Aspire T130
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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Revision History

Please refer to the table below for the updates made on Aspire T130 service guide.

Date	Chapter	Updates

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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.

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System Specifications

Overview

Aspire T130 will use AK32 (Aspire T310) chassis. It will be a low cost K8 solution with memory card reader and firewire solution.

Aspire T130 is a versatile, high-power system, supporting AMD K8 CPUs (754). The computer uses Peripheral Component Interface (PCI) and Accelerated Graphics Port (AGP) design. This improves system efficiency and helps the system support varied multimedia and software applications.

Aspire T130 has standard I/O interfaces such as a serial port, parallel port, PS/2 keyboard and mouse ports, the system includes eight USB port(2 front access, 2 I/O bracket and the rest four have been occupied by devices), two microphone ports and stereo line-out jacks (one at front and one at rear panel) and a stereo line-in Jack (in rear panel) . The system can accommodate extra peripheral equirement through those I/O ports. The system can also support an optional high-speed fax/data modem or an additional LAN (local area network) card. Furthermore, the system is compatible with Windows XP Home operating systems.

Features & Specifications

CPU

- Support AMD Athlon 64 Processor
- Front Side Bus: 800MHz
- Socket type: K8 Socket 754

Chipset

- North Bridge: SiS755
- South Bridge: SiS964(L)
- AC'97 Audio Codec: ALC655

Memory

- Module Speed: DDR 200/266/333/400
- Socket Type: Two DDR 184-pin unbuffered DIMM sockets
- Maximum Memory Size: 2GB

BIOS

- BIOS Memory Size:2MB
- Kernel:Award Kernel with Acer skin

PCI Slot

- PCI Slots Quality: 3 pcs
- PCI Slot Type:PCI 2.2 5V slot

AGP Slot

- AGP Slot Type: AGP 8x 1.5V slot
- AGP Slot Quality:1
- Speed: 4x/8x

IDE

- Headers: Two 40-pin IDE low profile headers
- Devices: Up to 4 IDE devices
- Speed: PIO mode ATA 66/100/133

Audio Connectors and Headers

- Real Audio Connector: Line Out, Line In, Microphone In
- One CD-In Header
- One AUX In Header
- One SPDIF Header
- One Intel specification audio header

LAN

- LAN Phy: RealTek RTL8201BL/CT
- 10/100 Mbs support

- One RJ45 jack at the rear side

USB Connectors and Headers

- Support USB 2.0/1.1 and mixed mode
- 8 USB ports support
  - Two USB ports at the rear panel
  - Two USB ports at the front through daughter card(on-board)
  - Four on-board USB ports reserved for memory card reader

Modem

- Askey V.92 56K HSF Fax/Modem
- GVC V.92 56K HSF Fax/Modem

Memory Card Reader

- ECS 6-in-1 Memory Card Reader with 1394

Power Supply

- 230W in stable mode

Misc

- One 34-pin FDD low profile header
- Three 3-pin FAN header: CPU, Chassis, Power
- One COM connector, one COM header
- One LPT connector
- One PS/2 keyboard and mouse connector
- One front panel header
- One 20-pin ATX power supply connector; one 4-pin 12V power supply connector
- One 1394 connector (optional), one 1394 header (optional)
- One 10/100 fast Ethernet LAN Port
- One Buzzer

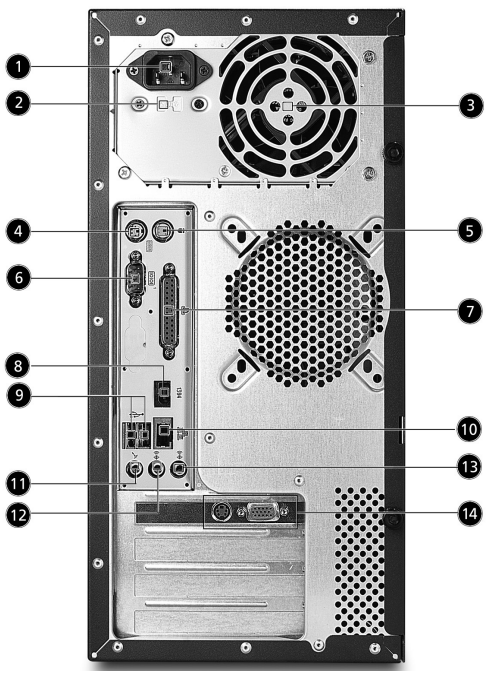
Front Panel

The computer's front panel consists of the following:

Label	Description
1	Optical Drive
2	Floppy Drive
3	6-in-1 Card Reader (Manufacturing Option)
4	Power Button
5	Speaker or Headphone Jack
6	Microphone Jack
7	USB Ports

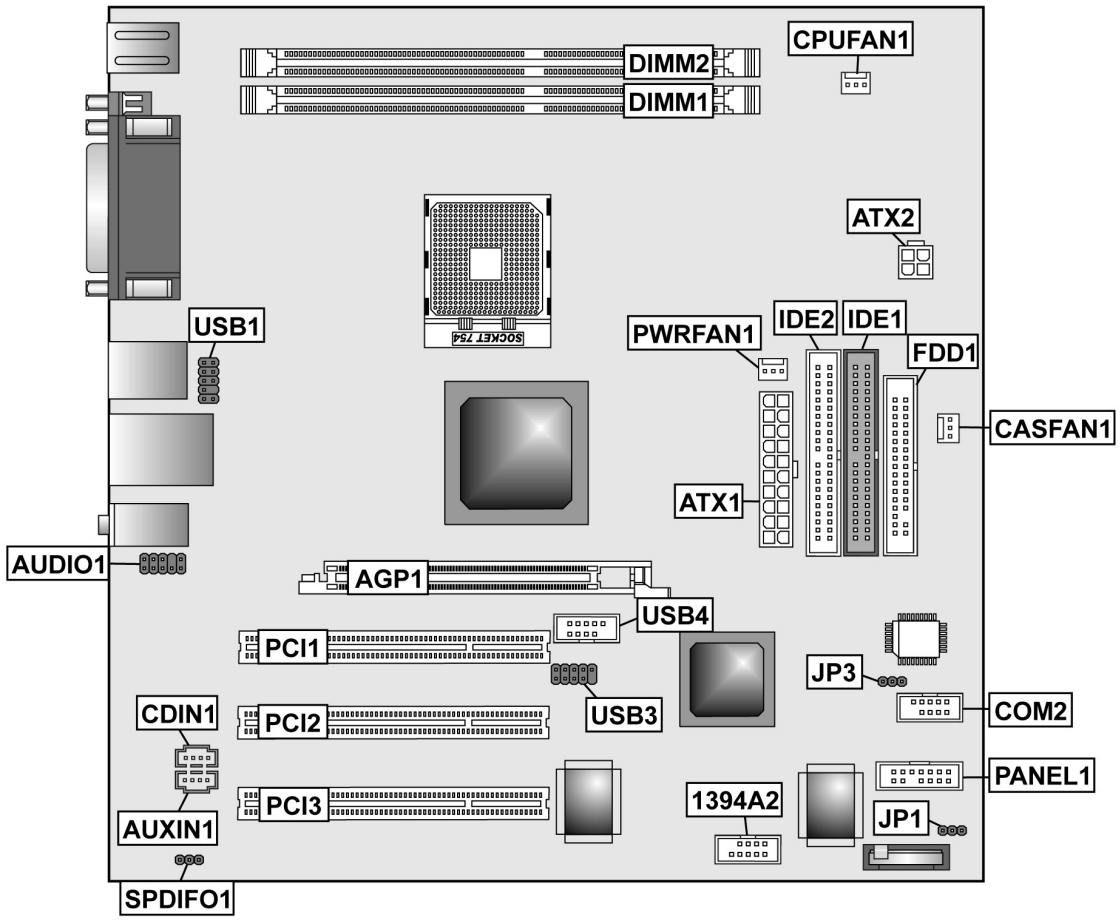
Rear Panel

The computer's rear panel consists of the following:



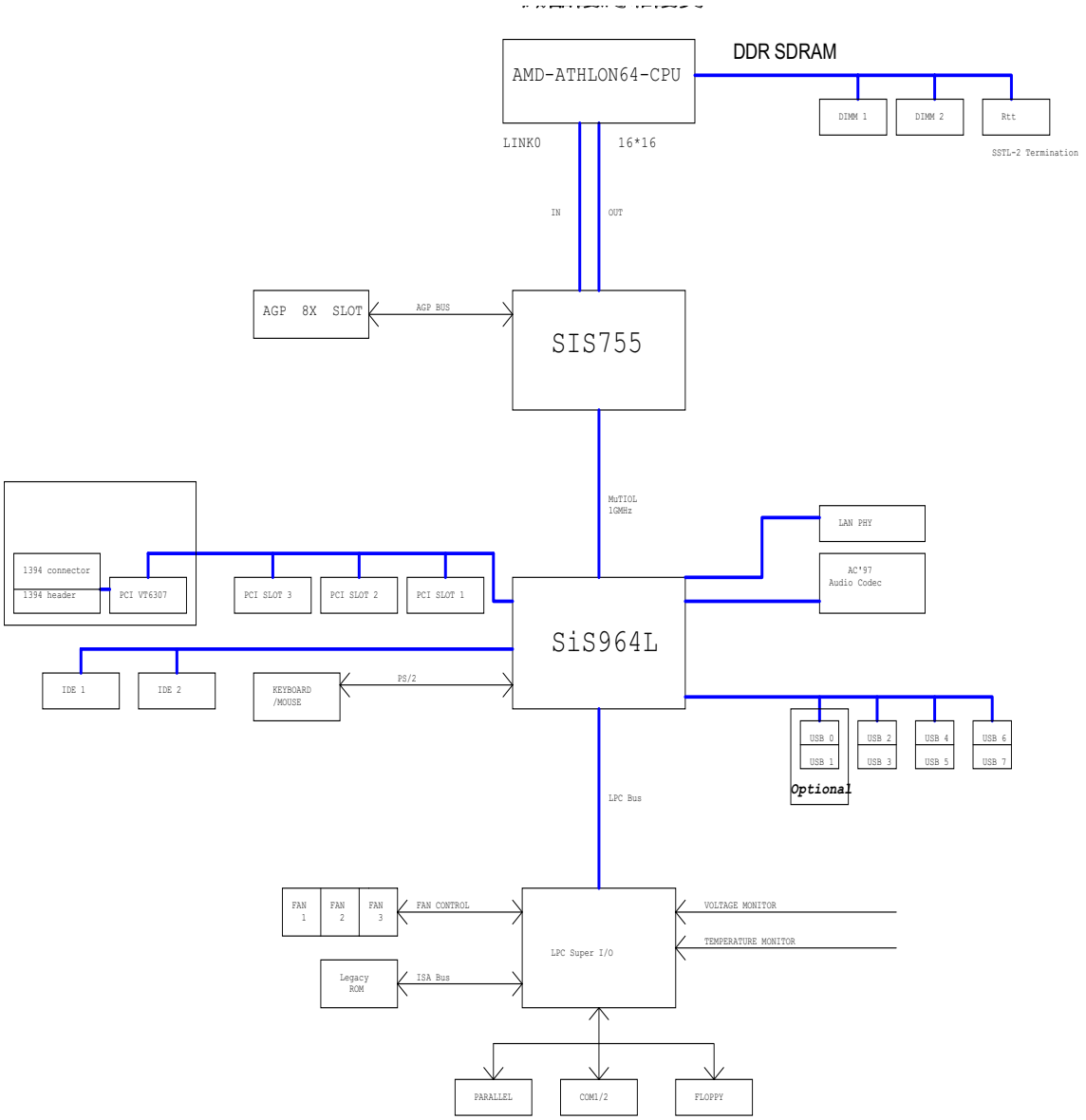
Label	Description
1	Power Cord Socket
2	Voltage Selector Switch
3	Fan Aperture
4	PS/2 Keyboard Port
5	PS/2 Mouse Connector
6	Serial Connector
7	Printer Connector
8	IEEE 1394 Port
9	USB Connectors
10	RJ-45 Ethernet Connector
11	Microphone Jack
12	Line-out Jack
13	Line-In Jack
14	Monitor Connector

Mainboard


CPUFAN1
DIMM2
DIMM1
ATX2
USB1
PWRFAN1
IDE2
IDE1
FDD1
CASFAN1
ATX1
AUDIO1
AGP1
USB4
PCI1
JP3
COM2
USB3
CDIN1
PCI2
PANEL1
1394A2
PCI3
JP1
AUXIN1
SPDIFO1

Lable	Component
AGP1	Accelerated Graphics Port (supports 1.5V AGP card only)
ATX1	Standard 20-pin ATX power connector
ATX2	Standard 4-pin ATX Power Connector
AUDIO1	Front Audio Connector
CASFAN1	Case fan connector
CDIN1	Primary CD-in connector
CPU FAN1	Cooling fan for CPU
DIMM1~DIMM2	Three 184-pin DDR SDRAM
FDD1	Floppy disk drive connector
IDE1	Primary IDE channel
IDE2	Secondary IDE channel
JP1	Clear CMOS jumper
PANEL1	Connector for case front panel switches and LED indicators
PCI1~ PCI3	Standard PCI Slot
USB1	USB header follow acer’s spec.
USB3	USB header follow acer’s spec.
USB4	USB header follow Intel’s spec.
PWRFAN1	3 pin header for 3rd fan
JP3	BIOS protection header
COM2	5x2 COM2 header follow acer’s spec.
1394A2	Standard header for 1394
AUXIN1	Audio Header
SPDIFO1	3 pin speaker header follow acer’s spec.

Block Diagram



Processor

Item	Specification
Type	AMD Athlon 64
Socket	754
Speed	3000+~3400+ or above
Voltage	1.40V~1.55V
Front Side Bus	800MHz

BIOS

Item	Specification
BIOS code programmer	Award
BIOS vision	v6.0
BIOS ROM type	Flash ROM
BIOS ROM size	2MB
BIOS ROM package	PLCC
Support Protocol	ACPI 1.0b, APM1.2, PC Card 95, AC972.3, EPP/IEEE 1284 1.7& 1.9, PCI 2.2, PnP 1.0a,DMI 2.0,USB,DDC-2B,ODD-bootable, Windows keyboard, Microsoft Simple Boot Flag
Support to LS-120 drive	Yes
Support to BIOS boot block feature	Yes

NOTE: The BIOS can be overwritten/upgraded by using the flash utility.

BIOS Hotkey List

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

This section has two table lists, system memory specification and the possible combinations of memory module.

System Memory

Item	*Specification*
Memory socket number	2 sockets
Memory Controller	K8 CPU
Support memory size per socket	1G
Support maximum memory size	2G
Support memoryType	DDR SDRAM(Double Data Rate-Synchronous Dynamic Random Access Memory)
Support memory Speed	100/133/166/200 MHz
Support memory voltage	2.6 V
Support memory module package	184-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.

Memory Combinations

Slot1	*Slot 2*	*Total Memory*
256 / 512 / 1024MB	0M	256/512/1024MB
256 / 512 / 1024MB	256MB	512/768/1280MB
256 / 512 / 1024MB	512MB	768/1024/1536MB
256 / 512 / 1024MB	1024MB	1280/1536/2048MB

Cache Memory

Item	*Specification*
First-Level Cache Configurations	
Cache function control	Enable/Disable by BIOS Setup
Second-Level Cache Configurations	
L2 Cache RAM type	PBSRAM
L2 Cache RAM size	256KB/512KB/1MB
L2 Cache RAM speed	One-half the processor core clock frequency
L2 Cache function control	Enable/Disable by BIOS Setup
L2 Cache scheme	Fixed in write-back

Video Memory

Item	*Specification*
Memory Size	8MB or above

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

Video Interface

Item	Specification
Video controller	N/A
Video controller resident bus	AGP Bus
Video interface support	Video YUV texture in all texture formats H/W DVD accelerator

Display

Display Screen Resolution	Refresh Rate (Hz)	Hor. Scan (KHz)	Pixel Clock (MHz)
640x480	60	31.5	25.2
640x480	72	37.4	32.0
640x480	75	37.5	31.5
640x480	85	43.3	36.0
640x480	120	63.7	55.0
800x600	56	35.2	36.0
800x600	60	37.8	39.9
800x600	72	48.0	50.0
800x600	75	46.9	49.5
800x600	85	53.7	56.2
800x600	100	62.5	67.5
800x600	120	76.1	81.0
800x600	160	101.9	110.0
1024x768	70	56.5	75.0
1024x768	75	60.0	78.8
1024x768	100	79.0	110.0
1280x1024	43	50.0	80.0
1280x1024	60	64.0	110.0
1280x1024	85	91.2	157.5
1600x1200	60	76.2	156.0
1600x1200	85	106.2	229.5

Audio Interface

Item	Specification
Audio controller	Realtek ALC655
Audio controller resident bus	AC’97
Audio function control	Enable/disable by BIOS Setup
Mono or stereo	Stereo
Resolution	26 bits
Channel	6

IDE Interface

Item	Specification
Chip Vendor	SiS
Chip Name	SiS964L
Number of IDE channel	2
Support IDE interface	Yes
Support bootable CD-ROM	Yes

Floppy Disk Drive Interface

Item	Specificatoin
Vendor & Mode Name	Panasoic JU-226A 243FC
Floppy Disk Specification	
Floppy Disk Drive Controlle	ITE8705
Floppy Disk Drive Controller Resident Bus	ISA Bus
Support FDD format	360KB, 720KB, 1.2MB, 1.44MB, 2.88MB

Parallel Port

Item	Specification
Parallel port controller	ITE8705
Parallel port controller resident bus	ISA bus
Number of parallel ports	1
Location	Rear Side
Support ECP/EPP	SPP / Bi-directional / ECP / EPP
Connector type	25-pin D-type female connector
Parallel port function control	Always Enabled
Optional ECP DMA channel (in BIOS Setup)	DMA channel 1 DMA channel 3
Optional parallel port I/O address (via BIOS Setup)	378h
Optional parallel port IRQ (via BIOS Setup)	IRQ7

Serial Port

Item	Specification
Serial port controller	ITE8705
Serial port controller resident bus	ISA bus
Number of serial port	1
16550 UART support	No
Connector type	9-pin D-type female connector
Optional serial port I/O address (via BIOS Setup)	COM1: 2F8h, 3E8h, 2E8h COM2: 3E8h, 3F8h, 2F8h
Optional serial port IRQ (via BIOS Setup)	COM1: IRQ 3, and 4 COM2: IRQ 4, and 3

Modem

Item	Specification
Chipset	Agere Scorpio+CSP1037P
Fax modem data baud rate (bps)	14.4K
Data modem data baud rate (bps)	56K
Voice modem	V.253
Modem connector type	RJ11
Full duplex	No

USB Port

Item	Specification
USB Compliancy Level	USB 1.1/2.0
EHCI	USB 2.0
Number of USB Port	8 (M/B support total 8 USB but there only 4 can be used, another 4 have been occupied by memory card reader)
Location	Rear Side(2) /Front side(2)
Serial Port Function Control	Always Enabled

PCI INTx# and IDSEL Assignment Map

PCI INTx #	PCI Devices	Device IDSEL: ADxx
INTA#	AGP-slot	N
INTB#	PCI-Slot1	AD20
INTC#	PCI-Slot2	AD21
INTD#	PCI-Slot3	AD22

PCI Slot IRQ Routing Map

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

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

I/O Address Map

Hex Range	Devices
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	Cascade Interrupt Control	N
IRQ3	Serial Alternate	Reserved
IRQ4	Serial Primary	Reserved
IRQ5	MPU-401(Alternate)	Reserved
IRQ6	Floppy Disk	Reserved
IRQ7	Parallel Port	ReservedReserved
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	Primary IDE	Reserved
IRQ15	Secondary IDE	Reserved

NOTE: N - Not be used

DRQ Assignment Map

DRQx	System Devices	Add-On-Card Devices
IRQ0	N	Reserved
IRQ1	N	Reserved
IRQ2	FDD	N
IRQ3	N	Reserved
IRQ4	Cascade	N
IRQ5	N	Reserved
IRQ6	N	Reserved
IRQ7	N	Reserved

NOTE: N - Not be used

Mainboard Major Chips

Item	Controller
System core logic	SiS755
Video controller	N/A
Super I/O controller	ITE8705
Audio controller	RealTek AC655
HDD controller	SiS964L
Keyboard controller	SiS964L
RTC	SiS964L
IEEE1394	VIA6307

Environment Requirements

Item	Specification
Temperature	
Operating	+5 ~ +35°C
Non-operating	-20 ~ +60°C (Storage package)
Humidity	
Operating	0% to 90% RH
Non-operating	20% to 90% RH
Vibration	
Operating (unpacked)	5-500Hz, 1.0Grms (random)
Non-operating (packed)	5-500Hz, 2.16Grms (random)

Switching Power Supply 200W

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

Input Voltage	Variation Range
100 - 120 VRMS	90 - 132 VRMS

Input Voltage	Variation Range
200 - 240 VRMS	180 - 264 VRMS

Input Current	Measuring Range
4A	90 -132 VRMS
2A	180 - 264 VRMS

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

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

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/flat. 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.

BIOS Navigation Keys

The BIOS navigation keys are listed below:

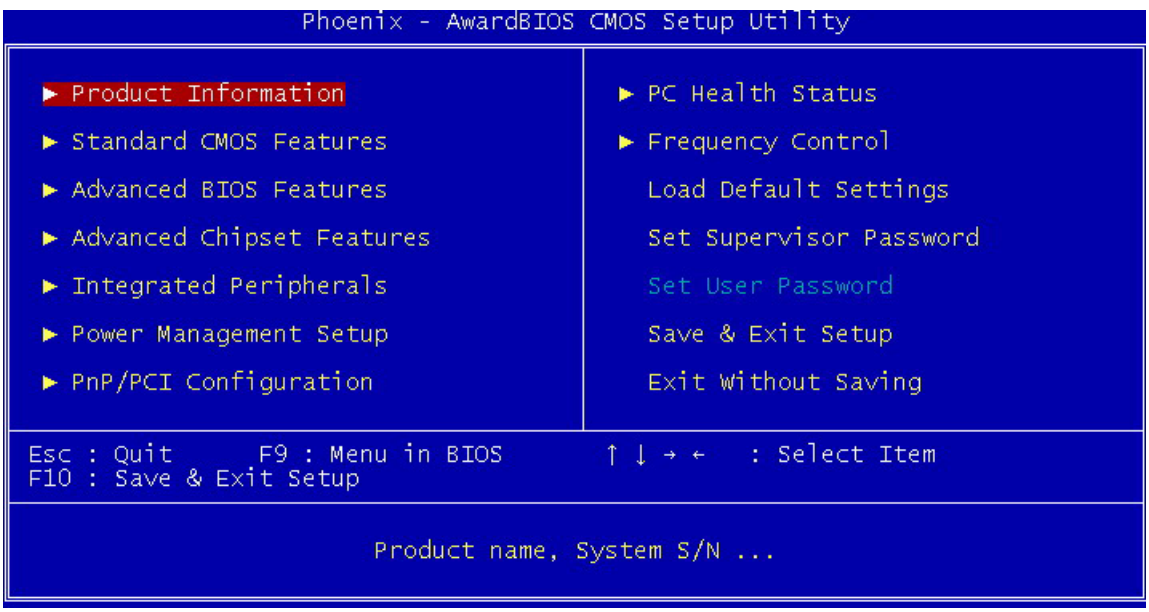
Key	Function
ESC	Exits the current menu
← → ↑ ↓	Scrolls through the items on a menu
+ − PG UP PG DN	Modifies the selected field's values
F10	Saves the current configuration and exits setup
F1	Displays a screen that describes all key functions
F5	Loads previously saved values to CMOS
F6	Loads a minimum configuration for troubleshooting
F7	Loads an optimum set of values for peak performance

Entering Setup

Power on the computer and the system will start POST (Power On Self Test) process. When the message of "`Press DEL to enter SETUP`" appears on the screen, press DEL to enter the setup menu.

NOTE: If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and On. You may also restart the system by simultaneously pressing [Ctrl+Alt+Delete].

The Setup Utility main menu then appears:



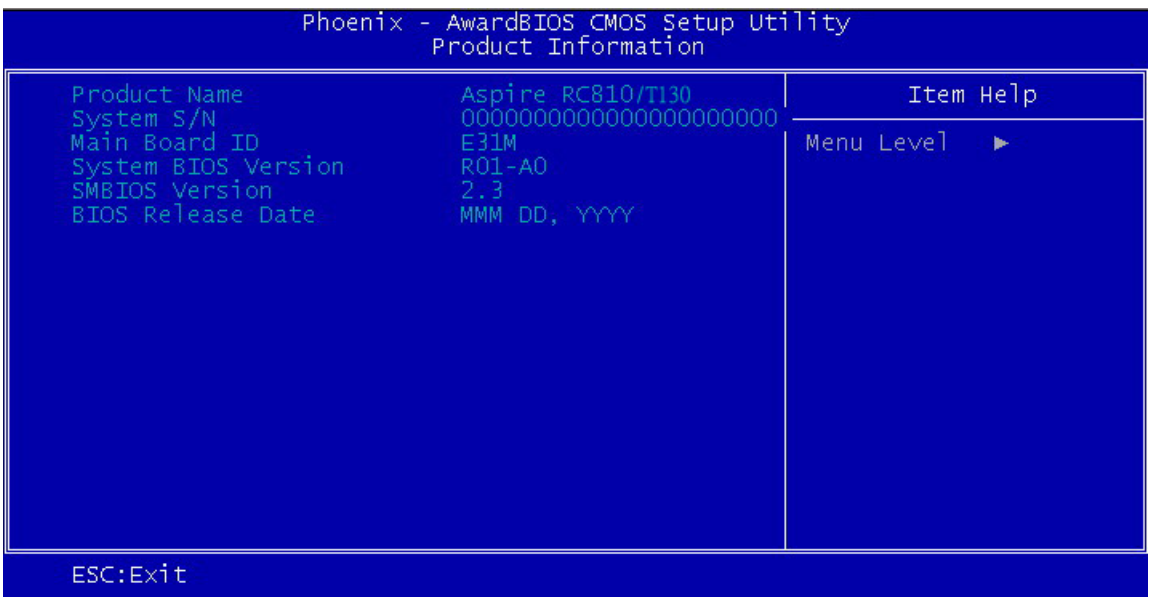
Item	Parameter	Item	Parameter
1	Production Information	*8*	PC Health Status
2	Standard CMOS Features	*9*	Frequency Control
3	Advanced BIOS Features	*10*	Load Default Settings
4	Advanced Chipset Features	*11*	Set Supervisor Password
5	Integrated Peripherals	*12*	Set User Password
6	Power Management Setup	*13*	Save & Exit Setup
7	PnP/PCI Configurations	*14*	Exit Without Saving

Product Information

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

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 (may be required when asking for technical support).

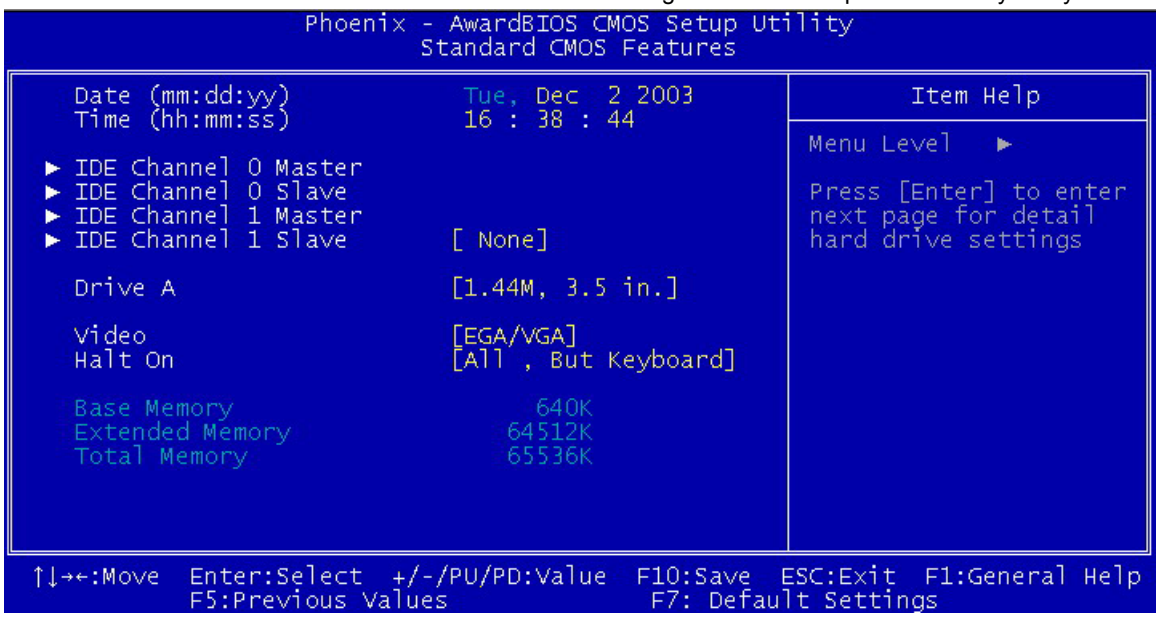
The following table describes the parameters found in this menu:



Parameter	Description
Product Name	Displays the model name on your system
System S/N	Displays the system's S/N
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
BIOS Release Date	Displays the release date of the BIOS utility MMM DD,YYYY

Standard CMOS Features

Select Standard CMOS Features from the main menu to configure some basic parameters in your system.



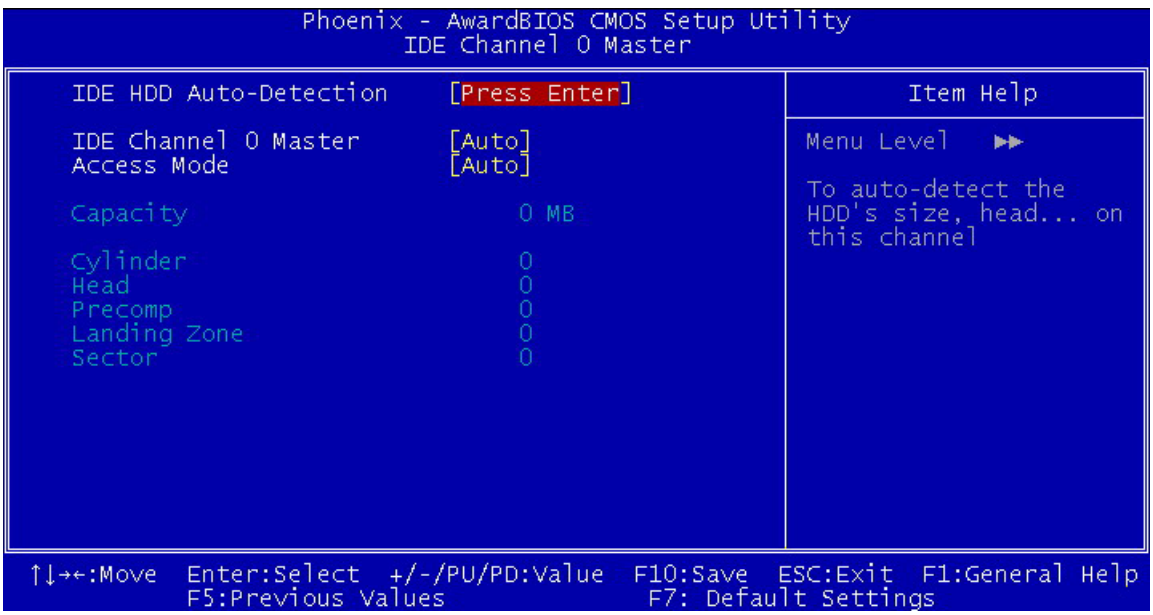
Parameter	Description	Option
Date	Let's you set the date following the weekday-month-day-year format	Weekday: Sun, Mon, ...Sat Month: Jan, Feb,....Dec Day: 1 to 30 Year: 1980 to 2079
Time	Let's you set the time following the hour-minute-second format	Hour: 0 to 23 Minute: 0 to 59 Second: 0 to 59
IDE Channel 0 Master	Lets you configure the hard disk drive connected to the master port of IDE channel 0. To enter the IDE Channel 0 Master setup, press ENTER. The IDE CD-ROM is always automatically detected.	(Show the Status:) None HDD or CD-ROM Number
IDE Channel 0 Slave	Lets you configure the hard disk drive connected to the slave port of IDE channel 0. To enter the IDE Channel 0 Slave setup, press ENTER. The IDE CD-ROM is always automatically detected.	(Show the Status:) None HDD or CD-ROM Number
IDE Channel 1 Master	Lets you configure the hard disk drive connected to the master port of IDE channel 1. To enter the IDE Channel 1 Master setup, press ENTER. The IDE CD-ROM is always automatically detected.	(Show the Status:) None HDD or CD-ROM Number

Parameter	Description	Option
IDE Channel 1 Slave	Lets you configure the hard disk drive connected to the slave port of IDE channel 1. To enter the IDE Channel 1 Slave setup, press ENTER. The IDE CD-ROM is always automatically detected.	(Show the Status:) None HDD or CD-ROM Number
Drive A	Allows you to configure your floppy drive A.	None 360K, 5.25in 1.2M , 5.25 in. 720K , 3.5 in. **1.44M, 3.5 in.** 2.88M, 3.5 in.
Video	This item specifies the type of video card in use. The default setting is VGA/EGA. Since current PCs use VGA only, this function is almost useless and may be disregarded in the future.	**EGA/VGA** CGA 40 CGA 80 MONO
Halt On	This parameter enables you to control the system stops in case of Power On Self Test errors (POST).	All Errors No Errors **All ,But keyboard** All ,But Diskette All ,but Disk/Key
Base Memory	Refers to the portion of memory that is available to standard DOS programs. DOS systems have an address space of 1 MB, but the top 384 KB (called high memory) is reserved for system use. This leaves 640 KB of conventional memory. Everything above 1 MB is either extended or expanded memory.	N/A
Extended Memory	Memory above and beyond the standard 1 MB (megabyte) of base memory that DOS supports. Extended memory is not configured in any special manner and is therefore unavailable to most DOS programs. However, MS Windows and OS/2 can use extended memory.	N/A
Total Memory	Total base, and extended memory, and I/O ROM 384KB available to the system.	N/A

IDE Channel 0 Master/Slave and IDE Channel 1 Master/Slave

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

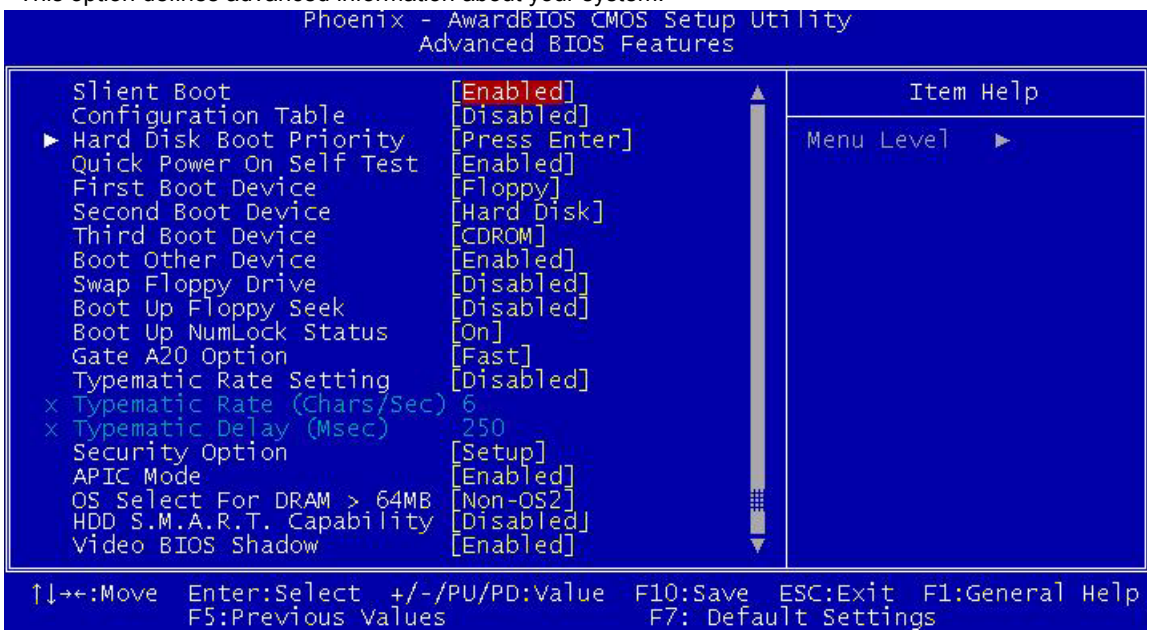
The following table describes the parameters found in this menu.



Parameter	Description	Option
IDE HDD Auto-Detection	Auto-detects your hard disk drive.	[Press Enter]
IDE Channel 0 Master/Slave IDE Channel 1 Master/Slave	Displays the device type	None **Auto** Manual
Access Mode	Selects the HDD access mode	CHS LBA Large **Auto**
Capacity	Shows the size of your hard disk in MB.	xxxxxx MB
Cylinder	Shows your hard disk's number of cylinders.	0 to 65535
Head	Shows your hard disk's number of heads	0 to 255
Precomp	Selects the Precomp number for old HDD parking	0 to 65535
Landing Zone	Selects the Landing Zone number for old HDD parking	0 to 65535
Sector	Shows your hard disk's number of sectors	0 to 255

Advanced BIOS Features

This option defines advanced information about your system.



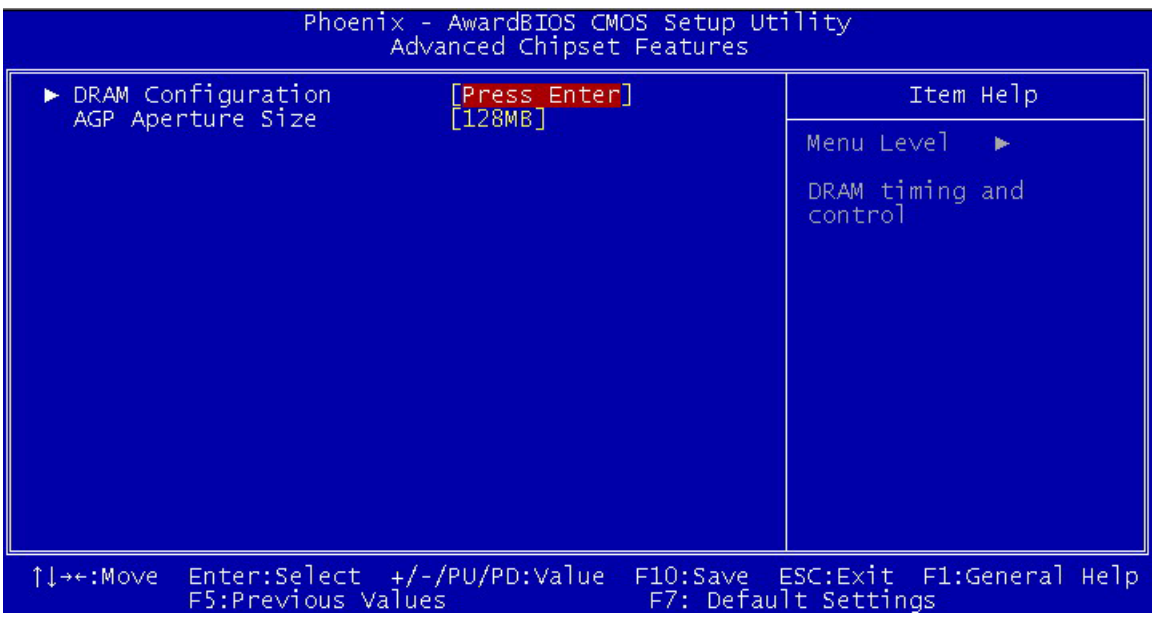
Parameter	Description	Options
Silent Boot	This is to switch 1st screen logo (default Acer's logo)	Disabled **Enabled**
Configuration Table	This is to select if system configuration shown by 2nd screen or not.	**Disabled** Enabled
Hard Disk Boot Priority	Selects the hard disk boot priority	**Press Enter** Pri. Master Pri. Slave Sec. Master Sec. Slave USBHDD0/1/2 Bootable Add-in Cards
Quick Power on Self Test	This parameter speeds up POST by skipping some items that are normally checked.	Disabled **Enabled**
First Boot Device	The items allow you to set the sequence of boot device where BIOS attempts to load the disk operating system.	**Floppy** LS120 Hard Disk CD ROM ZIP100 USB-FDD USB-ZIP USB-CDROM LAN Disabled

Parameter	Description	Options
Second Boot Device	The items allow you to set the sequence of boot device where BIOS attempts to load the disk operating system.	Floppy LS120 **Hard Disk** CD ROM ZIP100 USB-FDD USB-ZIP USB-CDROM LAN Disabled
Third Boot Device	The items allow you to set the sequence of boot device where BIOS attempts to load the disk operating system.	Floppy LS120 Hard Disk **CD ROM** ZIP100 USB-FDD USB-ZIP USB-CDROM LAN Disabled
Boot Other Device	This parameter allows you to specify the system boot up search sequence.	Disabled **Enabled**
Swap Floppy Driver	Setting to Enabled will swap floppy drive a: and b:	**Disabled** Enabled
Boot Up Floppy Seek	If this item is enabled, it checks the size of the floppy disk drives at start-up time. You don't need to enable this item unless you have a legacy diskette drive with 360K capacity.	**Disabled** Enabled
Boot up NumLock Status	This item defines if the keyboard Num Lock key is active when your system is started.	Off/**On**
Gate A20 Option	This item is to set the Gate A20 status. A20 refers to the first 64KB of extended memory. When the default value Fast is selected, the Gate A20 is controlled by port 92 or chipset specific method resulting in faster system performance. When Normal is selected, A20 is controlled by a keyboard controller or chipset hardware.	**Fast** Normal
Typematic Rate Setting	If this item is enabled, you can use the following two items to set the typematic rate and the typematic delay settings for your keyboard. ❑ Typematic Rate (Chars/Sec) : Use this item to define how many characters per second are generated by a held-down key. ❑ Typematic Delay (Msec): Use this item to define how many milliseconds muse elapse before a held-down key begins generating repeat characters.	**Disabled** Enabled

Parameter	Description	Options
Typematic Rate (Chars/sec)	After Typematic Rate Setting is enabled, this item allows you to set rate (characters/second) at which at keys are accelerated.	Settings: **6**,8,10,12,15,20,24 and 30
Typematic Delay	This item allows you to select the delay between when the key was first pressed and when the acceleration begins.	Settings: **250**,500,750 and 1000
Security Option	If you have installed password protection, this item defines if the password is required at system start up, or if it is only required when a user tries to enter the Setup Utility.	**Setup** System
APIC Mode	This items allows you to enable APIC (Advanced Programmable Interrupt Controller) functionality. APIC is an Intel chip that provides symmetic multiprocessing (SMP) for its Pentium systems.	**Enabled** Disabled
OS Select For DRAM > 64MB	This item is only required if you have installed more than 64MB of memory and you are running the OS/2 operating system. Otherwise, leave this item at the default.	**Non-OS2** OS2
HDD S.M.A.R.T Capability	The S.M.A.R.T (Self-Monitoring, Analysis, and Reporting Technology) system is a diagnostics technology that monitors and predicts device performance. S.M.A.R.T software resides on both the disk drive and the host computer. The disk drive software monitors the internal performance of the motors, media, heads, and electronics of the drive. The host software monitors the overall reliability status of the drive. If a device failure is predicated, the host software, through the Client WORKS S.M.A.R.Tapplet, warns the user of the impending condition and advise appropriate action to protect the data.	**Disabled** Enabled
Video BIOS Shadow	This function, when enabled allows VGA BIOS to be copied to the system DRAM for enhanced performance.	Disabled **Enabled**

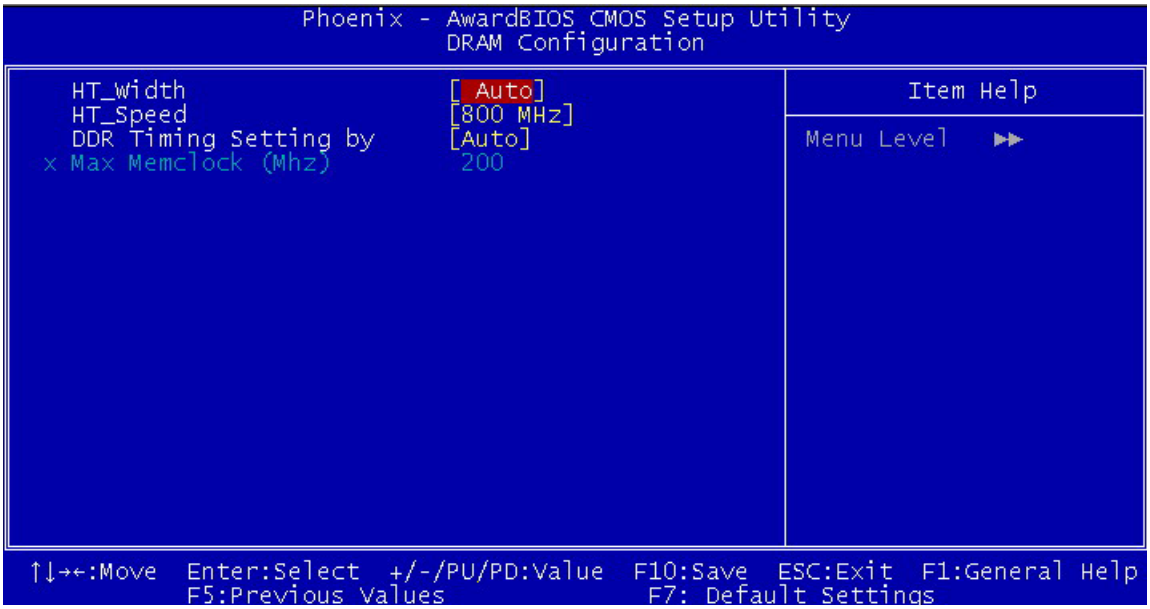
Advanced Chipset Features

These items define critical timing parameters of the mainboard. You should leave the items on this page at their default values unless you are very familiar with the technical specifications of your system hardware. If you change the values incorrectly, you may introduce fatal errors or recurring instability into your system.



Parameter	Description	Option
DRAM Configuration	DRAM timing and control	Press Enter
AGP Aperture Size	This item defines the size of the aperture if you use an AGPgraphics adapter. The AGP aperture refers to a section of the PCI memory address range used for graphics memory.	32MB 64MB **128MB** 256MB 512MB

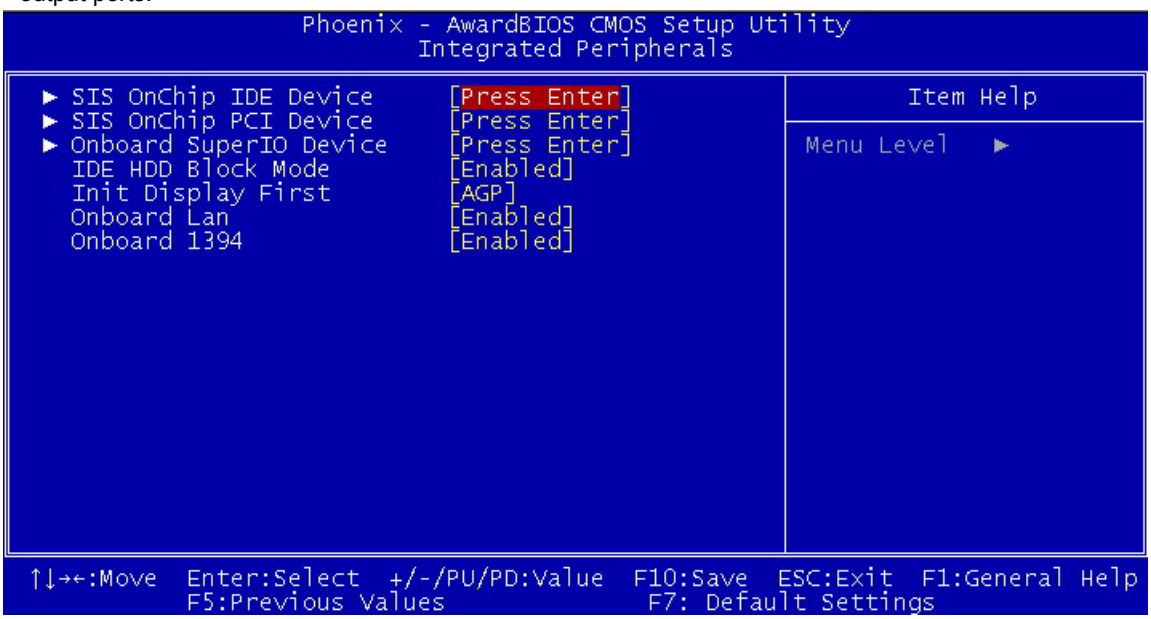
DRAM Configuration



Parameter	Description	Option
HT_Width	This item shows Hyper Transport TM 's bus size of Local Descriptor Table (LDT). The bus size is automatically calculated by the CPU. Therefore, we strongly recommend that you do not change this setting.	8 bits 16 bits **Auto**
HT_Speed	This item shows the bus frequency of Local Descriptor Table(LDT). Its default is setting as 800MHz.	200 MHz 400 MHz 600 MHz **800 MHz**
DDR Timing Setting by	Set this to the default value to enable the system to automatically set the DDR timing by SPD(Serial Presence Detect). SPD is an EEPROM chip on the DIMM module that stores information about the memory chips it contains, including size, speed, voltage, row and column addresses, and manufacture. If you disable this item, you can use the following three items to manually set the timing parameters for the system memory.	Manual **Auto**
Max Memclock (Mhz)	When DDR Timing Setting by is set to Manual, use this item to set the DRAM frequency.	200

Integrated Peripherals

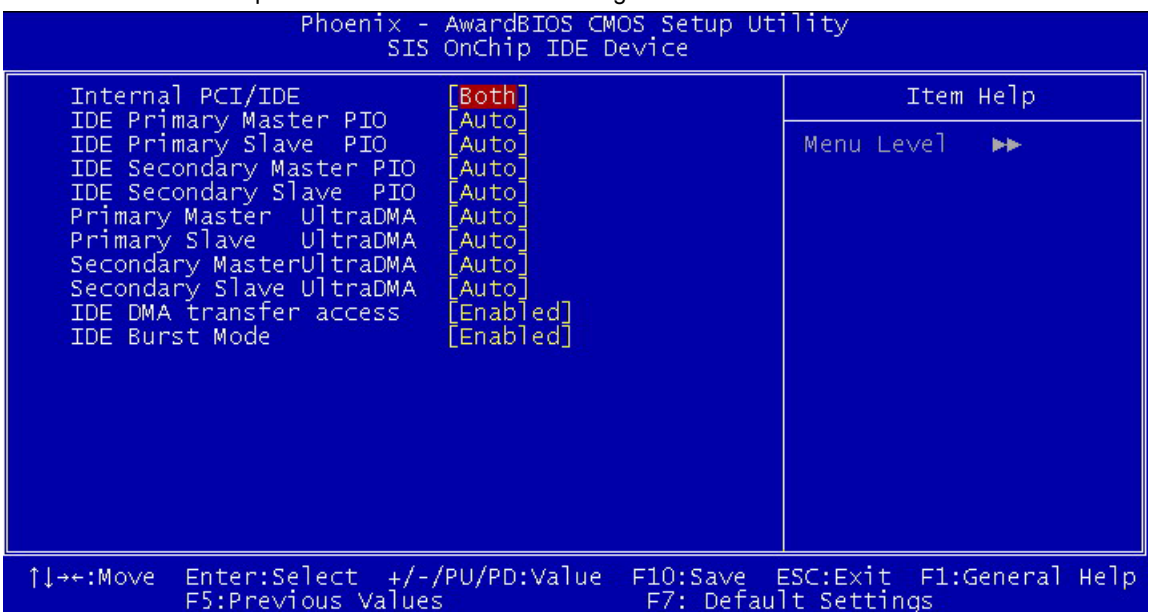
These options display items that define the operation of peripheral components on the system's input/ output ports.



Parameter	*Description*	*Option*
SIS OnChip IDE Device	Press enter to setup the IDE device	**Press Enter**
SIS OnChip PCI Device	Press enter to setup the PCI device	**Press Enter**
Onboard SuperIO Device	Press enter to setup the superIO device	**Press Enter**
IDE HDD Block Mode	If your IDE hard drive supports block mode select Enabled for automatic detection of the optimal number of block read/writes per sector the drive can support	Disabled **Enabled**
Init Display First	Use this item to specify whether your graphics adapter is installed in one of the PCI slot or is integrated on the mainboard.	PCI Slot **AGP**
Onboard LAN	Enables and disables the onboard LAN.	**Enabled** Disabled
Onboard 1394	Enables or disables the onboard 1394.	**Enabled** Disabled

SiS OnChip IDE Device

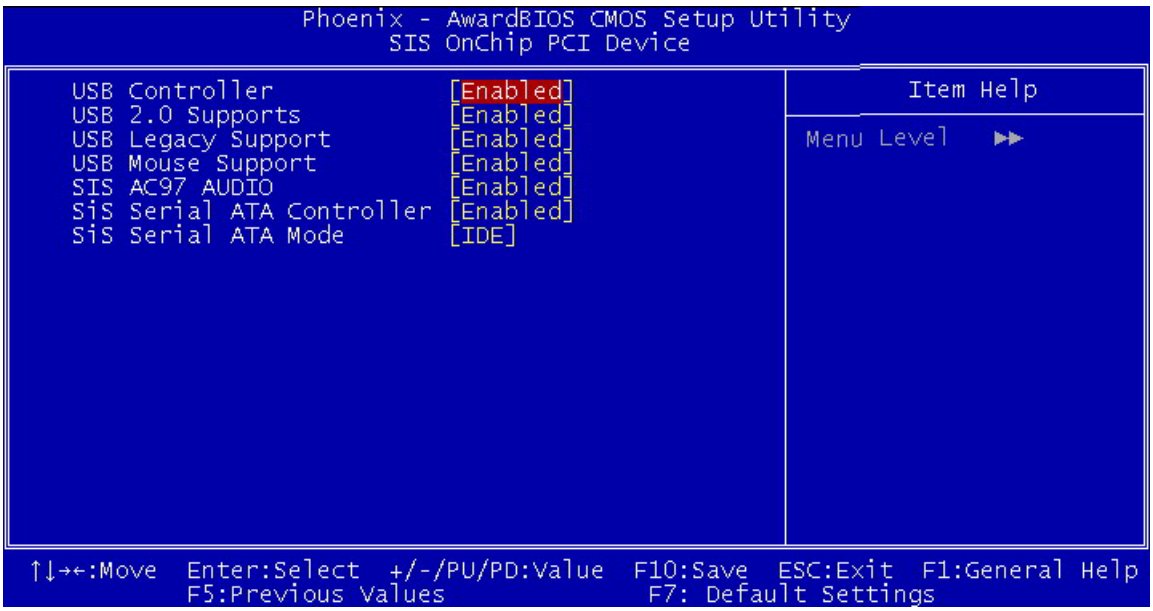
Scroll to this item and press <Enter> to view the following screen:



Parameter	Description	Option
Internal PCI/IDE	These parameters allow you have these options to set the IDE devices connect to the connectors	Disabled Primary Secondary **Both**
IDE Primary Master PIO IDE Primary Slave PIO IDE Secondary Master PIO IDE Secondary Slave PIO	Setting these items to Auto activates the HDD speed auto-detect function. The PIO mode specifies the data transfer rate of the HDD. For example, mode 0 data transfer rate is 3.3 MB/s, mode 1 is 5.2 MB/s, mode 2 is 8.3 MB/s, mode 3 is 11.1 MB/s and mode 4 is 16.6 MB/s. If your hard disk performance becomes unstable, you may manually try the slower mode. **Caution:** It is recommended that you connect the first IDE device of each channel to the endmost connector of the IDE cable.	**Auto** Mode 0 Mode 1 Mode 2 Mode 3 Mode 4
Primary Master UDMA Primary Slave UDMA Secondary Master UDMA Secondary Slave UDMA	Each IDE channel supports a master device and a slave device. This mainboard supports UltraDMA technology, which provides faster access to IDE devices. If you install a device that supports Ultra DMA, change the appropriate item on this list to Auto. You may have to install the Ultra DMA driver supplied with this mainboard in order to use an UltraDMA device.	Diabled **Auto**

SiS OnChip PCI Device

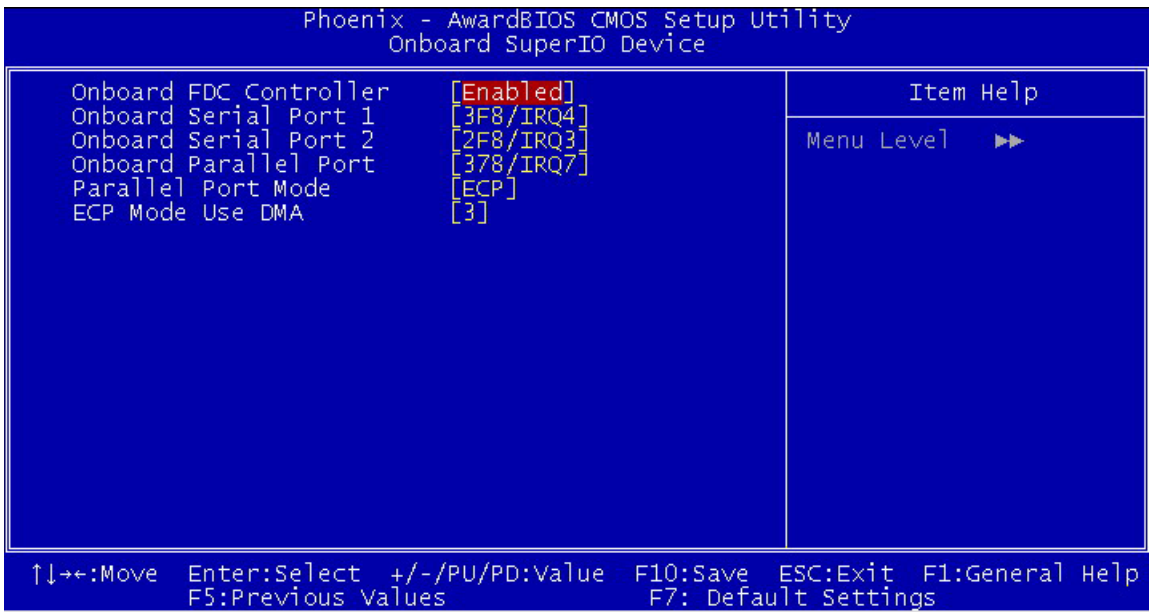
Scroll to this item and press <Enter> to view the following screen:



Parameter	Description	Option
USB Controller	This item is used to enable or disable the On-chip USB.	Disabled **Enabled**
USB 2.0 Supports	Enable this item if you plan to use the Universal Serial Bus ports on this mainboard.	Disabled **Enabled**
USB Legacy Support	This item allows the BIOS to interact with a USB keyboard or mouse to work with MS-DOS based utilities and non-Windows modes.	Disabled **Enabled**
USB Mouse Support	Enable this item if you plan to use a mouse connected through the USB port in a legacy operating system (such as DOS) that does not support Plug and Play.	Disabled **Enabled**
SIS AC97 AUDIO	Enables and disables the onboard AC97 audio function. Disable this item if you are going to install a PCI audio add-on card.	Disabled **Enabled**
SIS Serial ATA Controller	Hidden (acer won't support)	Disabled **Enabled**
SIS Serial ATA Mode	Hidden (acer won't support)	**IDE** RAID

Onboard SuperIO Device

Scroll this item and press <Enter> to view the following screen:

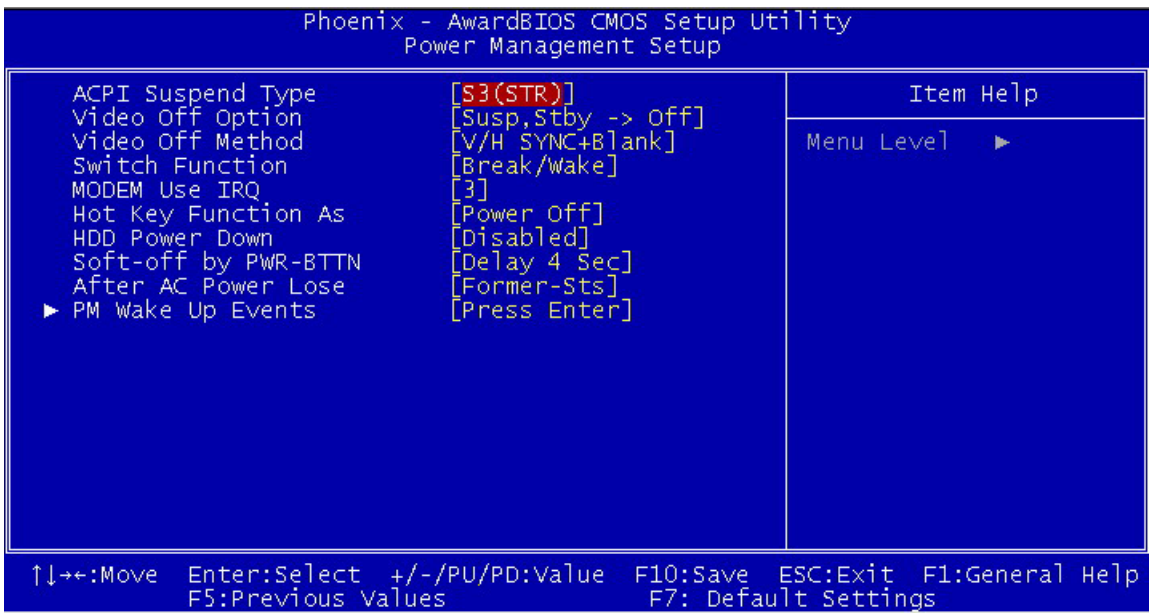


Parameter	Description	Option
Onboard FDC Controller	This option enables the onboard floppy disk drive controller.	Disabled **Enabled**
Onboard Serial Port 1	This option is used to assign the I/O address and interrupt request (IRQ) for the onboard serial port 1 (COM1).	Disabled **3F8/IRQ4** 2F8/IRQ3 3E8/IRQ4 2E8/IRQ3 Auto
Onboard Serial Port 2	This option is used to assign the I/O address and interrupt request (IRQ) for the onboard serial port 2 (COM2).	**Disabled** 3F8/IRQ4 **2F8/IRQ3** 3E8/IRQ4 2E8/IRQ3 Auto
Onboard Parallel Port	This option is used to assign the I/O address and interrupt request (IRQ) for the onboard parallel port.	Disabled **378/IRQ7** 278/IRQ5 3BC/IRQ7

Parameter	Description	Option
Parallel Port Mode	Enables you to set data transfer protocol for your parallel port. There are four options: SPP (Standard Parallel Port), EPP(Enhanced Parallel Port), ECP(Extended Capabilities Port) and ECP+EPP. SPP allows data output only. Extended Capabilities Port (ECP) and Enhanced Parallel Port (EPP) are bi-directional modes, allowing both data input and output. ECP and EPP modes are only supported with EPP and ECP aware peripherals.	SPP EPP **ECP** ECP+EPP
ECP Mode Use DMA	When the onboard parallel port is set to ECP mode, the parallel port can use DMA 3 or DMA 1.	1 **3**

Power Management Setup

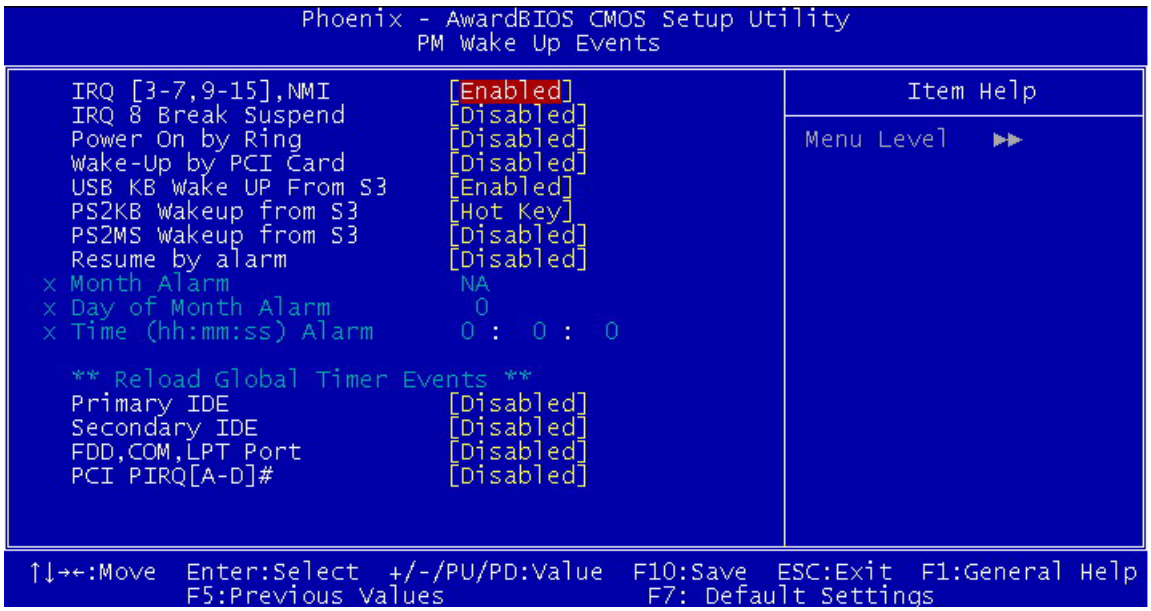
This option lets you control system power management. The system has various power-saving modes including powering down the hard disk, turning off the video, suspending to RAM, and software power down that allows the system to be automatically resumed by certain events.



Parameter	Description	Option
ACPI Suspend Type	This item specifies the power saving modes for ACPI function. S1(POS): The S1 sleep mode is a low power state. In this state, no system context (CPU or chipset) is lost and hardware maintains all system context. S3 (STR): The S3 sleep mode is s power-down state in which power is supplied only to essential components such as main memory and wake-capable devices and all system context is saved to main memory. The information stored in memory will be used to restore the PC to the previous state when an *wake-up* event occurs. S1&S3: Both S1 and S3 will be adopted.	S1(POS) **S3(STR)** S1&S3
Video Off Option	This item is to control the mode in which the monitor will shut down. Always On: Always keep the monitor on. Suspend --> Off: During suspend mode, the monitorwill shut down.	Always On Suspend > Off **Susp, Stby > Off** All Modes > Off
Video Off Method	This determines the manner in which the monitor is blanked. **V/H SYNC+Blank**: This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer. **Blank Screen**: This option only writes blanks to the video buffer. **DPMS**: Initial display power management signaling.	Blank Screen **V/H SYNC+Blank** DPMS Supported

Parameter	Description	Option
Switch Function	This option enables you to specify the function of the button: 1. Disabled: The button functions is disabled 2. Break/Wake: The button functions are same as suspend button in APM mode. When the button is depressed, the system enters a suspended state until the button is again depressed to return the system to normal operating status.	Disabled **Break/Wake**
Mode Use IRQ	If you want an incoming call on a modem to automatically resume the system from a power-saving mode, use this item to specify the interrupt request line (IRQ) that is used by the modem. You might have to connect the fax/modem to the mainboard Wake On Modem connector for this feature to work.	N/A **3** 4 5 7 9 10 11
Hot Key Function As	This option allows you to set the Hot Key functionality to one of the following states: Disabled, Power Off and Suspend	Disabled **Power Off** Suspend
HDD Power Down	This option lets you specify the IDE HDD idle time before the device enters the power down state. This item is independent from the power states previously described in this section (Standby and Suspend).	**Disabled** 1~15 Mins
Soft-off by PWR-BTTN	This is a specification of ACPI and supported by hardware. When Delay 4 sec. is selected, the soft power switch on the front panel can be used to control power On, Suspend and Off.The other setting is Instant-Off, where the soft power switch is only used to control On and Off, there is no need to press 4 sec, and there is no Suspend.	Instant Off **Delay 4 Sec**
After AC Power Lose	This item specifies when your system reboot after a power failure or interrupt occurs.	Always Off Always On **Former-Sts**
PM Wake Up Events	Disabled: The specified event's activity will not affect the PM Timers/wake up the system. Enabled: The specified event's activity will affect the PM Timers/wake up the system. For example, if you have a modem on IRQ3, you can turn On IRQ3 as a wake-up event, so an interrupt from the modem can wake up the system. Or you may wish to turn Off IRQ12 (the PS/2) mouse as a wake-up event, so accidentally brushing the mouse does not awaken the system.	**Press Enter**

PM Wake Up Events

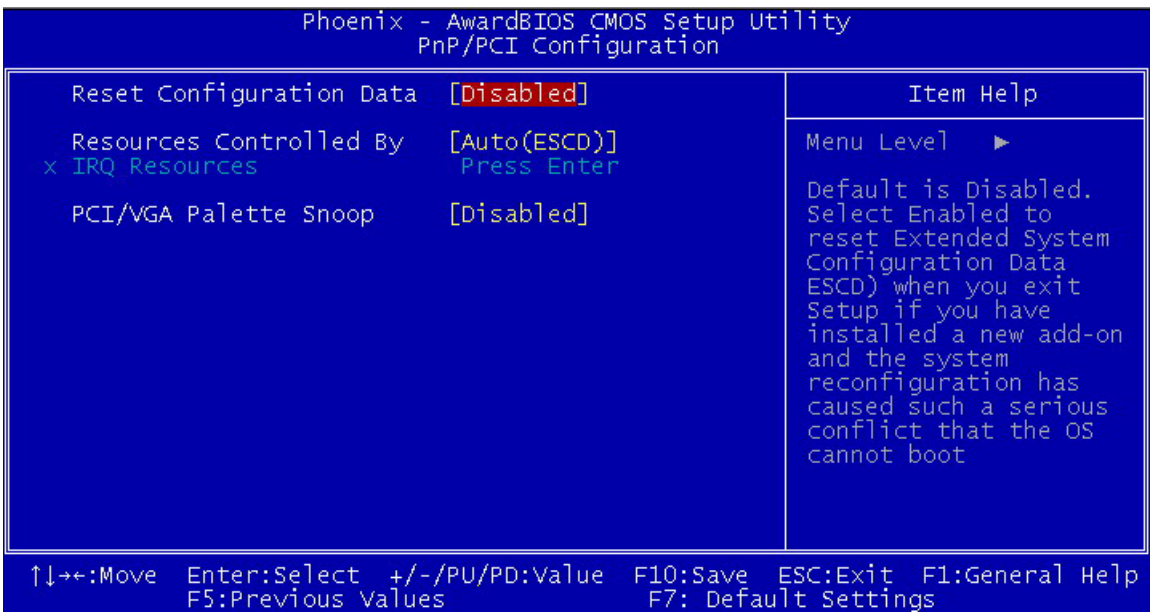


Parameter	Description	Option
IRQ [3-7, 9-15],NMI	This option determines whether any activity for IRQ 3-7/9-15 will cause the system to wake from a power saving mode.	Disabled **Enabled**
IRQ8 Break Suspend	Determines whether the system will monitor IRQ 8 activity and wake the system from a power saving mode when IRQ 8 is activated.	**Disabled** Enabled
Power On by Ring	This option determines the system power on by ring	**Disabled** Enabled
Wake-Up by PCI Card	This option determines the system wakup by PCI card	**Disabled** Enabled
USB KB Wake Up From S3	USB Keyboard wakeup from S3 (tandyb status)	Disabled **Enabled**
PS2KB Wakeup from S3	PS2 Keyboard wakeup from S3 (standby status)	**Hot Key**
PS2MS Wakeup from S3	PS2 mouse wakeyup from S3 (standby status)	**Disabled** Click Move & Click
Resume by alarm	Use this option to set the date and time for your computer to boot up.	**Disabled** Enabled
Month Alarm		NA 1~12
Day of Month Alarm		0-31
Time (hh:mm:ss) Alarm		hh:0-23 mm: 0-59 ss:0-59

Parameter	Description	Option
Primary IDE	When these items are enabled, the system will restart the power-saving timeout conunters when any activity is detected on any of the drives on the primary or secondary IDE channel.	**Disabled** Enabled
Secondary IDE	When these items are enabled, the system will restart the power-saving timeout conunters when any activity is detected on any of the drives on the primary or secondary IDE channel.	**Disabled** Enabled
FDD,COM,LPT Port	When this item is enabled, the system will restart the power-saving timeout counters when any activity is detected on the floppy disk drive, serial ports, or the parallel port.	**Disabled** Enabled
PCI PIRQ [A-D]#	When disabled, any PCI device set as the Master will not power on the system.	**Disabled** Enabled

PnP/PCI Configurations

These options configure how PnP (Plug and Play) and PCI expansion cards operate in your system. Both the ISA and PCI buses on the mainboard use system IRQs (Interrupt ReQuests) and DMAs (Direct Memory Access). You must set up the IRQ and DMA assignments correctly through the PnP/PCI Configurations Setup utility for the mainboard to work properly. Selecting PnP/PCI Configurations on the main program screen displays this menu:

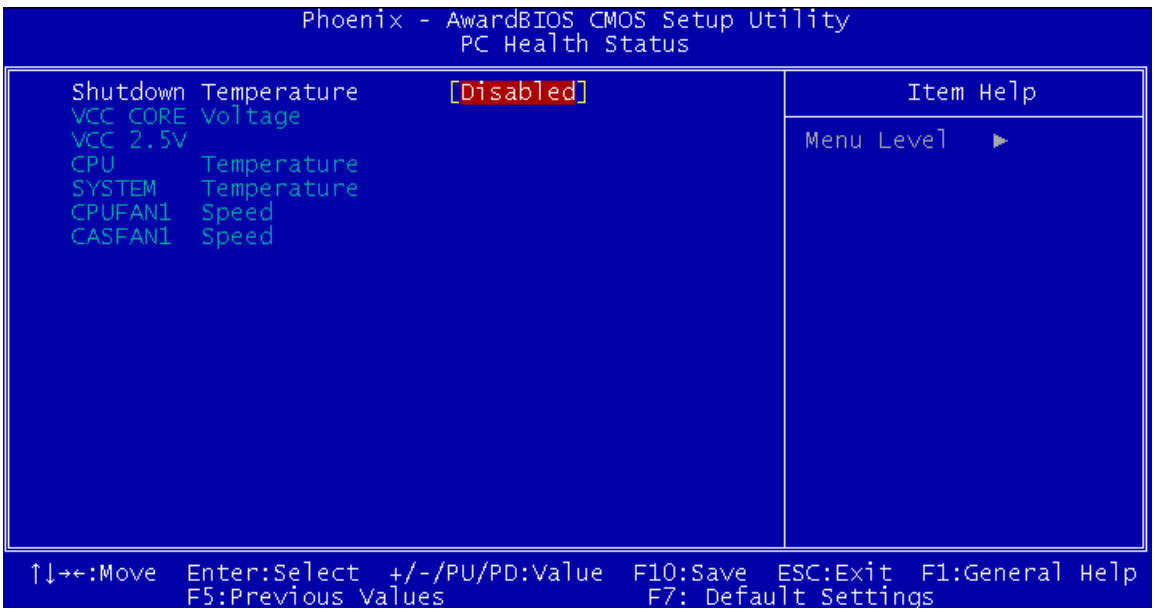


Parameter	Description	Option
Reset Configuration Data	Selecting “Enabled” to reset Extended System Configuration Data (ESCD) only if you installed a new add-on and the system reconfiguration has caused such a serious conflict that the operating system can not boot. Otherwise, you should leave it unchanged.	**Disabled** Enabled
Resources Controlled By	This BIOS can automatically configure all of the boot and Plug and Play compatible devices. You can also set it as Manual and go into each of the sub menu to choose specific resources.	**Auto(ESCD)** Manual
IRQ-3 IRQ-4 IRQ-5 IRQ-7 IRQ-9 IRQ-10 IRQ-11 IRQ-12 IRQ-14 IRQ-15	The items are adjustable only when Resources Controlled By is set to Manual. Press <Enter> and you will enter the sub-menu of the items. IRQ Resources list IRQ 3/4/5//7/9/10/11/12/14/15 for users to set each IRQ a type depending on the type of device using the IRQ.	**PCI Device** Reserved

Parameter	Description	Option
PCI/VGA Palette Snoop	Disabled - Data read or written by the CPU is only directed to the PCI VGA device's palette registers. Enabled - Data read or written by the CPU is directed to both the PCI VGA device's palette registers and the ISA VGA device's palette registers, permitting the palette registers of both VGA devices to be identical.	**Disabled** Enabled

PC Health Status

On mainboard that support hardware monitoring, this item lets you monitor the parameters for critical voltages, critical temperatures, and fan speeds.

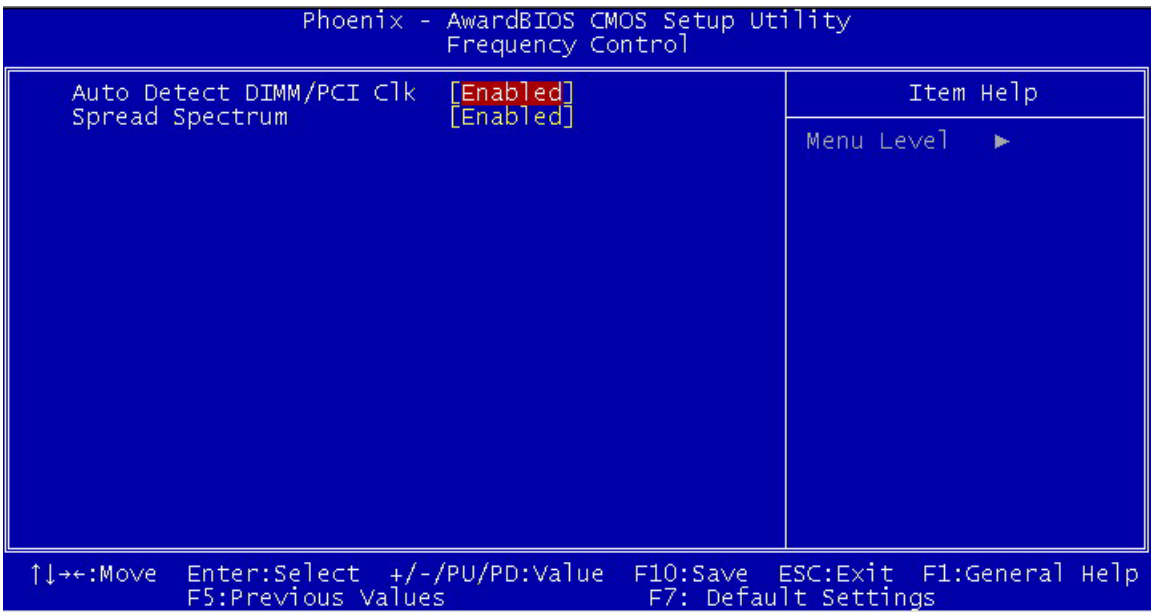


Parameter	Description	Option
Shutdown Temperature	Enables you to set the maximum temperature the system can reach before powering down.	60° C/140° F 65° C/149° F 70° C/158° F **Disabled**

Frequency/Voltage Control

This item enables you to set the clock speed and system bus for your system.

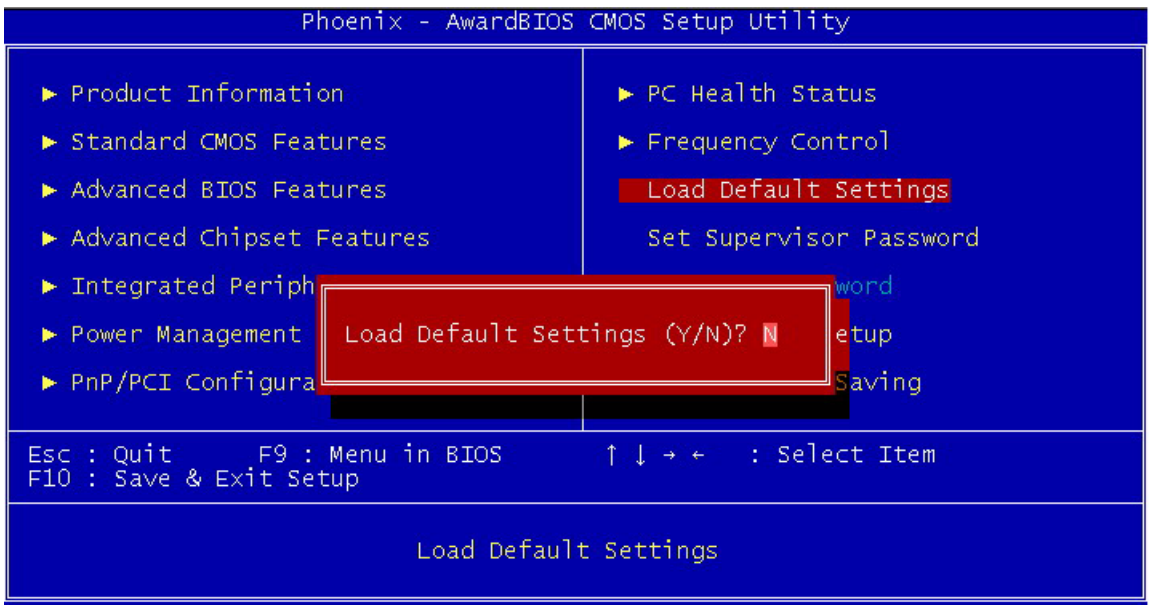
The clock speed and system bus are determined by the kind of processor you have installed in the system.



Parameter	*Description*	*Option*
Auto Detect PCI/DIMM Clk	When this item is enabled, BIOS will disable the clock signal of free DIMM and PCI slots.	**Enabled** Disabled
Spread Spectrum	If you enable spread spectrum, it can significantly reduce the EMI (Elector Magnetic Interference) generated by the system.	Disabled **Enabled**

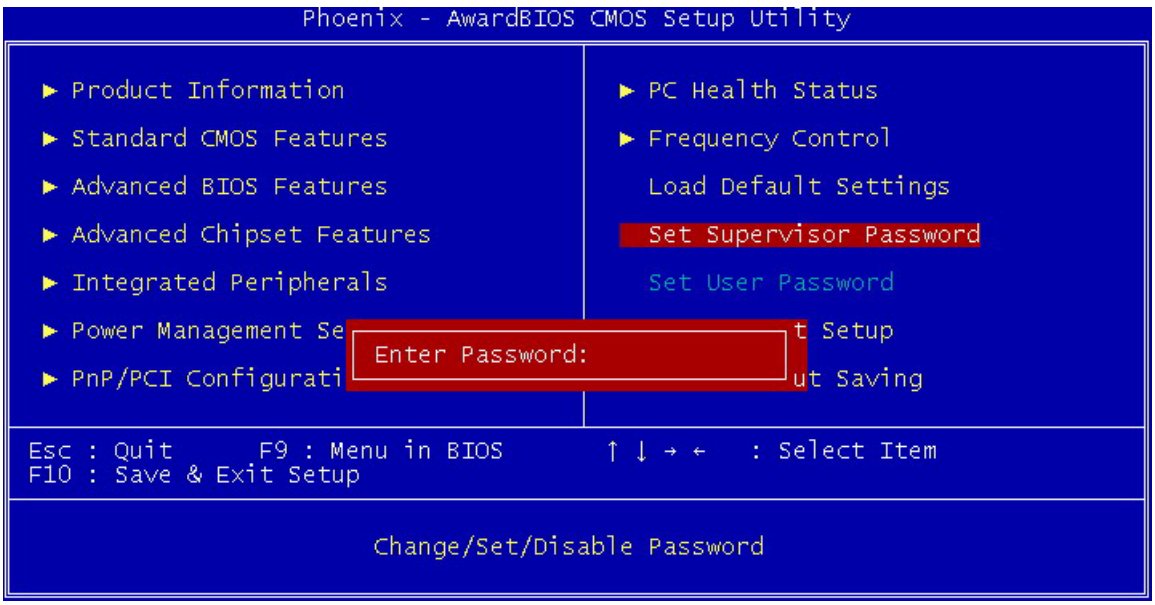
Load Default Settings

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:



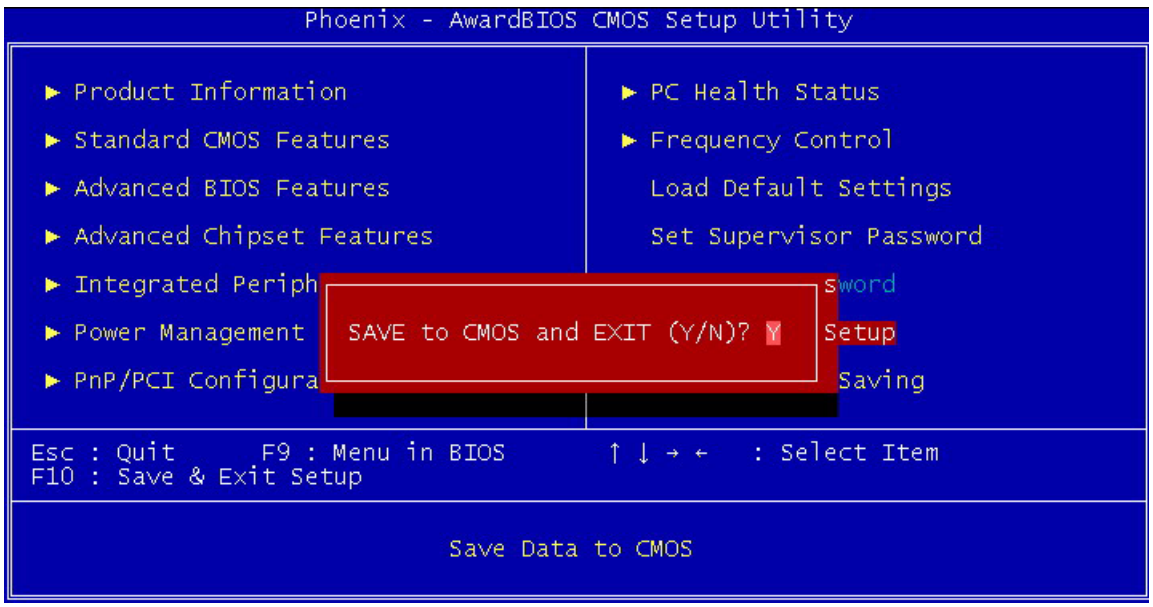
Parameter	Description	Option
Load Default Settings	Choosing **Yes** enables BIOS to automatically detect the hardware changes that you have made in your system. This option also allows you to restore the default settings. Choosing **No** returns you to the main menu without loading the default settings.	N/A

Set Supervisor/User Password



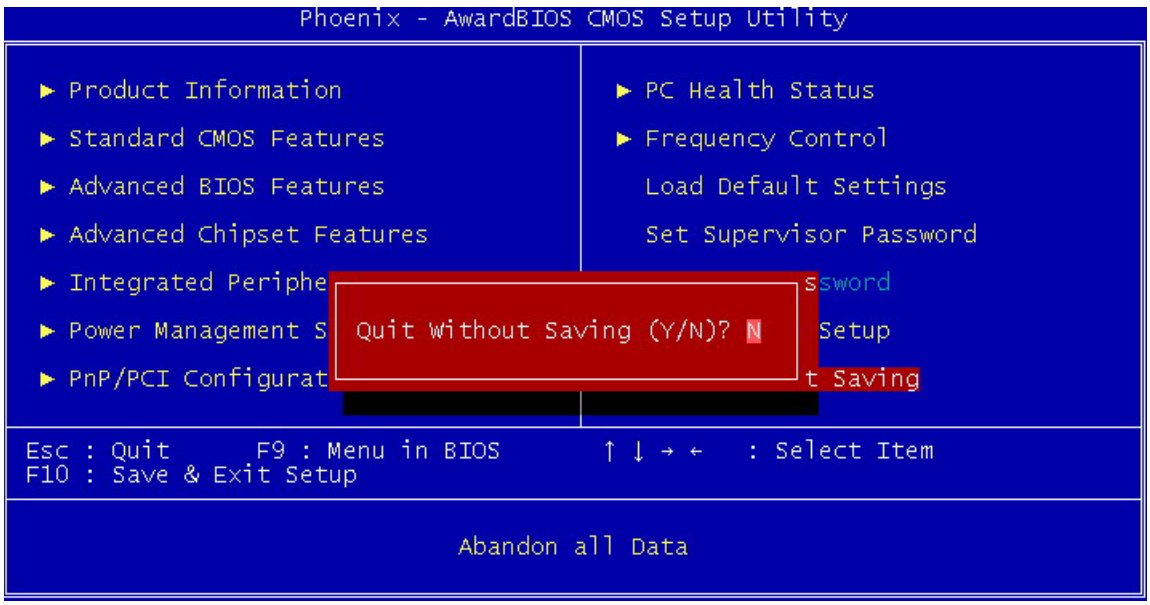
Parameter	Description	Option
Set Supervisor Password	To set a password: **1.** At the prompt, type your password. Your password can be up to 8 alphanumeric characters. When you type the characters, they appear as asterisks on the password screen box. **2.** After typing the password, press ENTER . **3.** At the next prompt, re-type your password and press ENTER again to confirm the new password. After the password entry, the screen automatically reverts to the main screen.	To disable the password, press ENTER when prompted to enter the password. The screen displays a message confirming that the password has been disabled.
Set User Password	To set a password: **1.** At the prompt, type your password. Your password can be up to 8 alphanumeric characters. When you type the characters, they appear as asterisks on the password screen box. **2.** After typing the password, press ENTER . **3.** At the next prompt, re-type your password and press ENTER again to confirm the new password. After the password entry, the screen automatically reverts to the main screen.	To disable the password, press ENTER when prompted to enter the password. The screen displays a message confirming that the password has been disabled.

Save & Exit Setup



Parameter	Description	Option
Save&Exit Setup	Highlight this item and press <Enter> to save the changes that you have made in the Setup Utility and exit the Setup Utility. When the Save and Exit dialog box appears, press <Y> to save and exit, or press <N> to return to the main menu.	N/A

Exit Without Saving



Parameter	Description	Option
Exit Without Saving	Highlight this item and press <Enter> to discard any changes that you have made in the Setup Utility and exit the Setup Utility. When the Exit Without Saving dialog box appears, press <Y> to discard changes and exit, or press <N> to return to the main menu.	N/A

Machine Disassembly and Replacement

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge.
- A flat screw driver
- Phillips screwdriver (may require different size).

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.

NOTE: The Aspire T130 mechanical housing is similar to AcerPower F1. Therefore, this chapter base on F1 to have minor rectify but the CPU and Heatsink are different between the two models.

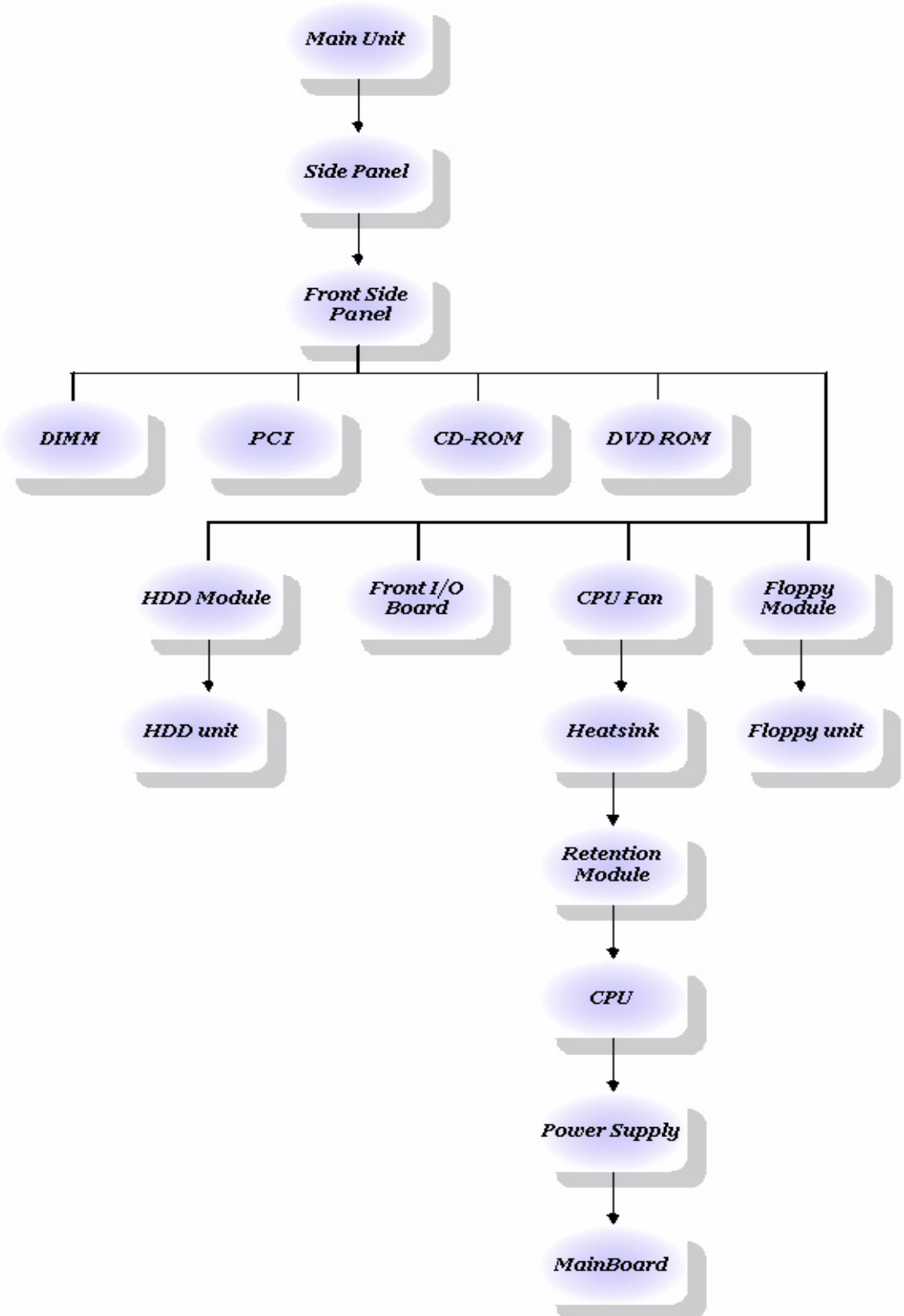
General Information

Before You Begin

Before proceeding with the disassenbly procedure, make sure that you do the following:

1. Turn off the power to the system and all peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.

Disassemble Flow Chart



Standard Disassembly Procedure

This section tells you how to disassemble the system when you need to perform system service. Please also refer to the disassembly video, if available.

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

NOTE: The Aspire T130 mechanical housing is similar to AcerPower F1. Therefore, this chapter base on F1 to have samll rectify but the CPU and Heatsink are different between the two models.

Opening the System

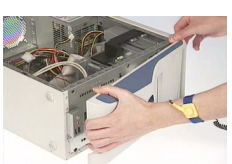
1. Place the system unit on a flat, steady surface.

2. Turn the housing back, and remove the screws as shown here.

3. Slide the side door out. Then remove it.

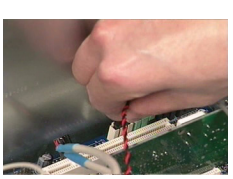
Removing the Front Panel

1. Release the six latches behind the front bezel.
2. Remove the bezel by following the instruction below.

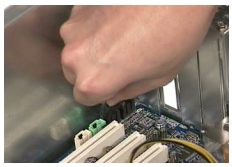


Removing the Cables

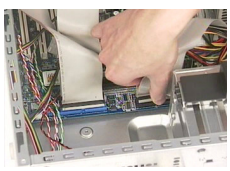
1. Disconnect the Aux-In cable.



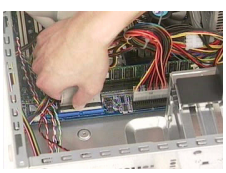
2. Disconnect the CD-In cable.

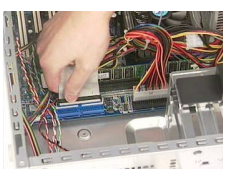


3. Disconnect the floppy cable.



4. Disconnect the IDE1 and IDE2 cable.

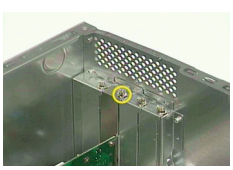


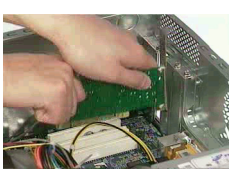


Removing the Modem card, CD-ROM, Floppy and HDD

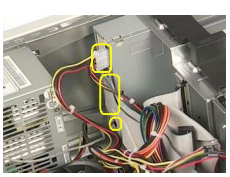
NOTE: ***There have the hook lock on CD-ROM, floppy and HDD cage, in other words, please move a little bit forward to release the lock then you can disassemble these parts smoothly.***

1. Detach the modem card.

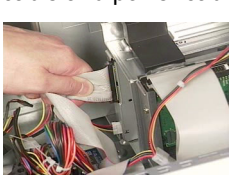


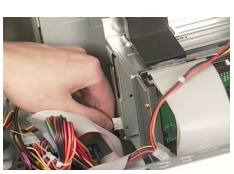


2. Disconnect the CD-ROM power, IDE and CD-In cables.

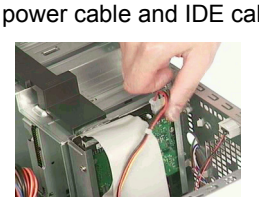


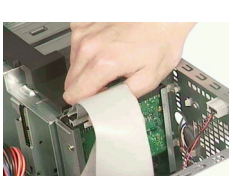
3. Disconnect the floppy cable and power cable.



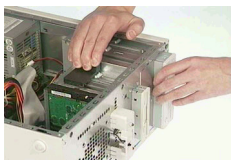


4. Disconnect the HDD power cable and IDE cable.

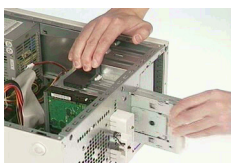




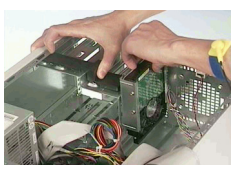
5. Press the latch and remove the CD-ROM drive.



6. Press the latch and remove the floppy drive.



7. Press the latch again to release the hard disk module.

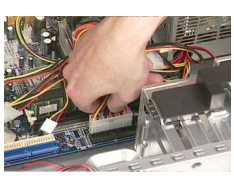


8. Detach the HDD from the bracket.

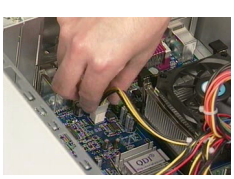


Removing the Power Supply

1. Remove the main ATX power connector as shown here.



2. Remove the Pentium 4(ATX-12V) power connector as shown here.

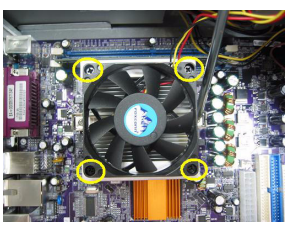
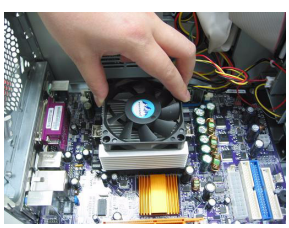


3. Remove the four screws as shown here.

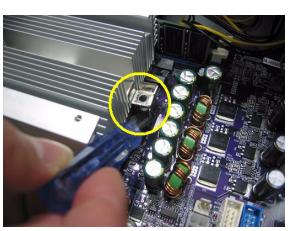
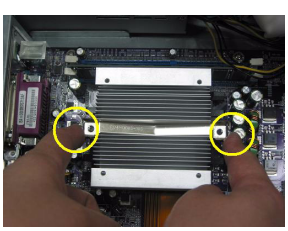
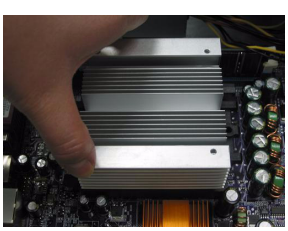
4. Remove the power supply.

Removing the Heatsink and the CPU (for T130)

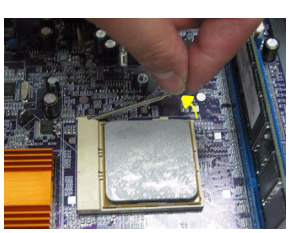
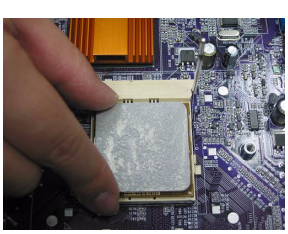
1. First of all, disconnect the CPU fan power cable.
2. Remove the 4 screws first.
3. Take the CPU fan after you remove screws.

4. Press the latch outward with a flat screw driver to release it.
5. Then hold the both sides to take the latch and heatsink away.
6. Take the retention module away.

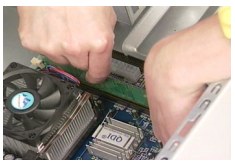





7. Pull the CPU bar up to 90 degrees.
8. Then take the CPU away from mainboard.

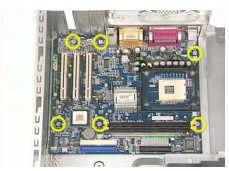
Removing the Memory

1. Pop out the memory and remove it as shown here.

Removing the Mainboard

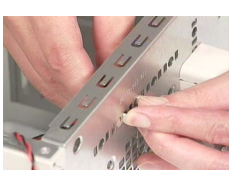
1. Remove the six screw as shown here.



2. Remove the motherboard as shown here.

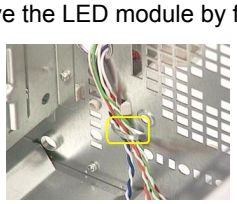
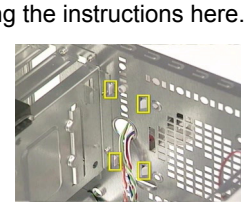
Removing the Power Button

1. Remove the power button as shown here.



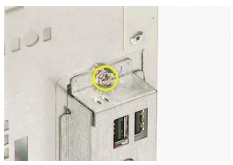
Removing the LED Module

1. Remove the LED module by following the instructions here.

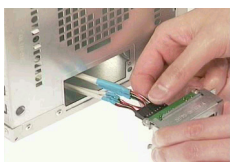




Removing the Daughter Board

1. Remove the screw as shown here.



2. Detach the USB cable and audio cable from the daughter board.

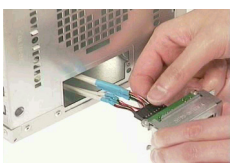


Standard Reassembly Procedure

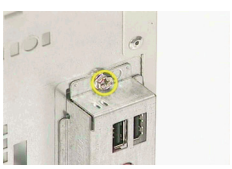
This section tells you how to reassemble the system when you need to perform system service. Please also refer to the assembly video, if available.

Installing the Daughter Board

1. Connect the audio cable and USB cables to the daughter board.

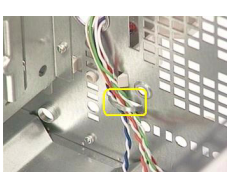
2. Fasten the daughter board with one screw as shown here.



Installing the LED Module

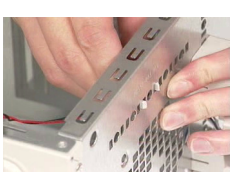
1. Install the LED module by following the instructions here.





Installing the Power Button

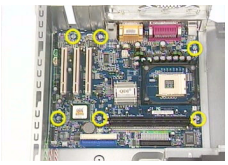
1. Attach the power button as shown here.



Installing the Mainboard

1. Put the motherboard to the original position as shown here.

2. Secure the motherboard with the six screw as shown here.

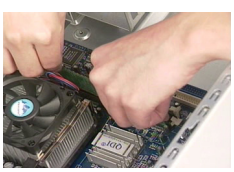


Installing the Heatsink and the CPU (please refer to disassemble photos)

1. Place the CPU to the CPU socket.
2. Place the rentention module next to previous installing.
3. Place the heatsink then hook the latch to the tabs.
4. Then place the CPU fan on the heatsink.

Installing the Memory

1. Insert the memory to the DIMM slot as shown here.

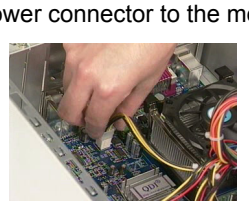


Installing the Power Supply

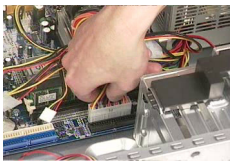
1. Place the power supply to the original position as shown here.

2. Secure the power supply with the four screws as shown here.

3. Connect the Pentium 4(ATX-12V) power connector to the motherboard as shown here.



4. Connect the main ATX power connector to the motherboard as shown here.



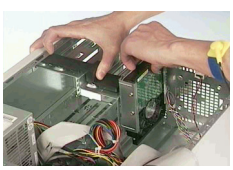
Installing the Modem card, CD-ROM, Floppy and HDD

NOTE: ***There have the hook lock on CD-ROM, floppy and HDD cage, in other words, please move a little bit forward to release the lock then you can install these parts smoothly.***

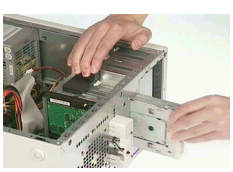
1. Insert the HDD to the bracket by following the instructions here.



2. Place the HDD module back to the original position.

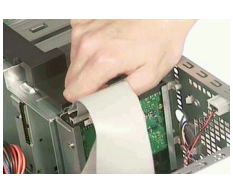
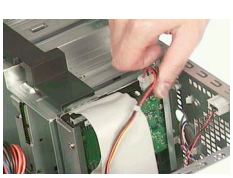


3. Place the floppy drive back to the original position.

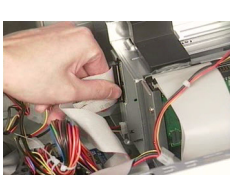


4. Place the CD-ROM drive back to the original position.

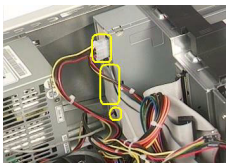
5. Connect the HDD power cable and IDE cable.

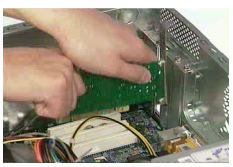
6. Connect the floppy cable and power cable.

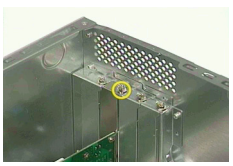



7. Connect the CD-ROM power, IDE and CD-In cables.



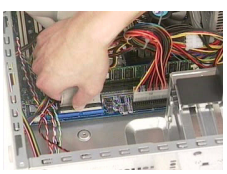
8. Place the modem card back to one PCI slot. Then secure the modem card with the screw.

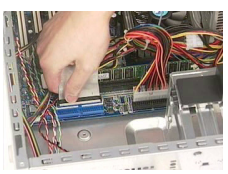




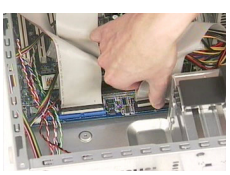
Installing the Cables

1. Connect the IDE1 and IDE2 cable to the motherboard.

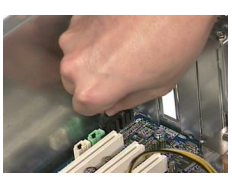




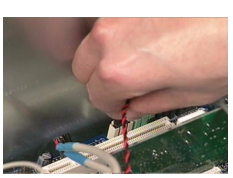
2. Connect the floppy cable to the motherboard.



3. Connect the CD-In cable to the motherboard.



4. Connect the Aux-In cable to the motherboard.



Installing the Front Panel

1. Place the front bezel back to the original position.


Closing the System

1. Place the side door back to the original position.


2. Secure the side door with the two screws as shown here.

Troubleshooting

This chapter provides troubleshooting information for the Aspire T130:

- 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
- I/O ports
  - PS/2-compatible mouse port
  - PS/2-compatible keyboard port
- Serial ports
- Parallel ports
- USB port

POST Check Points

When POST executes a task, it uses a series of preset numbers called check point to be latched at port 80h, indicating the stages it is currently running. This latch can be read and shown on a debug board.

The following table describes the Acer common tasks carried out by POST. A unique check point number represents each task.

Checkpoint	Description
CFh	Test CMOS R/W functionality
C0h	Early chipset initialization: • Disable shadow RAM • Disable L2 Cache (socket 7 or below) • Program basic chipset registers
C1h	Detect memory • Auto-detection of DRAM size, type and ECC. • Auto-detection of L2 cache (socket 7 or below)
C3h	Expand compressed BIOS code to DRAM
C5h	Call chipset hook to copy BIOS back to E000 & F000 shadow RAM
0h1	Expand the Xgroup codes locating in physical address 1000:0
02h	Reserved
03h	Initial Superio_Early_Init switch
04h	Reserved
05h	1. Blank out screen 2. Clear CMOS error flag
06h	Reserved
07h	1. Clear 8042 interface 2. Initialize 8042 self-test
08h	1. Test special keyboard controller for Winbond 977 series Super I/O chips 2. Enable keyboard interface
09h	Reserved
0Ah	1. Disable PS/2 mouse interface (optional) 2. Auto detect ports for keyboard & mouse followed by a port & interface swap (optional) 3. Reset keyboard for Winbond 977 series Super I/O chips
0Bh	Reserved
0Ch	Reserved
0Dh	Reserved
0Eh	Test F000h segment shadow to see whether it is R/W-able or not. If test fails. keep beeping the speaker.
0Fh	Reserved
10h	Auto detect flash type to load appropriate flash R/W codes into the run time area in F000 for ESCD & DMI support.

Checkpoint	Description
11h	Reserved
12h	Use walking 1's algorithm to check out interface in CMOS circuitry. Also set real-time clock power status, and then check for override.
13h	Reserved
14h	Program chipset default values into chipset. Chipset default values are MODBINable by OEM customers.
15h	Reserved
16h	Initial onboard clock generator if Early_Init_Onboard_Generator is defined. See also POST 26h.
17h	Reserved
18h	Detect CPU information including brand, SMI type (Cyrix or Intel) and CPU level (586 or 686).
19h	Reserved
1Ah	Reserved
1Bh	Initial interrupts vector table. If no special specified, all H/W interrupts are directed to SPURIOUS_INT_HDLR & S/W interrupts to SPURIOUS_soft_HDLR.
1Ch	Reserved
1Dh	Initial EARLY_PM_INIT switch
1Eh	Reserved
1Fh	Load keyboard matrix (notebook platform)
20h	Reserved
21h	HPM Initialization (notebook platform)
22h	Reserved
23h	1. Check validity of RTC value: e.g. a value of 5Ah is an invalid value for RTC minute. 2. Load CMOS settings into BIOS stack. If Smos checksum fails, use default value instead.
24h	Prepare BIOS resource map for PCI & PnP use. If ESCD is valid, take into consideration of the ESCD's legacy information.
25h	Early PCI Initialization: • Enumerate PCI bus number • Assign memory & I/O resource • Search for a valid VGA device & VGA BIOS, and put it into C000:0
26h	1. If Early_Init_Onboard_Generator is not defined Onboard clock generator initialization. Disable respective clock resource to empty PCI & DIMM slots. 2. Init onboard PWM 3. Init onboard H/W monitor devices
27h	Initialize INT 09 buffer
28h	Reserved

Checkpoint	Description
29h	1. Program CPU internal MTRR (P6 & PII) for 0-640K memory address. 2. Initialize the APIC for Pentium class CPU 3. Program early chipset according to CMOS setup. Example: onboard IDE controller. 4. Measure CPU speed.
2Ah	Reserved
2Bh	Invoke Video BIOS
2Ch	Reserved
2Dh	1. Initialize double-byte language font (Optional) 2. Put information on screen display, including Award title, CPU type, CPU speed, full screen logo.
2Eh	Reserved
2Fh	Rederved
30h	Reserved
31h	Reserved
32h	Reserved
33h	Reset keyboard if Early_Reset_KB is defined e.g. Winbond 977 series Super I/O chips. See also POST 63h
34h	Reserved
35h	Test DMA Channel 0
36h	Reserved
37h	Test DMA Channel 1
38h	Reserved
39h	Test DMA page registers
3Ah	Reserved
3Bh	Reserved
3Ch	Test 8254
3Dh	Reserved
3Eh	Test 8259 interrupt mask bits for channel 1
3Fh	Reserved
40h	Test 8259 interrupt mask bits for channel 2
41h	Reserved
42h	Reserved
43h	Test 8259 functionality
44h	Reserved
45h	Reserved
46h	Reserved
47h	Initialize EISA slot
48h	Reserved
49h	1. Calculate total memory by testing the last double word of each 64K page. 2. Program write allocation for AMD K5 CPU.
4Ah	Reserved
4Bh	Reserved

Checkpoint	Description
4Ch	Reserved
4Dh	Reserved
4Eh	1. Program MTRR of M1 CPU 2. Initialize L2 cache for P6 class CPU & program CPU with proper cacheable range. 3. Initialize the APIC for P6 class CPU. 4. On MP platform, adjust the cacheable range to smaller one in case the cacheable ranges between each CPU are not identical.
4Fh	Reserved
50h	Initialize USB Keyboard & Mouse
51h	Reserved
52h	Test all memory (clear all extended memory to 0)
53h	Clear password according to H/W jumper (Optional)
54h	Reserved
55h	Display number of processors (multi-processor platform)
56h	Reserved
57h	1. Display PnP logo 2. Early ISA PnP initialization - Assign CSN to every ISA PnP device
58h	Reserved
59h	Initialize the combined Trend Anti-Virus code
5Ah	Reserved
5Bh	(Optional Feature) Show message for entering AWDFLASH.EXE from FDD (optional)
5Ch	Reserved
5Dh	1. Initialize Init_Onboard_Super_IO 2. Initialize Init_Onboard_AUDIO
5Eh	Reserved
5Fh	Reserved
60h	Okay to enter Setup utility; i.e. not until this POST stage can users enter the CMOS setup utility.
61h	Reserved
62h	Reserved
63h	Reset keyboard if Early_Reset_KB is not defined.
64h	Reserved
65h	Initialize PS/2 Mouse
66h	Reserved
67h	Prepare memory size information for function call: INT 15h ax=E820h
68h	Reserved
69h	Turn on L2 cache
6Ah	Reserved

Checkpoint	Description
6Bh	Program chipset registers according to items described in Setup & Auto-configuration table
6Ch	Reserved
6Dh	1. Assign resources to all ISA PnP devices. 2. Auto assign ports to onboard COM ports if the corresponding item in Setup is set to “Auto”.
6Eh	Reserved
6Fh	1. Initialize floppy controller 2. Set up floppy related fields in 40:hardware
70h	Reserved
71h	Reserved
72h	Reserved
73h	Reserved
74h	Reserved
75h	Detech &install all IDE device: HDD, LS120, ZIP, CDROM...
76h	(Optional feature) Enter AWDFLASH.EXE if: - AWDFLASH.EXE is found in floppy drive. - ALT+F2 is prrssed.
77h	Detect serial ports & parallel ports
78h	Reserved
79h	Reserved
7Ah	Detect & install co-processor
7Bh	Reserved
7Ch	Init HDD write protect
7Dh	Reserved
7Eh	Reserved
7Fh	Switch back to text mode if full screen logo is supported. - If errors occur, report errors & wait for keys - If no errors occur or F1 key is pressed to continue: Clear EPA or customization logo.
80h	Reserved
81h	Reserved
82h	1. Call chipset power management hook. 2. Recover the text fond used by EPA logo (not for full screen logo). 3. If password is set, ask for password.
83h	Save all data in stack back to CMOS
84h	Initialize ISA PnP boot devices
85h	1. USB final initialization 2. Switch screen back to text mode
86h	Reserved
87h	NET PC: Build SYSID structure

Checkpoint	Description
88h	Reserved
89h	1. Assign IRQs to PCI devices. 2. Set up ACPI table at top of the memory.
8Ah	Reserved
8Bh	1. Invoke all ISA adapter ROMs 2. Invoke all PCI ROMs (except VGA)
8Ch	Reserved
8Dh	1. Enable/Disable Parity Check according to CMOS setup. 2. APM Initialization
8Eh	Reserved
8Fh	Clear noise if IRQs
90h	Reserved
91h	Reserved
92h	Reserved
93h	Read HDD boot sector information for Trend Anti-Virus code
94h	1. Enable L2 cache 2. Program Daylight Saving 3. Program boot up speed 4. Chipset final initialization 5. Power management final initialization 6. Clear screen & dispaly summary table 7. Program K6 write allocation 8. Program P6 class write combining
95h	Update keyboard LED & typematic rate
96h	1. Build MP table 2. Build & update ESCD 3. Set CMOS century to 20h or 19h 4. Load CMOS time into DOS timer tick 5. Build MSIRQ routing table
FFh	Boot attempt (INT 19h)

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 Sympton List”.

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.

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
PS/2 Keyboard Error or Keyboard Not Connected PS/2 Keyboard Interface Error PS/2 Keyboard Locked	1. Re-connect PS/2 keyboard and mouse. 2. Enter BIOS Setup and load the default settings. 3. PS/2 keyboard 4. PS/2 mouse 5. 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) On Board Serial Port 2 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.

BIOS Messages	Action/FRU
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.
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
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.
PS/2 Pointing Device Interface Error PS/2 Pointing Device Error	1. Re-connect PS/2 keyboard and mouse. 2. Enter BIOS Setup and load the default settings. 3. PS/2 mouse 4. PS/2 keyboard 5. System board
DMI Table Was Destroyed	1. Flash BIOS
Press “DEL” key to enter Setup or F1 key to continue	1. Press 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

Error Symptom	Action/FRU
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
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

Error Symptom	Action/FRU
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.
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

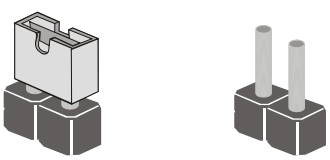
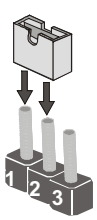
Error Symptom	Action/FRU
Display problem: - Incorrect colors No high intensity Missing, broken, or incorrect characters Blank monitor(dark) Blank monitor(bright) Distorted image Unreadable monitor Other monitor problems	1. Monitor signal connection/cable. 2. Monitor 3. Video adapter card 4. System board
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

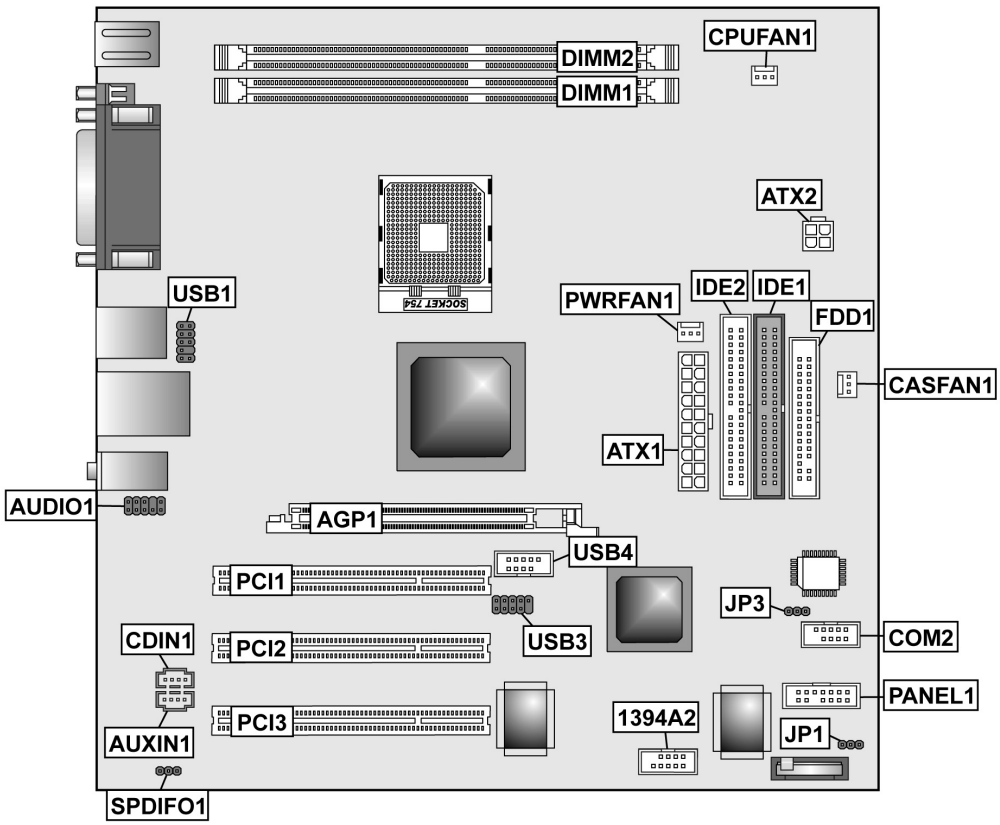
Jumper and Connector Information

Before setting jumpers

Use the mainboard jumpers to set system configuration options. Jumpers with more than one pin are numbered. When settting the jumpers, ensure that the jumper caps are placed on the correct pins.

Illustration	Description
 Short Open	The illustrations below show a 2-pin jumper. When the jumper cap is placed on both pins, the jumper is **SHORT**. If you remove the jumper cap, or place the jumper cap on just one pin, the jumper is **OPEN**.
	This illustration shows a 3-pin jumper. Pins 1 and 2 are **SHORT**.

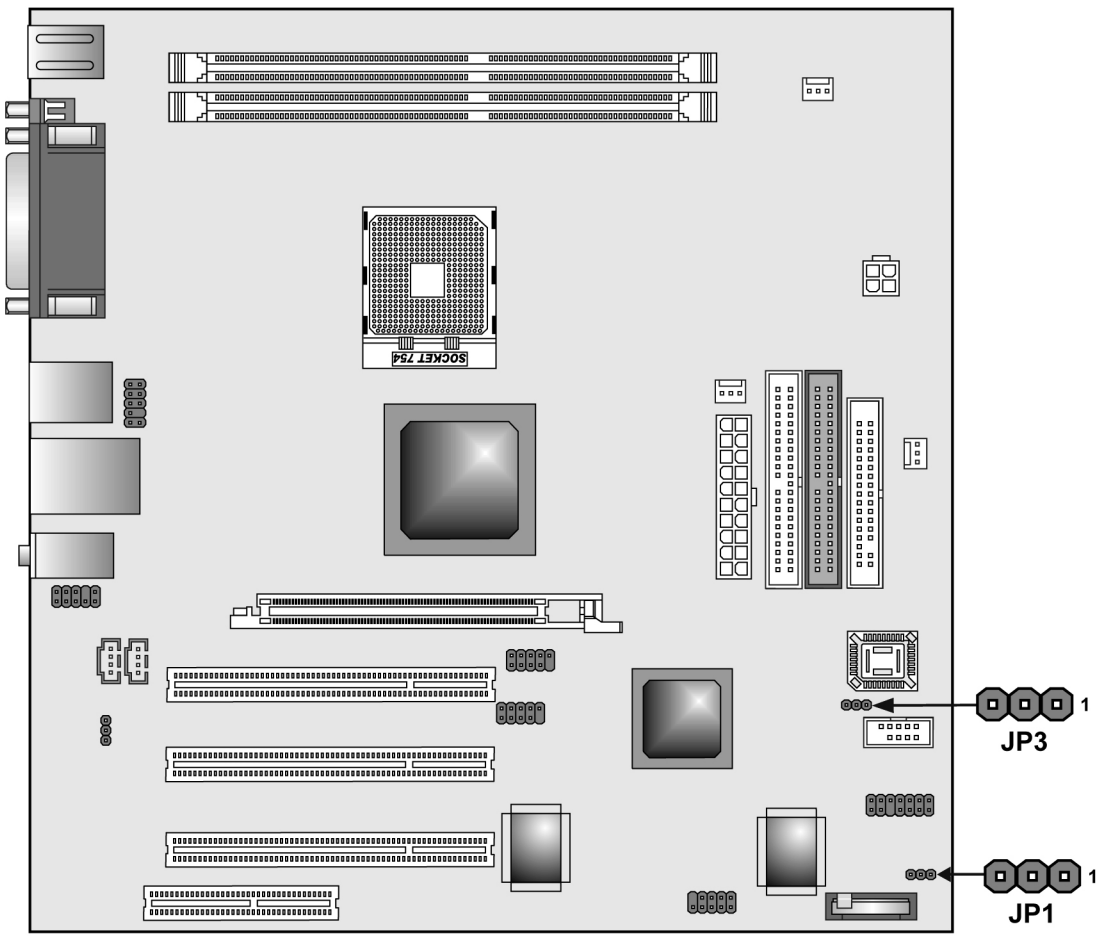
Header Definition



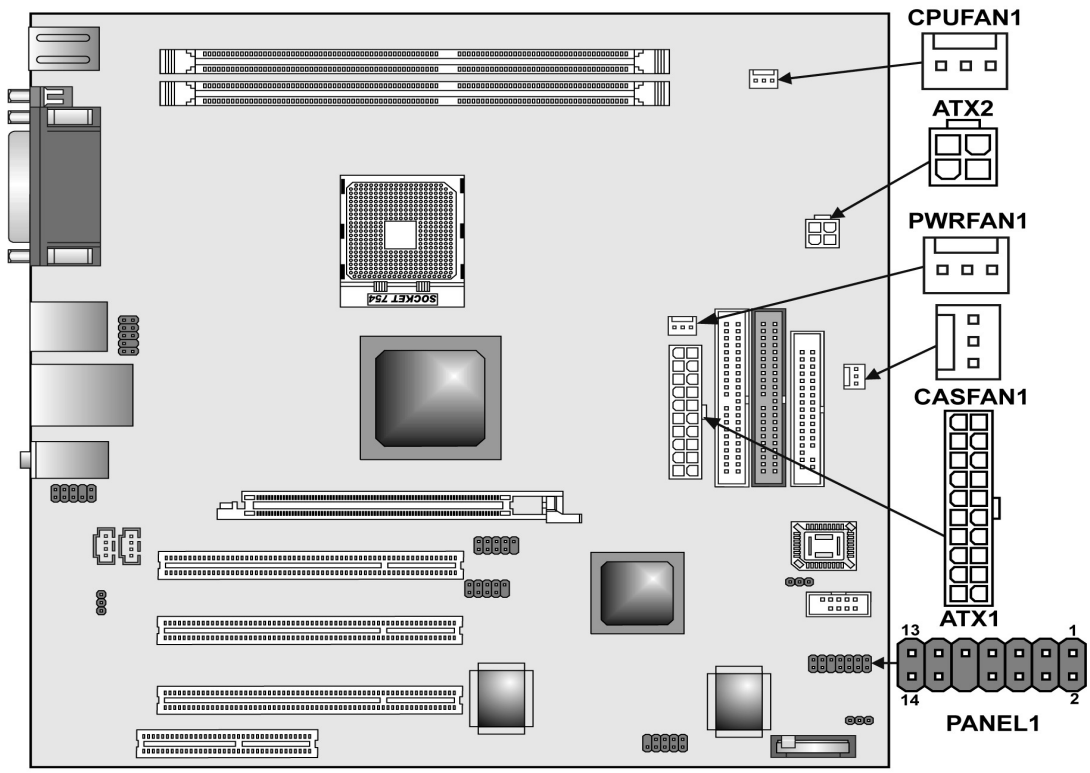
Name	Connector Type	Description
CPUFAN1	AMP640456-3	CPU FAN
CASFAN1	AMP640456-3	Chassis Fan
PWRFAN1	AMP640456-3	Power Fan
COM1	CONN-9P2R-90M	Serial Port 1
USB1394A2	USB-DUAL/1394	1394 and USB connector
USB1	H5*2	USB Header
USB2	H5*2	USB Header
USB3	H5*2	USB Header
FDD1	H17*2LW	Floppy connector
IDE1	H20*2LW	HDD primary connector
IDE2	H20*2LW	HDD secondary connector
PANEL1	H5*2	PWR_SW/RST/HDD_LED/PWR_LED
AUDIO1	H5*2	Audio header for front side connector
SPDIF	H3*1	SPDIF Header
ATX1	PW_20P2R	AXT power connector
ATX12V	AXT_PWR_CON4A	ATX 12V power connector

Jumper and Connector Settings

The following illustration shows the location of the mainboard jumpers. Pin 1 is labeled.



Jumper	*Type*	*Description*	*Setting(default)*	*Illustrator*
JP1	3-pin	Clear CMOS Use this jumper to clear the contents of the CMOS memory. You may need to clear the CMOS memory if the settings in the Setup Utility are incorrect and prevent your mainboard	1-2:Normal 2-3:Clear CMOS	
JP3	3-pin	BIOS Protect	1-2: Disable 2-3:Enable	



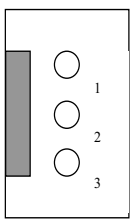
ATX 12V: ATX 12V Power Connector

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

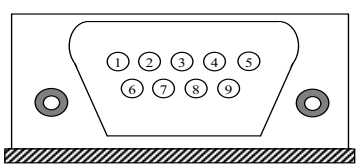
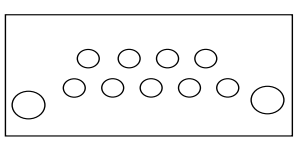
ATX1: ATX 20-pin Power Connector

Pin	Signal Name	Pin	Signal Name
1	+3.3V	11	+3.3V
2	+3.3V	12	-12V
3	Ground	13	Ground
4	+5V	14	PS ON#
5	Ground	15	Ground
6	+5V	16	Ground
7	Ground	17	Ground
8	PWRGD	18	-5V
9	+5VSB	19	+5V
10	+12V	20	+5V

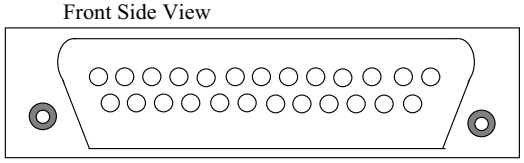
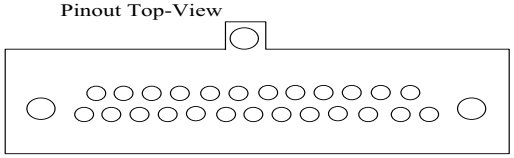
CPUFAN1/CASFAN1/PWRFAN1: FAN Power Connector

	Pin	Signal Name	Function
	1	GND	System Ground
	2	+12V	Power +12V
	3	Sense	Sensor

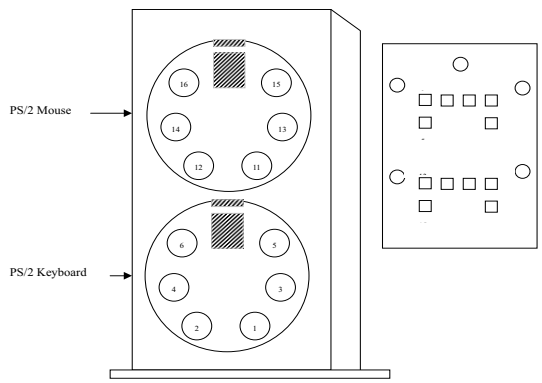
COM1

	Pin	Signal Name
	1	DCD
	2	RxD
	3	TxD
	4	DTR
	5	Ground
	6	DSR
	7	RTS
	8	CTS
	9	RI

LPT

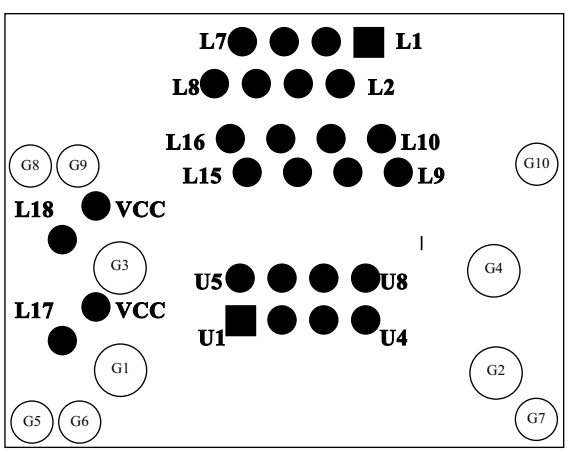
	Pin	Signal Name	Pin	Signal Name
Front Side View 	1	STROBE	13	SLCT
	2	PD0	14	ALF
	3	PD1	15	ERROR
	4	PD2	16	INIT
	5	PD3	17	SLCTIN
	6	PD4	18	GROUND
Pinout Top-View 	7	PD5	19	GROUND
	8	PD6	20	GROUND
	9	PD7	21	GROUND
	10	ACK	22	GROUND
	11	BUSY	23	GROUND
	12	PE	24	GROUND
			25	GROUND

PSKBM1



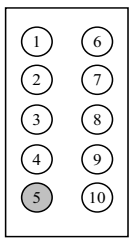
	PS/2 Keyboard		PS/2 Mouse	
1	KBDATA	11	MDATA
2	NC	12	NC
3	GROUND	13	GROUND
4	VCC	14	VCC
5	KBCLK	15	MCLK
6	NC	16	NC

USBLAN1



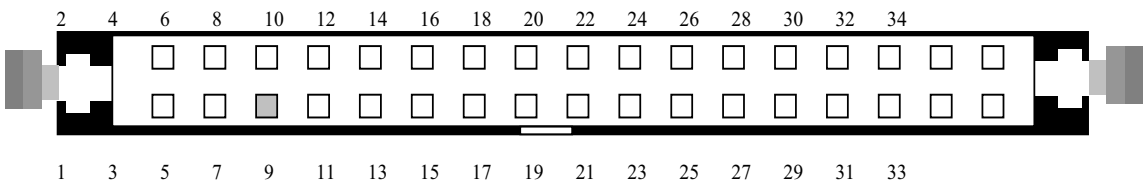
	Pin	Signal Name	Pin	Signal Name
U1	VCC	G7	HOLE_LAN
U2	-DATA0	G8	HOLE_LAN
U3	+DATA0	G9	HOLE_LAN
U4	GND	G10	HOLE_LAN
U5	VCC	L1	TX+
U6	-DATA1	L2	TX-
U7	+DATA1	L3	RX+
U8	GND	L4	NC
G1	HOLE_USB	L5	NC
G2	HOLE_USB	L6	RX-
G3	HOLE_USB	L7	NC
G4	HOLE_USB	L8	NC
G5	HOLE_LAN	L17	PLED0
G6	HOLE_LAN	L18	PLED1

USB1, USB3



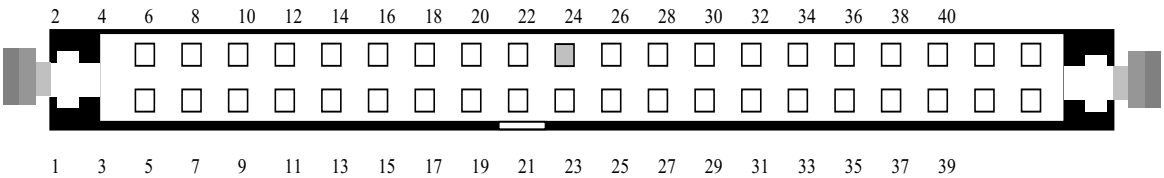
Pin	Signal Name	Pin	Signal Name
1	USBPWR0	6	USBPWR1
2	USB0-	7	USB1-
3	USB0+	8	USB1+
4	NC	9	KEY
5	GND	10	GND

FDD1



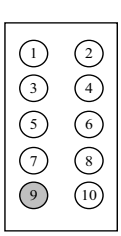
Pin	Signal Name	Pin	Signal Name
1	GROUND	2	DRVDEN0
3	GROUND	4	HDL-
5	KEYPIN	6	DS3-
7	GROUND	8	INDEX-
9	GROUND	10	MTR0-
11	GROUND	12	DS0-
13	GROUND	14	DS1-
15	GROUND	16	MTR1-
17	GROUND	18	DIR-
19	GROUND	20	STEP-
21	GROUND	22	WDATA
23	GROUND	24	WGATE-
25	GROUND	26	TRK0-
27	GROUND	28	WP-
29	GROUND	30	RDATA
31	GROUND	32	HDSEL-
33	GROUND	34	DSKCHG-

IDE1, IDE2



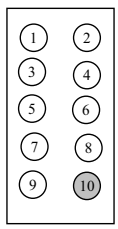
Pin	Signal Name	Pin	Signal Name
1	RESET-	2	GROUND
3	DD7	4	DD8
5	DD6	6	DD9
7	DD5	8	DD10
9	DD4	10	DD11
11	DD3	12	DD12
13	DD2	14	DD13
15	DD1	16	DD14
17	DD0	18	DD15
19	GROUND	20	KEYPIN
21	DMARQ	22	GROUND
23	DIOW-	24	GROUND
25	DIOR-	26	GROUND
27	IORDY	28	PSYNC:CSEL
29	DMACK-	30	GROUND
31	INTRQ	32	IOCS16-
33	DA1	34	PDIAG-
35	DA0	36	DA2
37	CS1FX-	38	CS3FX-
39	DASP-	40	GROUND

COM2



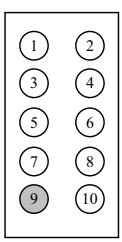
Pin	Signal Name	Pin	Signal Name
1	NDCDB	2	NSINB
3	NSOUTB	4	NDTRB
5	GND	6	NDSRB
7	NRTSB	8	NCTSB
9	NRIB	10	KEY

PANEL1



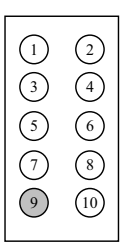
Pin	Signal Name	Pin	Signal Name
1	HD_LED_P	2	PWR_SLP
3	HD_LED_N	4	PWR_SLP
5	RST_SW_N	6	PWR_SW_P
7	RST_SW_P	8	PWR_SW_N
9	RSVD	10	KEY

1394A_J2



Pin	Signal Name	Pin	Signal Name
1	HD_LED_P	2	PWR_SLP
3	HD_LED_N	4	PWR_SLP
5	RST_SW_N	6	PWR_SW_P
7	RST_SW_P	8	PWR_SW_N
9	RSVD	10	KEY

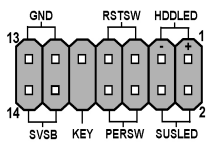
AUDIO1



Pin	Signal Name	Pin	Signal Name
1	AUD_MIC	2	AUD_GND
3	MIC_BIAS	4	AUD_VCC
5	AUD_F_R	6	AUD_RET_R
7	REVD	8	KEY
9	AUD_F_L	10	AUD_RET_L

Front Panel Connector

The front panel connector (PANEL1) provides a standard set of switch and LED connectors commonly found on ATX or micro-ATX cases. Refer to the table below for information:



Pin	Singal Name	Function	Pin	Signal Name	Function
1	HDDLED	Hard disk LED(positive)	2	SUS LED	Suspend LED [dual color or single color(+)]
3	HDDLED	Hard disk active LED (negative)	4	SUS LED	Suspend LED [dual color or single color(-)]
5	RST_SW_N	Reset Switch	6	PWR_SW_P	Power Switch
7	RST_SW_P	Reset Switch	8	PWR_SW_N	Power Switch
9	RSVD	Reserved	10	Key	No pin
11	GND	Ground	12	5VSB	
13	GND	Ground	14	5VSB	

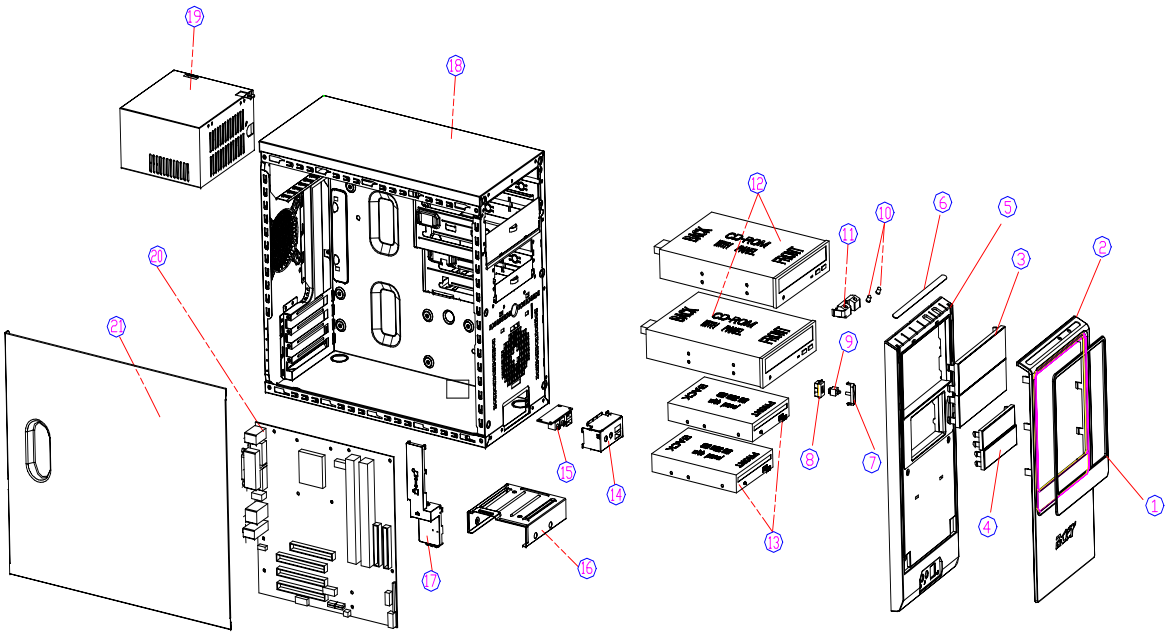
FRU (Field Replaceable Unit) List

This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of Aspire T130. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

NOTE: Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel (http://aicsl.acer.com.tw/spl/, if you do not own a specific account, you can still access the system with guest; guest). 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.

Aspire T130 Exploded Diagram



ITEM	DESCRIPTION		ITEM	DESCRIPTION	
1	AL-INSERT-PLATE	3KS56-005	12	CD-ROM	
2	FRONT DECORAT PANEL	20541-009	13	FDD-WITH-PANEL	
3	5.25" FILLER PANEL	2L273-113	14	USB BKT	2J017-003
4	3.5" FILLER PANEL	20396-001	15	USB BOARD	4E152-002
5	FRONT BEZEL	20541-001	16	HDD-BKT	2DC49-001
6	UP-DECOTAT PANEL	20541-006	17	TRACK(EN501C)	2NM29-003
7	POWER BUTTON	20541-011	18	CHASSIS	2ZW05-004
8	SWITCH-HOLDER	20541-005	19	POWER-SUPPLY	4A389-005
9	SWITCH CABLE	4S319-006	20	MOTHER BOARD	
10	LED LENS	20541-014	21	BKT-DOOR	2CR94-023
11	LED HOLDER	20541-004			

Spare Parts

Category	Partname	Description	Acer P/N
BOARD	USB/AUDIO DAUGHTER BOARD FOXCONN	USB BOARD	55.PSPVF.001
CABLES	IDE CD-ROM CABLE ATA66 40PIN	CDROM DATA CABLE	50.PSPVF.002
	IDE FDD CABLE 34PIN	FDD DATA CABLE	50.PSPVF.003
	AUDIO CABLE 8PIN 2CON	AUDIO CABLE	50.S03VF.001
	FRONT INTERNAL USB CABLE	USB CABLE	50.S03VF.002
CASE/ COVER/ BRACKET ASSEMBLY	FRONT BEZEL W/POWER BUTTON. 5.25”, 3.5” EMPTY COVER, USB DOOR	BEZEL ASSY	60.S03VF.001
	POWER BUTTON	POWER BUTTON (PAINTED)	42.S03VF.001
	SIDE DOOR	BKT-DOOR (PAINTING)	60.S03VF.002
	CHASSIS W/O I/O SHIELD	T120 SUB CASE ASSY(W/O IO SHIELD)	60.S02VF.001
	I/O SHIELD	I/O SHIELD ASSY	33.S02VA.001
	LED MODULE	LED HOLDER ASSY	42.S02VF.001
	SWITCH HOLDER ASSY	SWITCH HOLDER ASSY	42.S02VF.002
	EMPTY COVER FOR 5.25” DEVICE	5.25” FILLER PANEL	42.S03VF.004
	HDD BRACKET	BKT-HDD	33.PSPVF.002
	FILLER COVER FOR 3 1/2” DEVICE	3.5” FILLER PANEL	42.S03VF.005
FOOT STAND	RUBBER FOOT	RUBBER FOOT	47.S03VF.001
CD-ROM DRIVE	CD-RW DRIVE 52X BTC BCE 5224IM ACER COLOR W/O ACER LOGO	CD-RW DRIVE 52X BTC BCE 5224IM ACER COLOR W/O ACER LOGO	KR.52X0A.002
	CD-RW DRIVE 52XR 24XRW 52XW LITE-ON LTR-52246S BLACK W/O ACER LOGO	CD-RW DRIVE 52XR 24XRW 52XW LITE-ON LTR-52246S BLACK	KR.05201.001
	CD-RW DRIVE 52X24X52X LITE-ON LTR-52246S BLACK	DRV, CD-RW,52X/24X/52X,LTR-52246S,LITEON BLACK	KR.05201.001
DVD-ROM DRIVE	DVD-ROM DRIVE 16X/40X BTC BDV 316E ACER COLOR W/O ACER LOGO BLACK	DVD-ROM DRIVE 16X/40X BTC BDV 316E ACER COLOR W/O ACER LOGO BLACK	KV.0160A.002
	DVD-ROM DRIVE 16X PIONEER DVD-121RD BLACK W/O ACER LOGO	DRV,DVD-ROM 16X40X,DVD-121RD PIONEER (BLACK)	KV.01605.003
	DVD-ROM DRIVE 16X PIONEER DVD-121RD BLACK W/O ACER LOGO	DRV,DVD-ROM 16X40X,DVD-121RD PIONEER (BLACK)	KV.01605.003
COMBO DRIVE	COMBO DRIVE 48X HLDS GCC-4480B BLACK W/O ACER LOGO	DRV, COMBO, 48X, GCC-4480B, HLDS BLACK	KO.0480A.001

Category	Partname	Description	Acer P/N
DVD-RW DRIVE	4X DVD SUPERMULTI PLUS(BLACK) HLDS GSA-4040B BLACK W/O ACER LOGO	DVD SUPER MULTI DVD+/- RW DVD-RAM 4X/2.4X/2X/2X HLDS GAS-4040B BLACK	KU.0040D.007
FANSINK	FAN SINK FOR ATHLON 64	FAN SINK FOR ATHLON 64	HI.1720C.001
FAN	SYSTEM FAN	SYSTEM FAN	HI.9830C.001
CUP/ PROCESSOR	ATHLON 64 3200+ (CLAWHANMMER)	2.0GHZ, 800MHz, 1MB L2	KC.A3202.064
	ATHLON 64 3000+ (CLAWHAMMER)	1.8GHz, 800MHz, 1MB L2	KC.A3002.064
FDD/ FLOPPY DISK DRIVE	FDD 1.44MB PANASONIC JU-256A048P BLACK	FDD, PANASONIC,JU-256A048P BLACK	KF.25602.003
ADD-ON CARD	VGA CARD FX5200 256MB DDR W/TV OUT (PAL), ATX BRACKET PROLINK	VGA CARD FX5200 256MB DDR W/TV OUT (PAL), ATX BRACKET PROLINK	VG.52007.001
	VGA CARD ATI RADEON 9200SE 128MB DDR W/ TV out (PAL), ATX bracket	VGA CARD ATI RADEON 9200SE 128MB DDR W/ TV out (PAL), ATX bracket	54.ATI92.SE1
	VGA CARD ATI RADEON 9600SE 128MB DDR W/ TV out (PAL), ATX bracket	VGA CARD ATI RADEON 9600SE 128MB DDR W/ TV out (PAL), ATX bracket	54.ATI96.SE1
	VGA CARD ATI RADEON 9800SE 128MB DDR W/ TV out (PAL), ATX bracket	VGA CARD ATI RADEON 9800SE 128MB DDR W/ TV out (PAL), ATX bracket	54.ATI98.SE1
	MODEM CARD 56K ASKEY 1456VQH75D(INT)	V.92 S/W MODEM 56K (BKT:STANDARD) C4:0.1UF	FX.14501.001
	MODEM CARD ATX GVC F1156I(+)/R12(EU)	MODEM CARD ATX GVC	FX.56I02.003
POINTING DEVICE	CORDED MOUSE USB OPTICAL GENIUS POWERSCROLL EYE	GENIUS POWERSCROLL USB OPTICAL WITH ACER LOGO SILVER	MS.PSE04.005
	WIRELESS MOUSE CHICONY MSR0238T	MOUSE WIRELESS, MSR0238T,CHICONY	MS.WUR05.001

Category	Partname	Description	Acer P/N
KEYBOARD	USB KB(SILVER), KU0355, US VER., 104 KEYS	USB KB(SILVER), KU0355, US VER., 104 KEYS	KB.KUP03.034
	USB KB (SILVER), KU0355, ARBIC VER., 104KEYS	USB KB(SILVER), KU0355, US VER., 104 KEYS	KB.KUP03.037
	USB KB (SILVER), KU0355, GERMANY VER., 105KEYS	USB KB (SILVER), KU0355, GERMANY VER., 105KEYS	KB.KUP03.039
	USB KB (SILVER), KU0355, ITALIAN VER., 105KEYS	USB KB (SILVER), KU0355, ITALIAN VER., 105KEYS	KB.KUP03.040
	USB KB (SILVER), KU0355, FRENCH VER., 105KEYS	USB KB (SILVER), KU0355, FRENCH VER., 105KEYS	KB.KUP03.041
	USB KB (SILVER), KU0355, SWEDEN VER., 105KEYS	USB KB (SILVER), KU0355, SWEDEN VER., 105KEYS	KB.KUP03.042
	WIRELESS KB(SILVER), KBR0355, US VER.,104 KEYS	WIRELESS KB(SILVER), KBR0355, US VER.,104 KEYS	KB.WUR03.001
	WIRELESS KB(SILVER), KBR0355, ARABIC VER.,104 KEYS	WIRELESS KB(SILVER), KBR0355, ARABIC VER.,104 KEYS	KB.WUR03.004
	WIRELESS KB(SILVER), KBR0355, GERMANY VER.,105 KEYS	WIRELESS KB(SILVER), KBR0355, GERMANY VER.,105 KEYS	KB.WUR03.006
	WIRELESS KB(SILVER), KBR0355, ITALIAN VER.,105 KEYS	WIRELESS KB(SILVER), KBR0355, ITALIAN VER.,105 KEYS	KB.WUR03.007
	WIRELESS KB(SILVER), KBR0355, FRENCH VER.,105 KEYS	WIRELESS KB(SILVER), KBR0355, FRENCH VER.,105 KEYS	KB.WUR03.008
	WIRELESS KB(SILVER), KBR0355, SWEDEN VER.,105 KEYS	WIRELESS KB(SILVER), KBR0355, SWEDEB VER.,105 KEYS	KB.WUR03.009
HDD/HARD DISK DRIVE	HDD CUDA VI ALPINE 80G 7200RPM SEAGATE ST380011A	HDD 80G/7200 ST380011A	KH.08001.001
	HDD CUDA VI ALPINE 1200G 7200RPM SEAGATE ST3120022A	ALPINE 120G/7200, ATA-100 ST3120022A	KH.12001.001
	HDD SEAGATE ST3160021A 160GB 7.2KRPM 3.5IN. PATA 100 ALPINE	ALPINE 160G 7200RPM	KH.16001.001
	HDD XL80S 80G 7200RPM WD WD800BB-00DKA0	HDD 80G/7200 ATA100 WD800BB-00DKA0	KH.08008.003
	HDD 120GB 7200RPM WD CAVIAR WD1200BB-00DWA0	XL80 120G 7200RPM 1200BB-00DWA0	KH.12008.001
	HDD 160G 7200RPM WD WD1600BB00DWA0	HDD 160G 7200RPM WD WD1600BB00DWA0	KH.16008.001
	HDD 200G 7200RPM WD WD2000BB-22DWA0	HDD 200G 7200RPM WD WD2000BB-22DWA0	KH.20008.001

Category	Partname	Description	Acer P/N
MAINBOARD	MB E31M W/1394, USB2.0, LAN, AUDIO ECS 755-M	MB E31M W/1394, USB2.0, LAN, AUDIO ECS 755-M	MB.S0607.001
MAINBOARD CONVERTER	MB CONVERTER USED IN AUDIO/ USB/ LED	MB CONVERTER USED IN AUDIO/ USB/ LED	TBD
MEMORY	DDR333 256MB HYS64D32300GU-6-B 32MX8*8(.14U)	MEMORY DDR 333 256MB/0.14U/ INFINEON HYS64D32300GU-6-B	KN.25602.005
	DDRHYS64D64300GU-6-B/ INFINEON	MEMORY DDR 333 512MB/0.14U/ 64M*8*8/INFINEON HYS64D64300GU-6-B	KN.51202.004
	DDR333 256MB NT256D64S88B1G-6K (0.14U) 32MX8	MEMORY DDR333 256MB NANYA NT256D64S88B1G-6K	KN.51203.008
	DDR333 512MB NT512D64S8H (0.14U)32MX8	MEMORY DDR333 512MB NANYA NT512D64S8HB1G-6K	KN.51203.004
POWER SUPPLY	POWER SUPPLY 230W W PFC FSP 200-ATV(A)(PF)	POWER SUPPLY-FSP230-60ATV-PF	PY.23008.004
	POWER SUPPLY 230W W/ O PFC FSP 200-ATV(A)	POWERSUPPLY-FSP230-60ATV	PY.23008.003
SCREWS	M/B,USB BOARD SCREW	SCREW M3*6(FOR M/B AND USB)	86.PSPVF.001
	FDD, CD-ROM SCREW	SCREW M3(FOR FDD AND CD-ROM)	86.PSPVF.002
	CHASSIS SCREW	THUMB SCREW	86.S03VF.001
	SPS SCREW	SCREW#6-32UNC(FOR SPS, HDD AND CARD)	86.PSPVF.004
SPEAKER	SPEAKER 2+1 SUB-WOOFER NEOSONICA A2.1, DEFAULT 230V	SPEAKER, 2.1, NEOSONICA	SP.A2104.001
	SPEAKER 2+1 SUB-WOOFER NEOSONICA A2.1 DEFAULT 110V	SPEAKER 2+1 SUB-WOOFER NEOSONICA A2.1 DEFAULT 110V	SP.A2104.002

Model Definition and Configuration

The Aspire T130 Model No. Define:

1. Trade Mark:

2. Brand Name: Acer
3. Description: Mainboard E31M,W/1394, USB2.0, LAN and Audio
4. Model No: Aspire T130
5. Product Name: Acer Aspire T130

Test Compatible Components

Aspire T130 compatibility is tested and verified by Acer's internal testing department. All of its system functions are tested under the environments of Windows XP Home.

Microsoft Windows XP Home Environment Test

COMPONENTS	SPECIFICATIONS	MODEL DESCRIPTION
MAIN BOARD		
ECS	MAINBOARD E31M, W/1394, USB 2.0, LAN, AUDIO	E31M
ECS	CONVERTER FOR ASPIRE T130 CHASSIS	AUDIO/USB/FRONT IO
CPU (400MHZ)		
AMD	ATHLON 64 3200+(CLAWHAMMER)	2.0GHz, 800MHz, 1MB L2
	ATHLON 64 3000+(CLAWHAMMER)	1.8GHZ, 800MHZ, 1M L2
CP FAN SINK		
FOXCONN	FOXCONN FANSINK FOR ATHLON 64	TBD
DIMM (DDR 333)		
INFINEON	DDR 333 256MB 0.14U 32M*8*8 DDR 333 512MB 0.14U 64M*8*8	HYS64D32300GU-6-B HYS64D64320GU-6-B
NANYA	DDR 333 256MB 0.14U 32M*8*8 DDR 333 512MB 0.14U 32M*8*16	NT256D64S88B1G-6K NT512D64S8HB1G-6K
HDD (7200RPM)		
SEAGATE	ALPINE 80G 7200RPM ALPINE 120G 7200RPM ALPINE 160G 7200RPM	ST380011A ST3120022A ST3160021A
WD	80G 7200RPM 120G 7200RPM 160G 7200RPM 200G 7200RPM	WD800BB-00DKA0 WD1200BB-00DWA0 WD1600BB-00DWA0 WD2000BB-22DWA0
CD-ROM		
BTC	52X CD-ROM ACER COLOR,W/O ACER LOGO, BLACK	F564E
DVD ROM		
BTC	16X/40X DVD-ROM ACER COLOR, W/O ACER LOGO, BLACK	BDV 316E
PIONEER	16X/40X DVD-ROM ACER COLOR, W/O ACER LOGO, BLACK	DVD-121RD
CD-RW		
BTC	52X/24X/52X CD-RW ACER COLOR,W/O ACER LOGO, BLACK	BCE-52241M
LITE-ON	52X/24X/52X CD-RW ACER COLOR,W/O ACER LOGO, BLACK	LTR-52246S
COMBO		
HLDS	48X/24X/48X/16 COMBO ACER COLOR,W/O ACER LOGO,BLACK	GCC-4480B
SUPERMULTIPLUS		
HLDS	4X DVD DUAL, ACER COLOR, WO ACER LOGO, BLACK	GSA-4040B
VGA CARD		
PROLINK	FX5200 256MB DDR W/ TV OUT (PAL), ATX BRACKET	TBD

COMPONENTS	SPECIFICATIONS	MODEL DESCRIPTION
SAPPHIRE	ATI RADEON 9200SE 128MB DDR W/TV OUT (PAL), ATX BRACKET ATI RADEON 9600SE 128MB DDR W/TV OUT (PAL), ATX BRACKET ATI RADEON 9800SE 128MB DDR W/TV OUT (PAL), ATX BRACKET	TBD TBD TBD
MODEM		
ASKEY	V92 56K HSFI	1456VQH75D(INT)
GVC	F-1156I(+)/R12(EU) ATX	F-1156(+)/R12
HOUSING		
FOXCONN	MICRO TOWER	TBD
SPS (SWITCH POWER SUPPLY)		
FSP	FSP200-ATV(A)(PF), 230W PFC SPS FSP200-ATV(A), 230W non-PFC SPS	FSP200-ATV(A)(PF) FSP200-ATV(A)
7-IN-1 CARD READER		
ECS	3.5” (BLACK) 7-IN-1 CARD READER	UCR-61
RF BOARD		
CHICONY	CHICONY RF BOARD	
IR BOARD		
NFIC	NFIC IR MB 801 RECEIVER BOARD	MB801
REMOTE CONTROL		
NFIC	NFIC RC801 REMOTE CONTROL	RC801
FDD		
PANASONIC	1.44M 3.5”, JU-256A048P, BLACK	JU-256A048P
SPEAKER		
NEOSONICA	NEOSONICA SPEAKER, 2+1 SUB-WOOFER(SILVER), A2.1, DEFAULT 230V NEOSONICA SPEAKER, 2+1 SUB-WOOFER(SILVER), A2.1, DEFAULT 110V	A2.1 A2.1
CORED KEYBOARD		

COMPONENTS	SPECIFICATIONS	MODEL DESCRIPTION
CHICONY	USB KB(SILVER), KU0355, US VER., 104 KEYS	KU0355
	USB KB(SILVER), KU0355, ARABIC VER., 104 KEYS	KU0355
	USB KB(SILVER), KU0355, GERMANY VER., 105 KEYS	KU0355
	USB KB(SILVER), KU0355, ITALIAN VER., 105 KEYS	KU0355
	USB KB(SILVER), KU0355,FRENCH VER., 105 KEYS	KU0355
	USB KB(SILVER), KU0355, SWEDEN VER., 105 KEYS	KU0355
	USB KB(SILVER), KU0355, UK VER., 105 KEYS	KU0355
WIRELESS KEYBOARD		
CHICONY	WIRELESS KB(SILVER), KBR0355, US VER., 104 KEYS	KBR0355
	WIRELESS KB(SILVER), KBR0355, ARABIC VER., 104 KEYS	KBR0355
	WIRELESS KB(SILVER), KBR0355, GERMANY VER., 105 KEYS	KBR0355
	WIRELESS KB(SILVER), KBR0355, ITALIAN VER., 105 KEYS	KBR0355
	WIRELESS KB(SILVER), KBR0355, FRENCH VER., 105 KEYS	KBR0355
	WIRELESS KB(SILVER), KBR0355, SWEDEN VER., 105 KEYS	KBR0355
	WIRELESS KB(SILVER), KBR0355, UK VER., 105 KEYS	KBR0355
CORE MOUSE		
GENIUS	MOUSE USB WHEEL OPTICAL (SILVER)	POWERSCROLL USB
WIRELESS MOUSE		
CHICONY	CHICONY WIRELESS MOUSE (SILVER), MSR0238T	MSR0238T
CRT MONITOR		

COMPONENTS	SPECIFICATIONS	MODEL DESCRIPTION
	17" CRT MON.AC713 BLACK MPRII N.M. EUR P.C. AEB	AC713
	17" CRT MON.AC713 BLACK MPRII N.M. UK P.C. AEB	AC713
	17" CRT MON.AC713 BLACK MPRII E.M. W/O P.C.AAP	AC713
	17" CRT MON.AC713 BLACK MPRII N.M. W/O P.C. AAP	AC713
	17" CRT MON.AC713 BLACK MPRII S.M. AUSTRALIA P.C. AAP	AC713
	17" CRT MON.AC713 BLACK MPRII E.M. UK P.C. AEB	AC713
	17" CRT MON.AC713 BLACK MPRII N.M. US P.C. PA	AC713
	17" CRT MON.AC713 BLACK TCO03 N.M. UK P.C. AEB	AC713
	17" CRT MON.AC713 BLACK TCO03 N.M. EUR P.C. AEB	AC713
	17" CRT MON.AC713 BLACK TCO03 N.M. W/O P.C.	AC713
	17" CRT MON.AC713 BLACK MPRII N.M. US P.C. AAP/AME	AC713
	17" CRT MON.AC713 BLACK MPRII N.M. UK P.C. AAP/AME	AC713
	17" CRT MON.AC713 BLACK MPRII N.M. EUR P.C. AAP/AEM	AC713
	17” CRT MON. AC713 BLACK MPRII N.M. EUR P.C. AEB	AF715
	17” CRT MON. AC713 BLACK MPRII N.M. EUR P.C. AEB	AF715
	17” CRT MON. AC713 BLACK MPRII N.M. EUR P.C. AEB	AF715
	17” CRT MON. AC713 BLACK MPRII N.M. EUR P.C. AEB	AF715
	17” CRT MON. AC713 BLACK MPRII N.M. EUR P.C. AEB	AF715
	17” CRT MON. AC713 BLACK MPRII N.M. EUR P.C. AEB	AF715
	17” CRT MON. AC713 BLACK MPRII N.M. EUR P.C. AEB	AF715
	17” CRT MON. AC713 BLACK MPRII N.M. EUR P.C. AEB	AF715
	17” CRT MON. AC713 BLACK MPRII N.M. EUR P.C. AEB	AF715
LCD MONITOR		

COMPONENTS	SPECIFICATIONS	MODEL DESCRIPTION
	17” LCD MONITOR	AL1521
	15 LCD M N. AL1531 TC99 EUR. SWISS UK P.C. AEB	AL1531
	15 LCD M N. AL1531 TC99 W/P WER C RD AAP	AL1531
	15 LCD M N. AL1531 TC99 UK P WER C RD AAP	AL1531
	15 LCD M N. AL1531 TC99 EUR P WER C RD AAP	AL1531
	15 LCD M N. AL1531 TC99 US P WER C RD AAP/AME	AL1531
	15 LCD M N. AL1531 TC99 AUSTRALIA P.C. ACA	AL1531
	17” LCD MONITOR	AL1721
	17 LCD M N. AL1531 TC99 EUR, SWISS UK P.C. AEB	AL1731
	17 LCD M N. AL1531 TC99 W/P WER C RD AAP	AL1731
	17 LCD M N. AL1531 TC99 UK P WER C RD AAP	AL1731
	17 LCD M N. AL1531 TC99 EUR P WER C RD AAP	AL1731
	17 LCD M N. AL1531 TC99 US P WER C RD AAP/AME	AL1731
	17 LCD M N. AL1531 TC99 AUSTRALIA P.C. ACA	AL1731

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
- User's manuals
- Training materials
- Main manuals
- Bios updates
- Software utilities
- Spare parts lists
- TABs (Technical Announcement Bulletin)

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 Traveller'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.