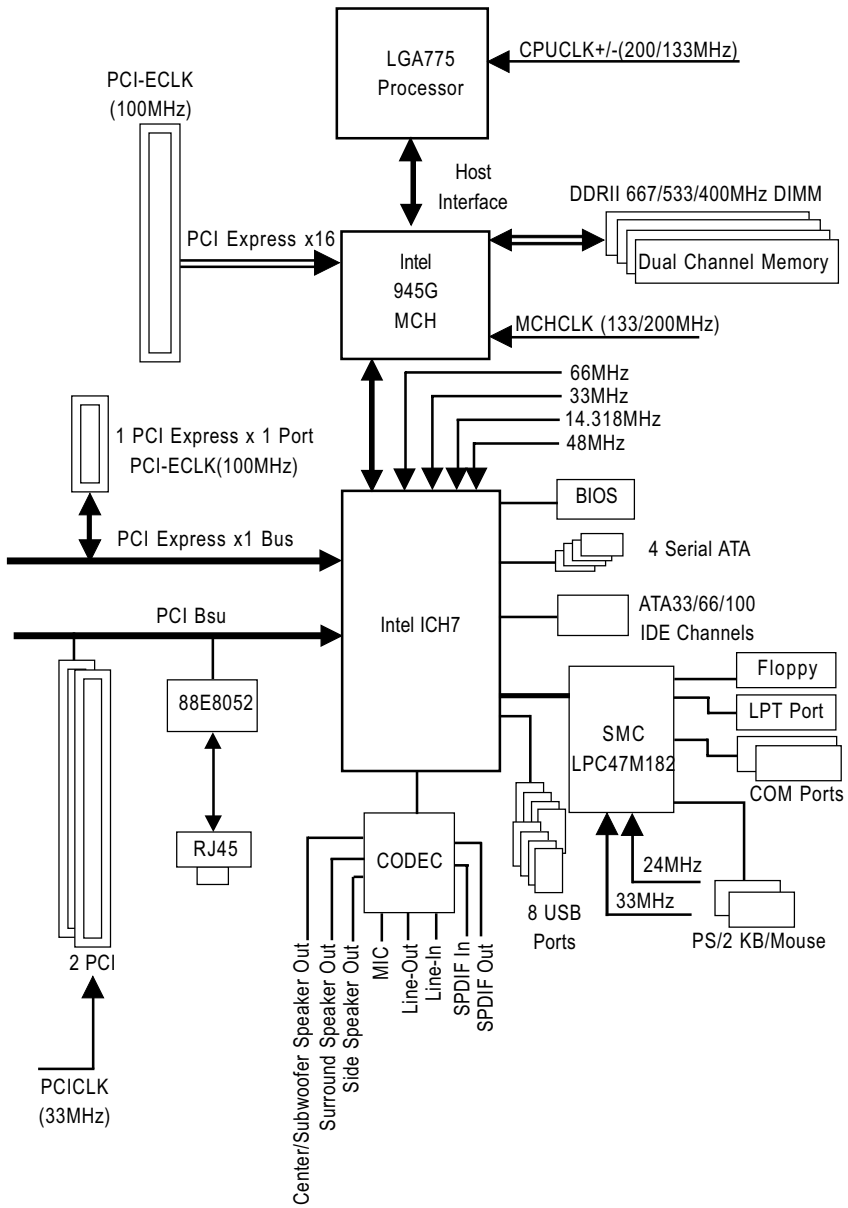
Chasis	Bezel	Power LED			HDD LED	LAN LED	ODD LED
		S0	S1,S3	S4,S5			
H701	V751	Blue	Blue Blinking	OFF	Blue	Blue	Blue
H500	H500	Green	Green Blinking	OFF	Green	Green	N/A
H401	V451	Blue	Blue Blinking	OFF	Blue	Blue	Blue
	A451	Blue	Blue Blinking	OFF	Blue	Blue	Blue

On-Board Connector

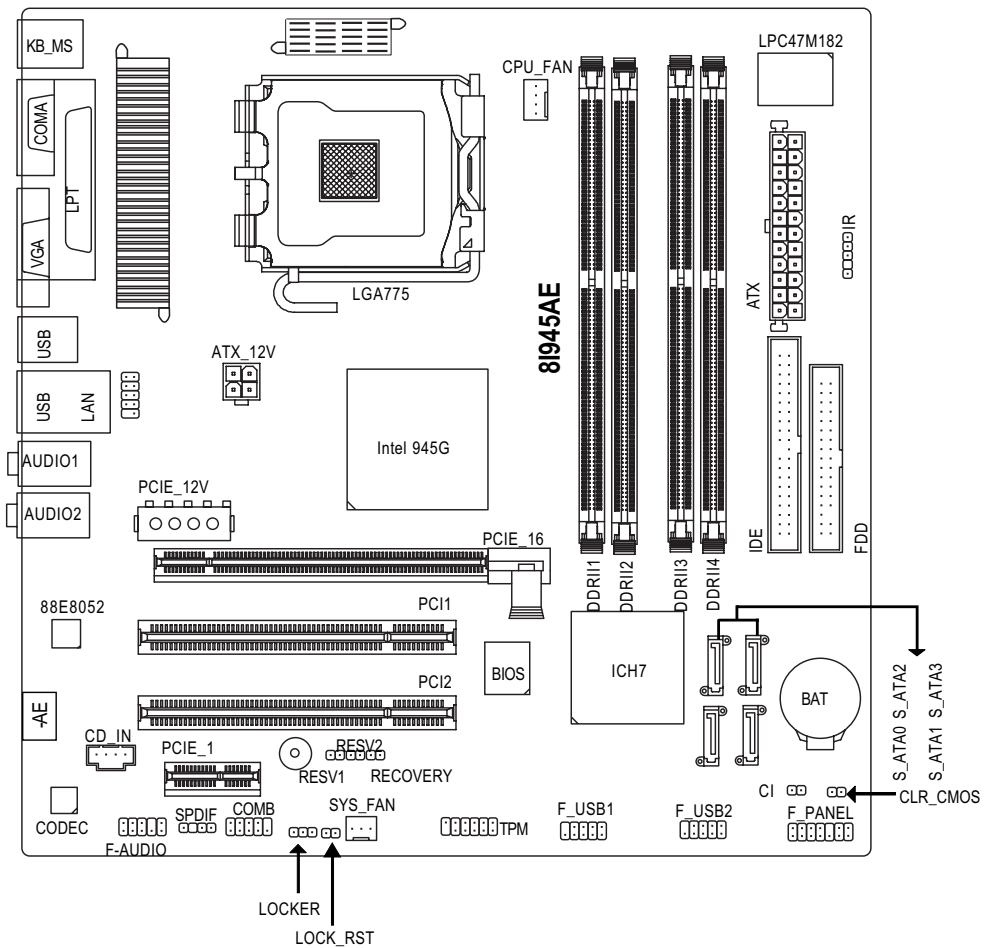
- Rear I/O Connectors
  - 1 PS/2 Keyboard Port, 1 PS/2 Mouse Port
  - 1 Parallel Port, 1 Serial Port
  - 1 VGA Port
  - 1 RJ45 GigaLAN Port
  - 4 USB Ports
  - 6 Ports Jack Support HD (High Definition) Audio Output(5.1 channel)
- On-Board Connectos
  - 1 CPU Socket
  - 4 Memory Socket
  - 1 PCI Express x1 Slot
  - 1 PCI Express x16 Slot
  - 2 PCI Slots
  - 1 FDD Slot

- 1 PATA IDE Slots
- 4 SATA2 IDE Slots
- 2 2*5 pin Intel FPIO sepecification USB pin connectors
- 1 2*5 pin Intel FPIO spec. Microphone In/Headphone Out pin connectors
- 1 2nd serial port
- 1 CD-In 4pin connector (CD-ROM Audio Input)
- 1 4 pin CPU Fan connector with linear circuit
- 1 3 pin System FAN connectors with linear circuit
- 1 Intrusion ALarm connector
- 1 24pin/4pin ATX interface PS3/PS2 SPS connector
- 1 2*5pin Intel FPIO specification Power Switch/Power State LED/HDD active LED
- 1 2 pin LAN activity monitor connector
- 1 reserved GPIO connector for “One Button Recovery” function
- 1 Buzzer on board
- Color management for on board connector

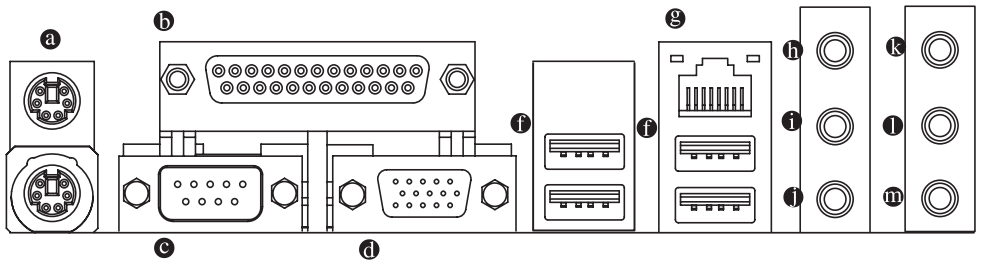
Block Diagram



MainBoard Placement

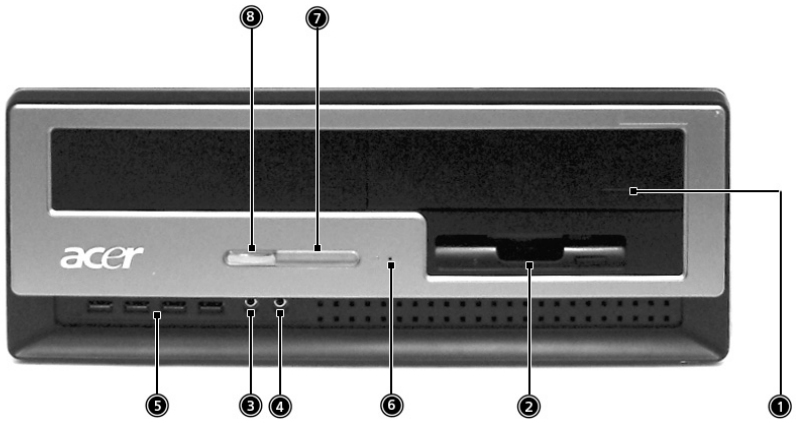


Rear I/O Port



Item	Name	Description
a	PS/2 Keyboard and PS/2 Mouse Connector	To install a PS/2 port keyboard and mouse, plug the mouse to the upper port (green) and the keyboard to the ower port (purple).
b	LPT Port (Parallel Port)	The parallel port allows connection of a printer, scanner and other peripheral devices.
c	COM (Serial Port)	Connects to serial-based mouse or data processing devices.
d	VGA Port	Monitor can be connected to VGA port.
f	USB Ports	Before you connect your device(s) into USB connector(s), please make sure your device(s) such as USB keyboard, mouse, scanner, zip, speaker...etc. have a standard USB interface. Also make sure your OS supports USB controller. If your OS does not support USB controller, please contact OS vendor for possible patch or driver upgrade. For more information please contact your OS or device(s) vendors.
g	LAN Port	The provided Internet connection is Gigabit Ethernet, providing data transfer speeds of 10/100/1000Mbps.
h	Line In	Devices like CD-ROM, walkman etc. can be connected to Line In jack.
i	Line Out	Connect the stereo speakers or earphone to this connector.
j	MIC In	Microphone can be connected to MIC In jack.
k	Rear Speaker Out	COnnect the rear surround speakers to this connector
l	Center/Subwoofer Speaker Out	Connect the Center/Subwoofer speakers to this connector
m	Side Speaker Out	Connect the side surround speakers to this connector

Veriton 5800 Front Panel



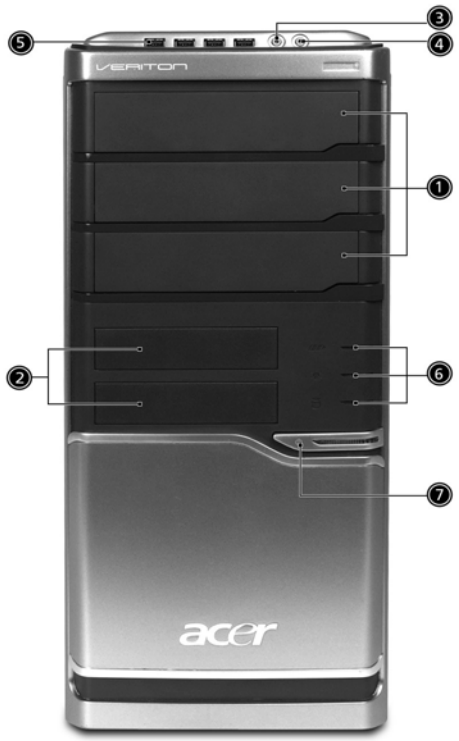
No.	Description	No.	Description
1	Optical Device	2	Floppy drive
3	Microphone-in jack	4	Speaker-out/line-out port
5	USB ports	6	One Button Recovery hole
7	Indicators	8	Power button

Veriton 6800 Front Panel

No.	Description	No.	Description
1	Optical Device	2	Floppy drive
3	Microphone-in jack	4	Speaker-out/line-out port
5	USB ports	6	Indicators
7	Power button		

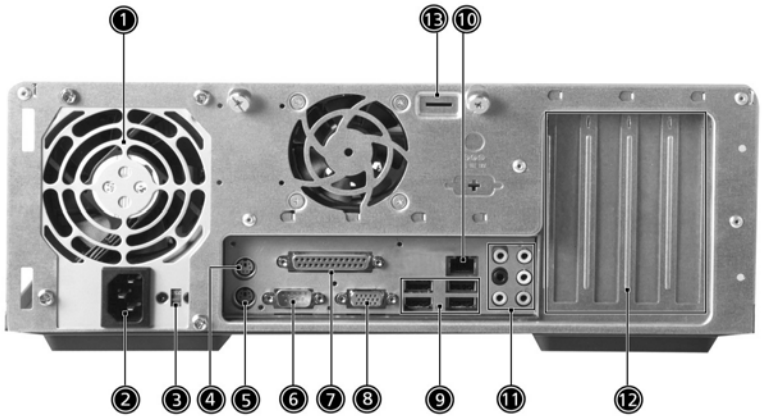
NOTE: The specifications above are for reference only. The exact configuration of your PC depends on the model purchased.

Veriton 7800 Front Panel



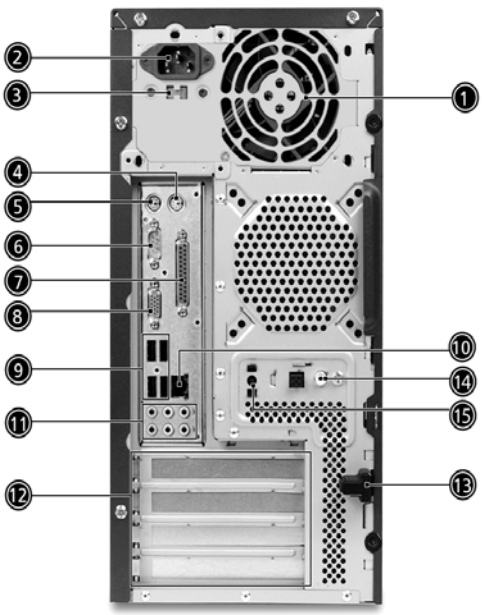
No.	Description	No.	Description
1	Optical Device	2	Floppy drive
3	Microphone-in jack	4	Speaker-out/line-out port
5	USB ports	6	Indicators
7	Power button		

Veriton 5800 Rear Panel



No.	Description	No.	Description
1	Power supply	2	Power cord socket
3	Voltage selector switch	4	PS/2 mouse port
5	PS/2 Keyboard port	6	Serial port
7	Printer connector	8	Monitor connector
9	USB 2.0 ports	10	RJ-45 Ethernet connector
11	Audio jack	12	Expansion slots
13	Chassis lock pad		

Veriton 6800 Rear Panel



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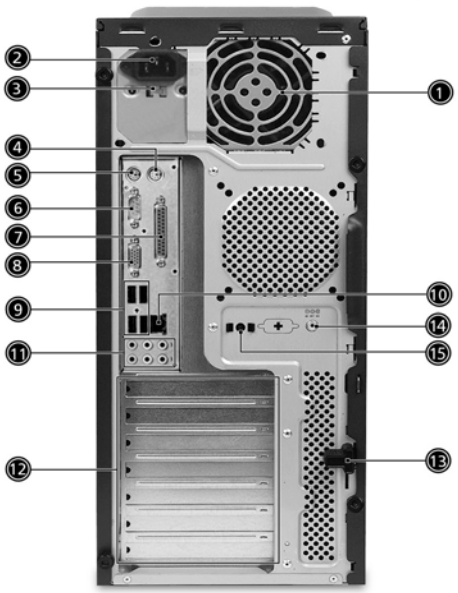
9	USB 2.0 ports	10	RJ-45 Ethernet connector
11	Audio jack	12	Expansion slots
13	Chassis lock pad		

Veriton 7800 Rear Panel



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9	USB 2.0 ports	10	RJ-45 Ethernet connector
11	Audio jack	12	Expansion slots
13	Chassis lock pad		

Audio Jack Function Table

Color/Use	Headphone	1.1 CH	3.1 CH	5.1 CH	7.1 CH
Blue	Line-in	Line-in	Line-in	Line-in	Line-in
Green	Headphone	Line-out	Front	Front	Front
Pink	Mic-in	Mic-in	Mic-in	Mic-in	Mic-in
Orange	Center&woofer	Center&woofer	Center&woofer	Center&woofer	Center&woofer
Black	Rear	Rear	Rear	Rear	Rear
Gray	Side	Side	Side	Side	Side

System Peripherals

The Aspire T630 and AcerPower F3 computer consist of the system itself, and system peripherals, like a mouse, keyboard and a set of speakers (optional). This section provides a brief description of the basic system peripherals.

Mouse (PS/2 or USB, manufacturing option)

The included mouse is a standard two-button wheel mouse. Connect the mouse to the PS/2 mouse port or USB port on the back panel of the system.

Keyboard (PS/2 or USB, manufacturing option)

Connect the keyboard to the PS/2 keyboard port or USB port on the back panel of the system.

Speakers

For systems bundled with speakers, before powering on the system, connect the speaker cable to the audio out (external speaker) port on the back panel of the system.

For more detailed information about the speakers, please refer to the included operating instructions.

NOTE: speakers are optional and the appearance might be different depending on the actual product.

Acer eRecovery

Acer eRecovery is a tool to quickly backup and restore the system. Users can create and save a backup of the current system configuration to hard drive, CD, or DVD.

Acer eRecovery consists of the following functions:

1. Create backup
2. Restore from backup
3. Create factory default image CD
4. Re-install bundled software without CD
5. Change Acer eRecovery password

Create backup

Users can create and save backup images to hard drive, CD, or DVD.

1. Boot to Windows XP
2. Press **<Alt>+<F10>** to open the Acer eRecovery utility.
3. Enter the password to proceed. The default password is six zeros.
4. In the Acer eRecovery window, select **Recovery settings** and click **Next**
5. In the Recovery settings window, select **Backup snapshot image** and click **Next**.
6. Select the backup method.
   - ❑ Use **Backup to HDD** to store the backup disc image on drive D:.
   - ❑ **Backup to optical device** to store the backup disc image on CD or DVD (only available on systems that include an optical disc burner).
7. After choosing the backup method, click **Next**.

Follow the instruction on screen to complete the process.

Restore from backup

Users can restore backup previously created (as stated in the **Create backup** section) from hard drive, CD, or DVD.

1. Boot to Windows XP.
2. Press **<Alt>+<F10>** to open the Acer eRecovery utility.
3. Enter the password to proceed. The default password is six zeros.
4. In the Acer eRecovery window, select **Recovery actions** and click **Next**.
5. Select the desired restore action and follow the onscreen instructions to complete the restore process.

Create factory default image CD

When the System CD and Recovery CD are not available, you can create them by using this feature.

1. Boot to Windows XP.
2. Press **<Alt>+<F10>** to open the Acer eRecovery utility.
3. Enter the password to proceed. The default password is six zeros.
4. In the Acer eRecovery window, select **Recovery settings** and click **Next**.
5. In the Recovery settings window, select **Burn image to disc** and click **Next**.
6. In the Burn image to disc window, select **01. Factory default image** and click **Next**.

7. Follow the instructions on screen to complete the process.

Re-install bundled software without CD

Acer eRecovery stores pre-loaded software internally for easy driver and application re-installation.

1. Boot to Windows XP.
2. Press **<Alt>+<F10>** to open the Acer eRecovery utility.
3. Enter the password to proceed. The default password is six zeros.
4. In the Acer eRecovery window, select Recovery actions and click **Next**.
5. In the Recovery settings window, select **Reinstall applications/drivers** and click **Next**.
6. Select the desired driver/application and follow the instructions on screen to re-install.

At first launch, Acer eRecovery prepares all the needed software and may take few seconds to bring up the software content window.

Change Password

Acer eRecovery and Acer disc-to-disc recovery are protected by a password that can be changed by the user. Follow the steps below to change the password in Acer eRecovery.

1. Boot to Windows XP.
2. Press **<Alt>+<F10>** to open the Acer eRecovery utility.
3. Enter the password to proceed. The default password is six zeros.
4. In the Acer eRecovery window, select **Recovery settings** and click **Next**.
5. In the Recovery settings window, select **Password**: **Change Acer eRecovery password** and click **Next**.
6. Follow the instructions on screen to complete the process.

Acer disc-to-disc recovery

Restore without a Recovery CD

This recovery process helps you restore the C: drive with the original software content that is installed when you purchase your notebook. Follow the steps below to rebuild your C: drive. (Your C: drive will be reformatted and all data will be erased.) It is important to back up all data files before you use this option.

1. Restart the system.
2. While the Acer logo is showing, press <Alt>+<F10> at the same time to enter the recovery process.
3. The message "The system has password protection. Please enter 000000:" is displayed.
4. Enter six zeros and continue.
5. The Acer Recovery main page appears.
6. Use the arrow keys to scroll through the items (operating system versions) and press <Enter> to select.

Multilingual operating system installation

Follow the instructions to choose the operating system and language you prefer when you first power-on the system.

1. Turn on the system.
2. Acer's multilingual operating system selection menu will pop-up automatically.
3. Use the arrow keys to scroll to the language version you want. Press <Enter> to confirm your selection.
4. The operating system and language you choose now will be the only option for future recovery operations.
5. The system will install the operating system and language you choose.

System Board Major Chip

Item	Specification
System Core Logic	Intel 945G Express chipset Intel ICH7
Super I/O Controller	LPC47M182
LAN Controller	Intel ICH7
Memory Controller	Build in Intel 945G
E-IDE Controller	Build in Intel ICH7
RJ45 Controller	88E8052
Audio Controller	Intel ICH7
VGA Controller	Intel 945G
Keyboard Controller	LPC47M182

Processor

Item	Specification
Type	Intel Pentium 4 processor 775 Land Grid Array(LGA)
Slot	Socket-T (LGA 775)
Speed	Depends on CPU, which is local configured
Bus Frequency	533/800/1066 MHz
Voltage	Processor voltage can be detected by any system without setting any jumper

BIOS

Item	Specification
BIOS code programmer	Award
BIOS version	R01-A1
BIOS ROM size	4MB
BIOS ROM package	32-pin PLCC package
Support protocol	PCIX 1.0,PCI 2.2,APM 1.2,VESA/DPMS (VBE/PM V1.1), SMBIOS 2.3, E-IDE 1.1, ACPI 1.0b,ESCD1.03, PnP 1.0a, Bootable CD-ROM 1.0, USB 1.1~ USB 2.0, UHCI 1.0, ANSI ATA 3.0 ATAPI
Boot from CD-ROM feature	Yes
Support to LS-120 drive	Yes
Support to BIOS boot block feature	Yes
BIOS Password Control	Yes

The BIOS can be overwritten/upgraded by using “AFLASH” utility (AFLASH.EXE).

BIOS Hotkey List

Hotkey	Function	Description
DEL	Enter BIOS Setup Utility	Press while the system is booting to enter BIOS Setup Utility.

System Memory

Item	Specification
Memory Slot Number	4 Slots
Supported Memory Size per Slot	256 MB ~ 1GB
Supported Maximum Memory Size	4GB
Supported Memory Speed	533/667 MHz
Supported memory voltage	1.8 V
Support memory module package	240-pin DIMM
Support to parity check feature	Yes
Support to Error Correction Code (ECC) feature	Yes
Memory module combinations	You can install memory modules in any combination as long as they match the above specifications.

VRM (Voltage Regulator Module)

Function	VRM Specification	Typical Voltage	Power Source	Maximum Output
CPU VRM	VRM10.1	0.8375~1.6v	12 Voltage	101A
CPU VRM	VRM 9.0	1.1-1.85 Voltage	12 Voltage	70A

Cache Memory

Item	Specification
First-Level Cache Configurations	
Cache function control	Enable/Disable by BIOS Setup
Second-Level Cache Configurations The information below is only applicable to system installed with a Pentium 4 processor	
Tag RAM Location	On Processor
L2 Cache RAM Location	On Processor
L2 Cache RAM type	PBSRAM (Pipelined-burst Synchronous RAM)
L2 Cache RAM size	Depends on CPU, which is local configured
L2 Cache RAM speed	Full of the processor core clock frequency (Advanced Transfer Cache)
L2 Cache function control	Enable/Disable by BIOS Setup
L2 Cache scheme	Fixed in write-back

LAN Interface

Item	Specification
LAN Controller	88E8052 LAN Controllers
LAN Controller Resident Bus	PCI Bus
LAN Port	ONE RJ-45 on board
Function Control	Enable/Disable by BIOS Setup

IDE Interface

Item	Specification
IDE Controller	Built-in Intel ICH7
IDE Controller Resident Bus	PCI bus
Number 40 pin PATA slot	1
❑ Device Type Support	HDD, CD-ROM, CD-RW, DVD-ROM,Combo,DVD burner
❑ Transfer Rate Support	PIO 0/1/2/3/4
❑ ATA Mode	33/66/100
Number STAT IDE slot	4
❑ Device Type Support	HDD,CD-ROM,CD-RW,DVD-ROM,DVD-RW,DVD+RW,DVD Dual,DVD Supermultiplus
Supports LS-120	Yes
Supports bootable CD-ROM	Yes
Function Control	Enable/Disable by BIOS setup

Diskette Drive Interface

Item	Specification
Diskette Drive Controller	LPC47M182
Diskette Drive Controller Resident Bus	LPC Bus
Supported Diskette Drive Formats	1.44MB, 2.88MB format and slim type diskette drive
Function Control	Enable/Disable by BIOS Setup

Serial Port

Item	Specification
Serial port controller	LPC47M182
Serial port controller resident bus	LPC Bus
Number of serial port	1
Serial port location	Rear panel
16550 UART support	Yes
Connector type	9-pin D-type female connector

USB Port

Item	Specification
Universal HCI	USB 2.0/1.1
Controller	Intel ICH7
Number of the connectors	8
Location	Rear : 4 On-board header : 4
USB Class	Support legacy keyboard for legacy mode

Wake-up Event Specifications

Device	S1	S3	S4	S5
Power Button	Enabled	Enabled	Enabled	Enabled
PS2 Keyboard	Disabled	Disabled	Disabled	Disabled
USB Keyboard	Disabled	Disabled	N/A	N/A
PME	Disabled	Disabled	Disabled	Disabled
WOR (wake on Ring)	Disabled	Disabled	Disabled	Disabled
RTC (real time clock)	Disabled	Disabled	Disabled	Disabled

Thermal Design

Item	Description
Thermal Design	❑ Provision for optional secondary fan ❑ Adequate venting in the front of chassis ❑ Adequate venting in the rear of chassis

Memory Address Map

Address	Size	Function
0000000 - 009FFFF	640 KB System Memory	Onboard DRAM
00A0000-00BFFFF	128 KB Video RAM	Reserved for Graphics Display Buffer Non-Cacheable
00C0000-00CFFFF	32 KB I/O Expansion ROM	Reserved for ROM on I/O Adapters
00D0000-00D3FFF	16 KB I/O Expansion ROM	Reserved for ROM on I/O Adapters
00D4000-00D7FFF	16 KB I/O Expansion ROM	Reserved for ROM on I/O Adapters
00D8000-00DBFFF	16 KB I/O Expansion ROM	Reserved for ROM on I/O Adapters
00DC000-00DFFFF	16 KB I/O Expansion ROM	Reserved for ROM on I/O Adapters
00E0000-00E7FFF	32 KB for SCSI BIOS	Reserved for SCSI BIOS
00E8000-00EFFFF	32 KB	Reserved Onboard

Memory Address Map

Address	Size	Function
00F0000-00FFFFF	64 KB BIOS	System ROM BIOS (ROM) System RAM BIOS (DRAM)
0100000-0F9FFFF	System Memory	Onboard DRAM
0FA0000-0FFFFFF	384 KB I/O Card Memory	Reserved for Memory Map I/O Card Non-Cacheable
1000000-FFFFFFF	System Memory	Onboard DRAM

PCI INTx# and IDSEL Assignment Map

PCI INTx #	PCI Devices	Device IDSEL: ADxx
INTA#	ADIMM-slot	N
INTB#	PCI-Slot1	AD16
INTC#	PCI-Slot2	AD17

I/O Address Map

Hex Range	*Devices*
000-01F	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
080-08F	DMA Page Register
0A0-0A1	Interrupt Controller-2
0C0-0DF	DMA Controller-2
0F0-0FF	Math Co-Processor
170-177	Secondary IDE
1F0-1F7	Primary IDE
278-27F	Parallel Printer Port 2
2F8-2FF	Serial Asynchronous Port 2
378-37F	Parallel Printer Port 1
3F0-3F5	Floppy Disk Controller
3F6-3F6	Secondary IDE
3F7-3F7	Primary IDE
3F8-3FF	Serial Asynchronous Port 1
0CF8	Configuration Address Register
0CFC	Configuration Data Register
778-77A	Parallel Printer Port 1

IRQ Assignment Map

IRQx	System Devices	Add-On-Card Devices
IRQ0	Timer	N
IRQ1	Keyboard	N
IRQ2	Reserved	N
IRQ3	Serial Port 2	Reserved
IRQ4	Serial Port 1	Reserved
IRQ5	Reserved	Reserved
IRQ6	Floppy Disk	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	Numeric Processor	N
IRQ14	Embedded Hard Disk	Reserved
IRQ15	Reserved	Reserved

NOTE: N - Not be used

DRQ Assignment Map

DRQx	System Devices	Add-On-Card Devices
DRQ0	N	Reserved
DRQ1	N	Reserved
DRQ2	FDD	N
DRQ3	N	Reserved
DRQ4	Cascade	N
DRQ5	N	Reserved
DRQ6	N	Reserved
DRQ7	N	Reserved

NOTE: N - Not be used

Environmental Requirements

Item	Specifications
Temperature	
Operating	+5°C ~ +35°C
Non-operating	-20 ~ +60°C (Storage package), -10°C~+60°C (un-package)
Humidity	
Operating	15% to 80% RH, non-condensing
Non-operating	10% to 90% RH, non-condensing at 40°C
Vibration	
Operating (unpacked)	5 ~ 500Hz, 2.20g RMS random,10 minutes per axis in all 3 axes

Environmental Requirements

Item	Specifications
Non-operating (packed)	5 ~ 500Hz, 1.09g RMS random,1 hour per axis in all 3 axes
Shock Operating	Half sine, 2g 11m seconds

Drop Test

Drop Test				
Definition	The protection ability of packing & cushion must be capable of withstanding, with no physical or functional demage, mechanical impact from height-specific drops.			
Test Standard				
Package Cross Weight		**Drop Height**		**Not of Drop**
KGs	lbs	CM	Inch	
0~9.1	0~20	76	30	10
9.1~18.2	20~40	61	24	10
18.2~27.3	40~60	46	18	10
27.3~45.4	60~100	31	12	10
10 drops : one corner, three edges, six surfaces				

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 external switch button, modem ring in, keyboard and mouse for 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.
- LED on the panel turns amber colour.
- 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, modem ring in, keyboard and mouse for APM mode.
- Return to original state by pushing external switch button, modem ring in and USB keyboard for ACPI mode.

ACPI

- ACPI specification 1.0b.
- S0, S1, S3 and S5 sleep state support.
- On board device power management support.
- On board device configuration support.

Dual Channel

VT x800 series support the Dual Channel Technology. After operating the dual channel technology, the bandwidth of memory bus will add double up to 4GB/s.

The mainboard inculdes 4 DIMM slots, and each channel has two DIMM sockets as following:

- ❑ Channel A : DDR1, DDR3
- ❑ Channel B : DDR2 , DDR4

If you want to operate the Dual Channel Technology, please note the following explanations due to the limitation of Intel chipset specifications.

Memory Number		Description
1	Only one DDR memory module is installed ?	The Dual Channel Technology can't operate when only one DDR memory module is installed.
2	Two DDR memory modules are installed (the same memory size and type) ?	The Dual Channel Technology will operate when two memory modules are inserted individually into Channel A and B. If you install two memory modules in the same channel, the Dual Channel Technology will not operate.
3	Three DDR memory modules are installed ?	Pleae note that the Dual Channel Technology will not operate when three DDR memory modules are installed; part of them will not be detected.
4	Four DDR memory modules are installed ?	If you install four memory modules at the same time, the Dual Channel Technology will operate only when those modules have the same size and type.

NOTE: We strongly recommend user to slot two DDR memory modules into the DIMMs with the same color in order for Dual Channel Technology to work.

The following tables include all memory-installed combination types:

Dual Channel Technology (DS: Double Side, SS: Single Side)

	DDR1	DDR2	DDR3	DDR4
2 memory modules	DS/SS	X	DS/SS	X
	X	DS/SS	X	DS/SS
4 memory modules	DS/SS	DS/SS	DS/SS	DS/SS

Don't operate Dual Channel Technology (DS:Double Side, SS: Single Side)

	DDR1	DDR2	DDR3	DDR4
1 memory module	DS/SS	X	X	X
	X	DS/SS	X	X
	X	X	DS/SS	X
	X	X	X	DS/SS
2 memory module	DS/SS	DS/SS	X	X
	X	X	DS/SS	DS/SS
3 memory module	DS/SS	DS/SS	DS/SS	X
	DS/SS	DS/SS	X	DS/SS
	DS/SS	X	DS/SS	DS/SS
	X	DS/SS	DS/SS	DS/SS