TECHNICAL MANUAL

Of

Intel GM45 Express Chipset

&

ICH9M Chipset

Based

Mini-ITX M/B for Penyn Processor

NO.G03-NF3-F

Rev 1.0

Release date: Feb., 2009

Trademark:

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Environmental Protection Announcement

Do not dispose this electronic device into the trash while discarding. To minimize pollution and ensure environment protection of mother earth, please recycle.

TABLE OF CONTENT

Safety Environmental Instruction

- Avoid the dusty, humidity and temperature extremes. Do not place the product in any area where it may become wet.

- 0 to 60 centigrade is the suitable temperature. (The figure comes from the request of the main chipset)

- Generally speaking, dramatic changes in temperature may lead to contact malfunction and crackles due to constant thermal expansion and contraction from the welding spots' that connect components and PCB. Computer should go through an adaptive phase before it boots when it is moved from a cold environment to a warmer one to avoid condensation phenomenon. These water drops attached on PCB or the surface of the components can bring about phenomena as minor as computer instability resulted from corrosion and oxidation from components and PCB or as major as short circuit that can burn the components. Suggest starting the computer until the temperature goes up.

- The increasing temperature of the capacitor may decrease the life of computer. Using the close case may decrease the life of other device because the higher temperature in the inner of the case.

- Attention to the heat sink when you over-clocking. The higher temperature may decrease the life of the device and burned the capacitor.

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Manual Revision Information

Reversion	Revision History	Date
1.0	First Edition	February, 2009

Item Checklist

- ☑ Motherboard
- ☑ Cable(s)
- ☑ CD for motherboard utilities
- ☑ Motherboard User's Manual
- ☑ Back panel

Chapter 1

Introduction of the Motherboard

1-1 Feature of motherboard

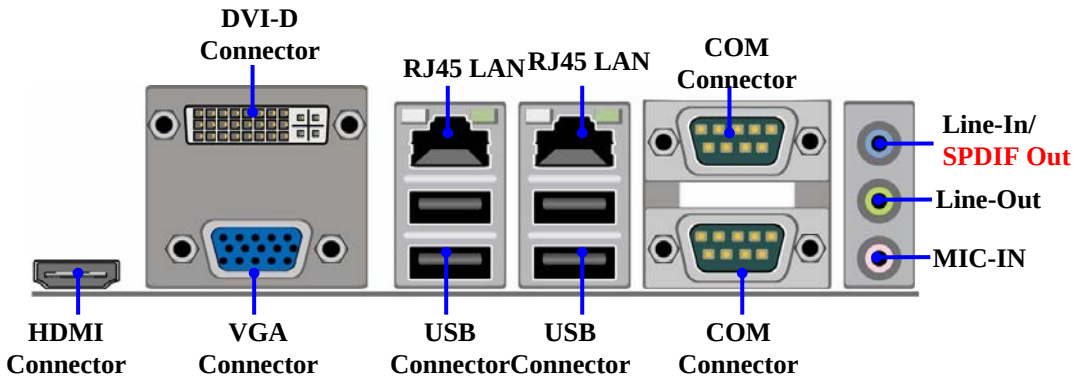
- Intel GM45+ICH9M chipset.
- Penyn CPU, with low power consumption never denies high performance.
- Support FSB 1066MHz
- Support two DDRII SODIMM 800/667MHz up to 4 GB.
- Onboard two REALTEK RTL 8111C Gigabit Ethernet LAN.
- Integrated ALC888 6-channel HD audio CODEC.
- Support USB2.0 data transport demands.
- Support RS422/485 and watchdog.
- Support GPIO function.

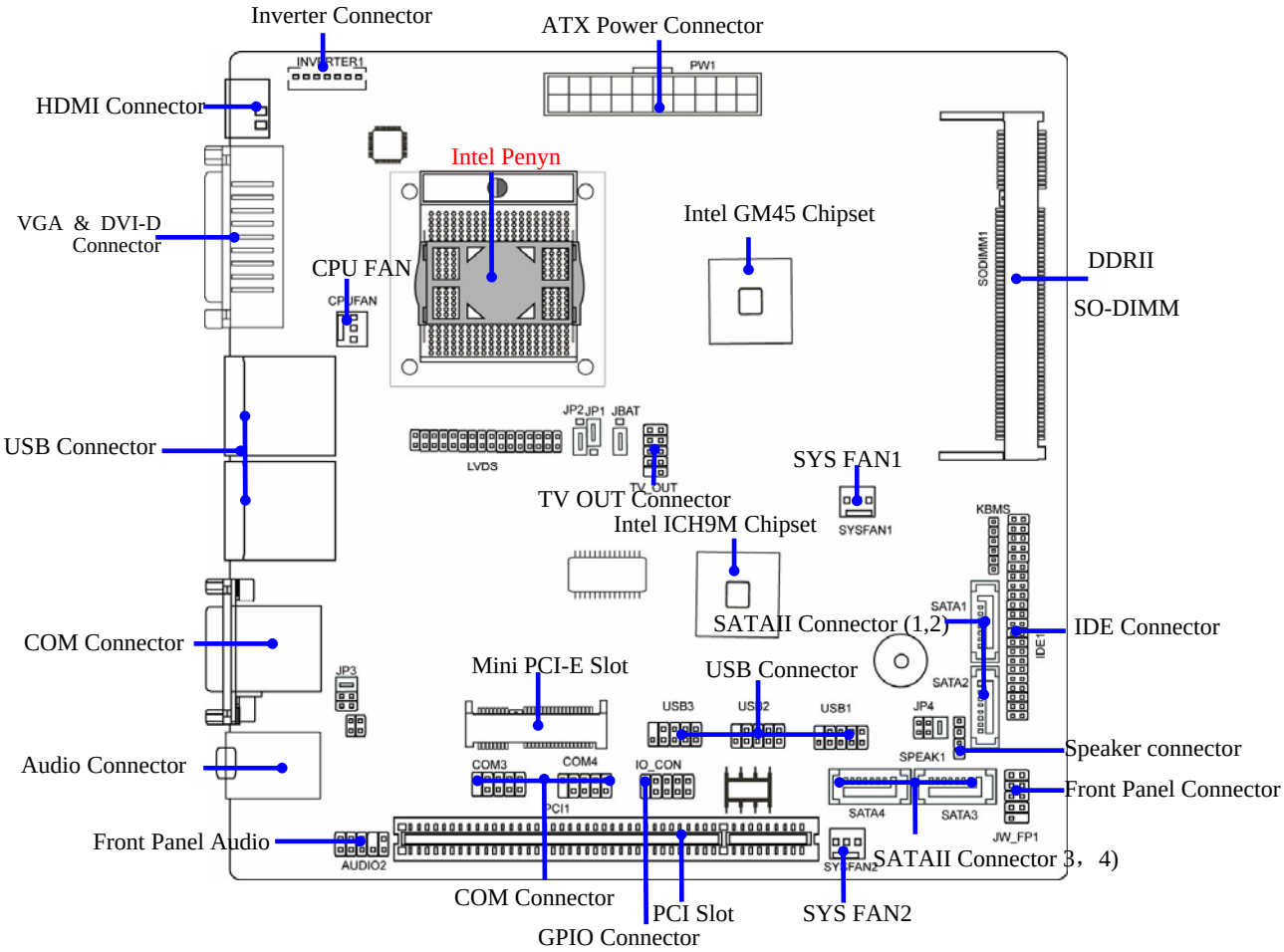
1-2 Specification

Spec	Description
Design	* Mini ITX form factor 8 layers PCB size: 17.0x17.0cm
Chipset	* Intel GM45+ICH9M Chipset
CPU	* Penyn CPU
Memory Socket	* 200-pin DDRII SO-DIMM socket x2 * Support DDRII SODIMM 800/667 MHz system Modules DDRII SODIMM memory * Expandable to 4GB.
Expansion Slots	* 32-bit PCI slot x 1pcs * Mini PCI-E x1pcs
Integrate IDE	* One PCI IDE controller that supports PCI Bus Mastering, ATA PIO/DMA and the ULTRA DMA 100/66 functions that deliver the data transfer rate up to 100 MB/s.
LAN	* Integrated two Realtek RTL8111C PCI-E Gigabit LAN. * Support Fast Ethernet LAN function of providing 10Mb/100Mb/1000Mb Ethernet data transfer rate
Audio	* ALC888 6 channel Audio Codec integrated * Audio driver and utility included
BIOS	* Award 8MB Flash DIP ROM
Multi I/O	* Hard disk drive connector x1 * SATAII x4 * USB2.0 port x 4 and headers x6 * RJ45 LAN connector x2 * Audio connector x1 (Line-in, Line-out, MIC,SPDIF_OUT) * COM connector x 2 * COM Header x2

	* LVDS Connector x1 * VGA Connector x1 * DVI-D Connector x1 * TV OUT x1 * HDMI Connector x1

1-3 Layout Diagram & Jumper Setting




Inverter Connector
ATX Power Connector
HDMI Connector
Intel Penyn
VGA & DVI-D Connector
Intel GM45 Chipset
CPU FAN
DDRII
SO-DIMM
USB Connector
SYS FAN1
TV OUT Connector
Intel ICH9M Chipset
SATAII Connector (1,2)
IDE Connector
COM Connector
Mini PCI-E Slot
USB Connector
Speaker connector
Audio Connector
Front Panel Connector
Front Panel Audio
SATAII Connector 3，4)
COM Connector
PCI Slot
SYS FAN2
GPIO Connector
INVERTER1
PW1
CPUFAN
SODIMM1
JP2
JP1
JBAT
LVDS
TV_OUT
SYSFAN1
KBMS
SATA1
SATA2
IDE1
JP3
USB3
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SPEAK1
COM3
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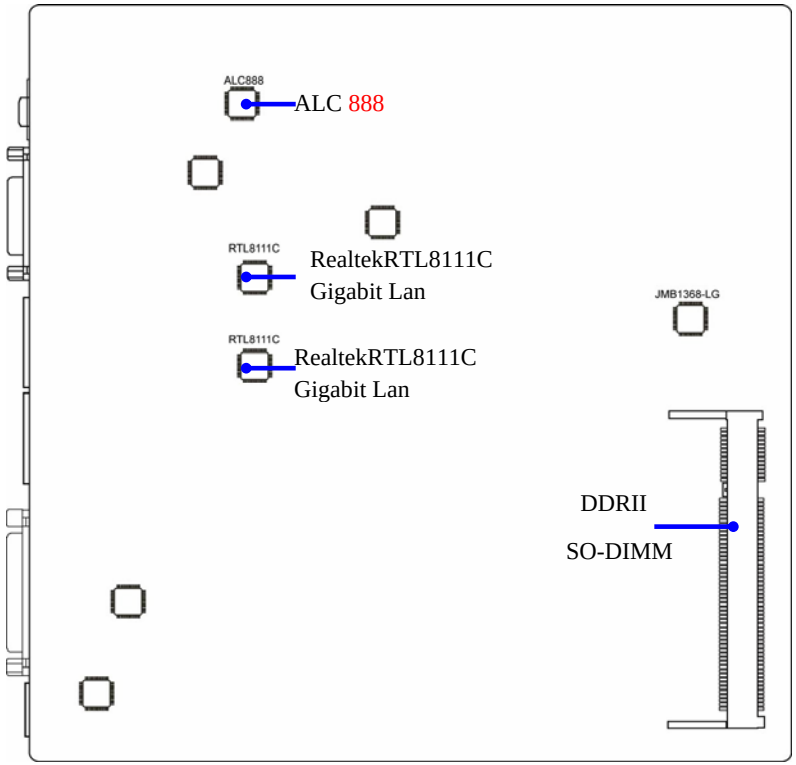
PCI1
SATA4
SATA3
JW_FP1
AUDIO2
SYSFAN2


ALC888
ALC 888
RTL8111C
RealtekRTL8111C
Gigabit Lan
JMB1368-LG
RTL8111C
RealtekRTL8111C
Gigabit Lan
DDRII
SO-DIMM

Jumper

Jumper	Name	Description	Page
JP1	Panel backlight selecting	3-pin Block	P.8
JBAT	CMOS RAM Clear Function Setting	3-pin Block	P.8
JP2	Panel VDD Select	3-pin Block	P.9
JP3	RS232/422/485 Function Select	6-pin Block	P.9
JP4	Powered RS232 Select	6-pin Block	P.10

Connectors

Connector	Name	Description	Page
USB	USB Port Connector	4-pin Connector	P.10
UL2	RJ45 LAN Connector	RJ-45 Connector	P.10
VGA	Video Graphic Attach Connector	D-sub15-pin Female	P.10
AUDIO1	Line-Out /MIC/Line-In Audio Connector	3 Phone Jack	P.10
COM1,2	Serial Port COM1 Connector	9-pin Connector	P.10
DVI-D Connector	DVI port connector	24-pin Connector	P.10
HDMI Connector	HDMI port connector	19-pin Connector	P.10

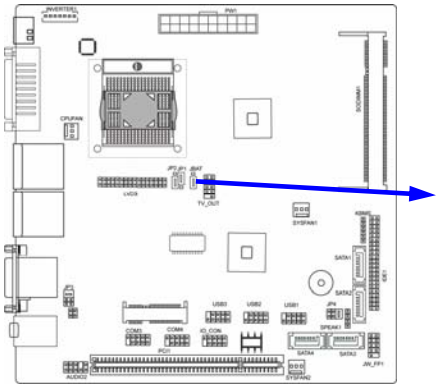
Headers

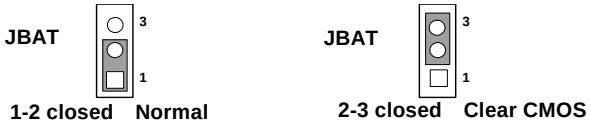
Header	Name	Description	Page
CPUFAN,SYSFAN1/2	FAN Speed Headers	3-pin Block	P.15
AUDIO1	Front panel audio Headers	9-pin block	P.11
TV Out1	TV Out Header	9-pin block	P.14
PWR LED	Power LED	4-pin Block	P.15
LVDS	LVDS Connector	32-pin Block	P.12
Inverter	LVDS Inverter Connector	7-pin Block	P.13
COM3,4	Serial Port COM3/4 Connector	9-pin Connector	P.16
JW_FP (PWR LED/ HD LED/ /Power Button /Reset)	Front Panel Header (PWR LED/ HD LED/ /Power Button /Reset)	9-pin Block	P.15
SATA1~4	Serial ATAII IDE Connector	7-pin Connector	P.11
GPIO	GPIO header	10-pin Connector	P.16
KBMS Header	PS/2 Keyboard and mouse connector	6-pin Connector	P.17

Chapter 2

2-1 Jumper Setting

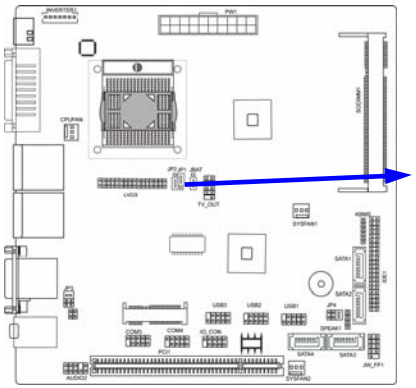
(1) Clear CMOS (3-pin): JBAT

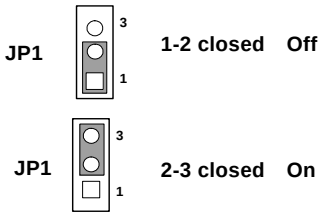




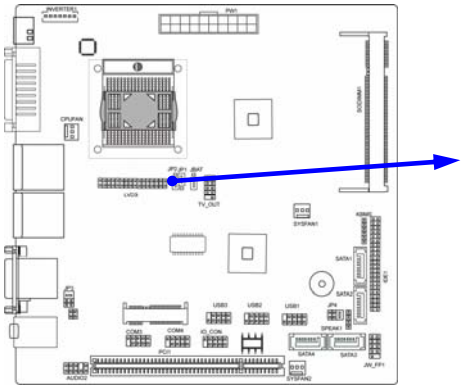
CMOS RAM Clear Setting

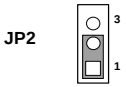
(2) JP1: Panel backlights select (3-pin)



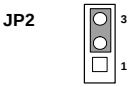


(3) JP2: Panel VDD Select (3-pin)



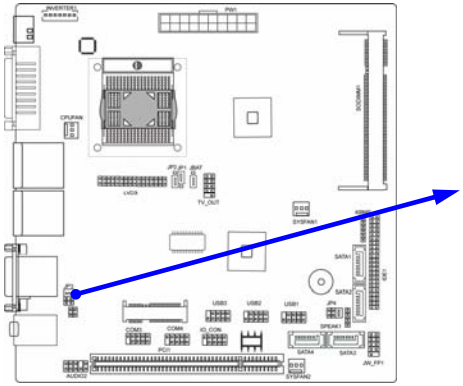


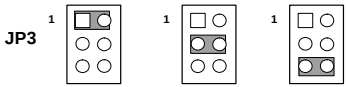
1-2 closed: 5V



2-3 closed : 3.3V

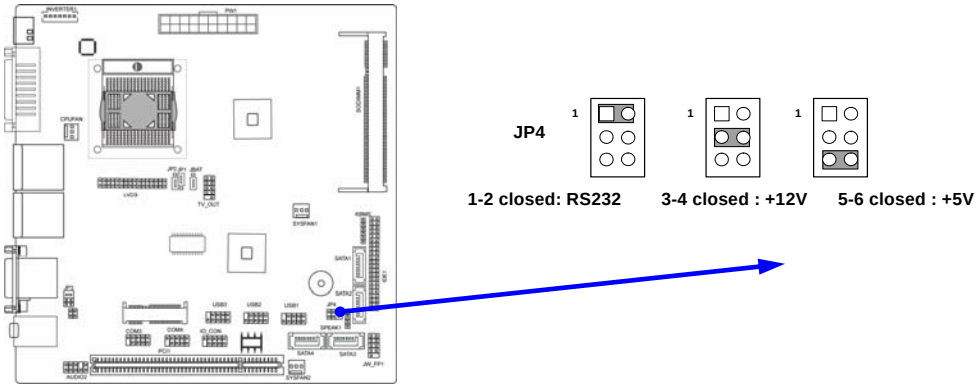
(4) JP3: Power RS232/422/485 Function Select





1-2 closed: RS232 3-4 closed : RS485 5-6 closed : RS422

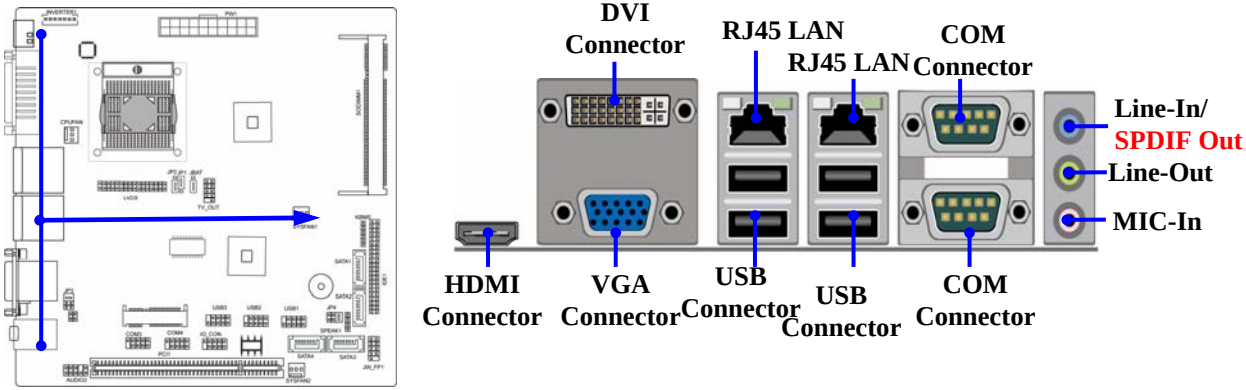
(5) JP4: Powered RS232 Select ：



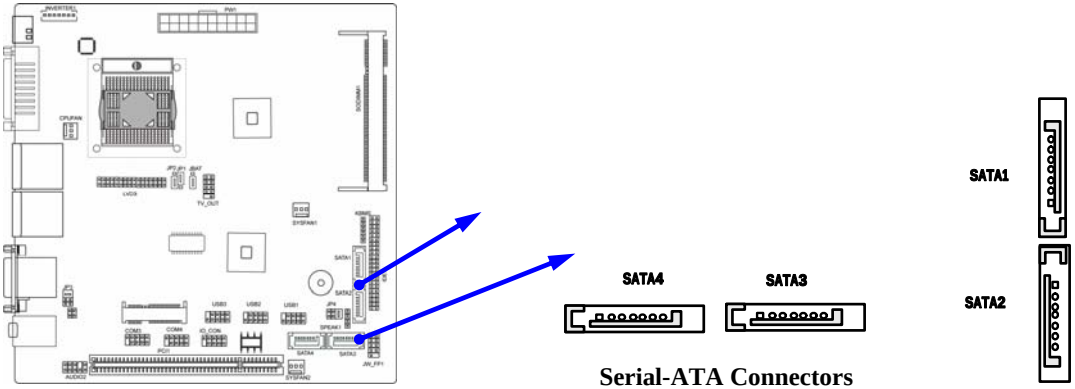
2-2 Connectors and Headers

2-2-1 Connectors

(1) Audio Connector: (Line-IN/ Line-Out/ MIC-In)



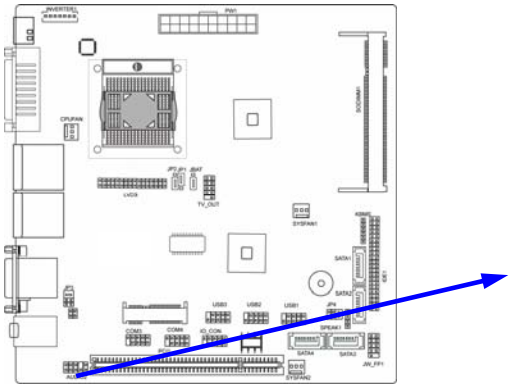
(2) Serial-ATA Port connector: SATA1/SATA2/ SATA3/SATA4

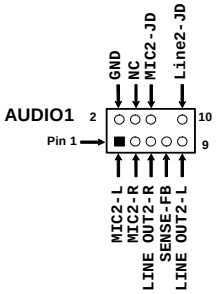


Serial-ATA Connectors

2-2-2 Headers

(1) Front panel audio (9-pin): AUDIO1

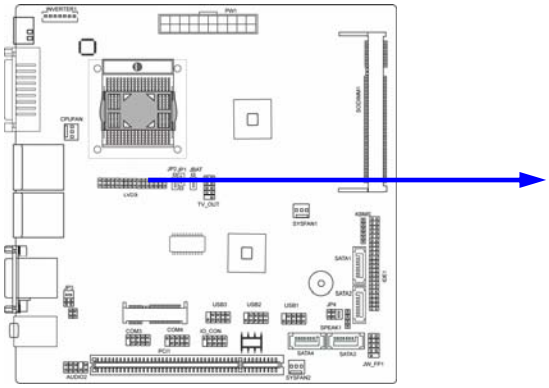


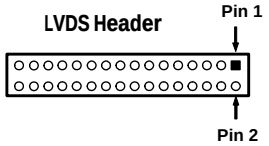


Line-Out, MIC Headers

(2) LVDS Headers: LVDS

Pin NO.	Pin Define	Pin NO.	Pin Define
Pin 1	NC	Pin 2	NC
Pin 3	LVDS_CLKBN	Pin 4	LVDS_CLKBP
Pin 5	LVDSA_DATAN2	Pin 6	LVDSA_DATAP2
Pin 7	LVDSA_DATAN1	Pin 8	LVDSA_DATAP1
Pin 9	LVDSA_DATAN0	Pin 10	LVDSA_DATAP0
Pin 11	LVDS_DDC_DATA	Pin 12	LVDS_DDC_CLK
Pin 13	GND	Pin 14	GND
Pin 15	GND	Pin 16	GND
Pin 17	NC	Pin 18	NC
Pin 19	LVDS_CLKAP	Pin 20	LVDS_CLKAN
Pin 21	LVDSB_DATAP2	Pin 22	LVDSB_DATAN2
Pin 23	LVDSB_DATAP1	Pin 24	LVDSB_DATAN1
Pin 25	LVDSB_DATAP0	Pin 26	LVDSB_DATAN0
Pin 27	PVDD	Pin 28	PVDD
Pin 29	PVDD	Pin 30	PVDD
Pin 31	GND	Pin 32	GND





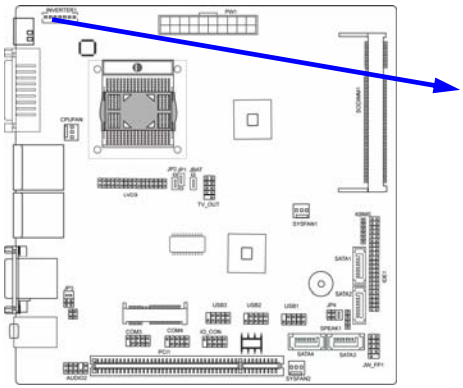
(3) **Pin-headers of LVDS Inverter:**

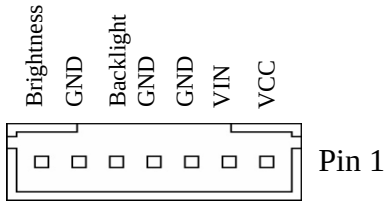
Pin 1 and pin2: VCC of inverter

Pin3、pin4 and pin6: GND

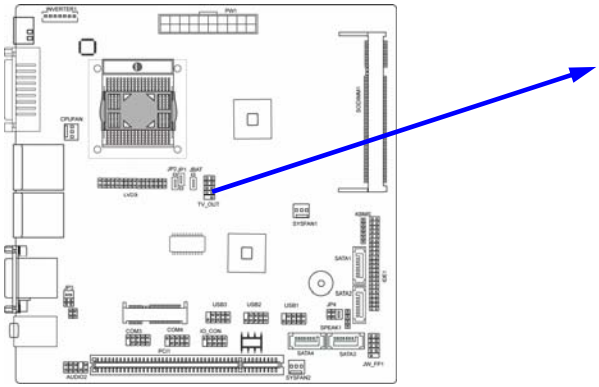
Pin5: Backlight

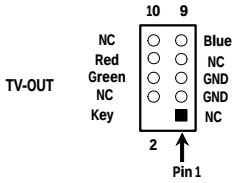
Pin7: Brightness





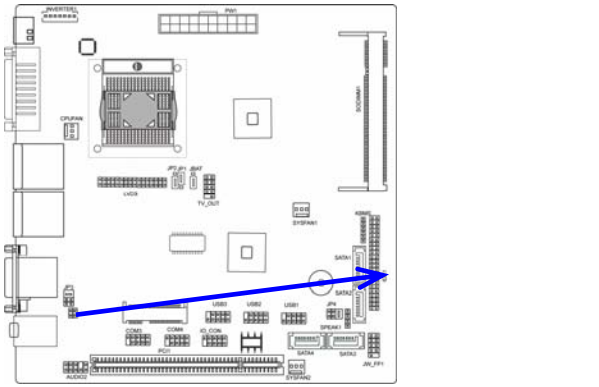
(4) TV-OUT Header:

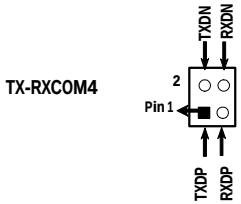




TV-OUT Header

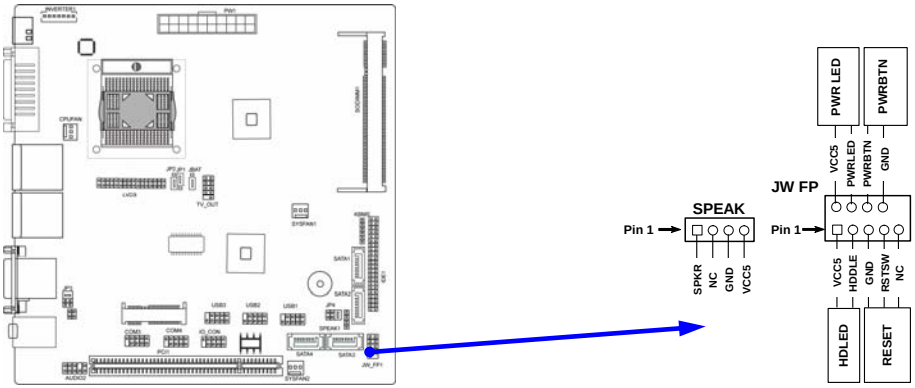
(6) RS422/485 Header:





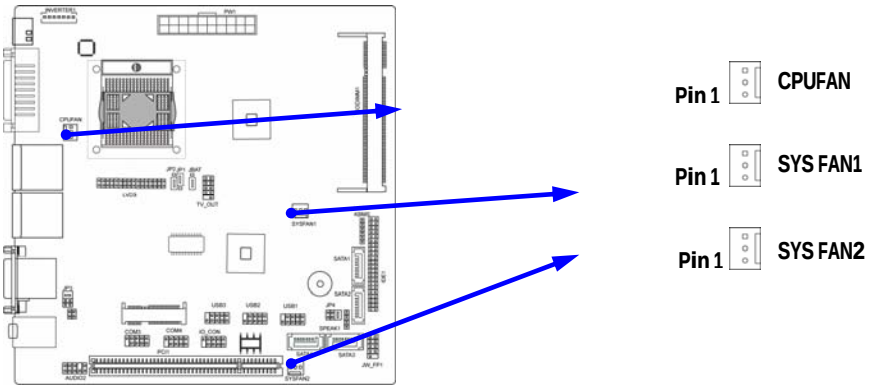
RS422/485 Header

(7) JW-FP（9-pin）

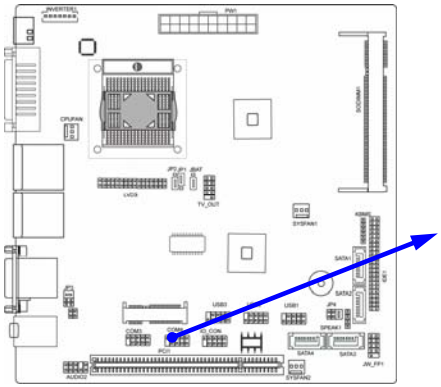


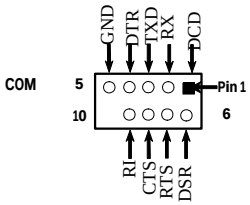
System Case Connections

(8) FAN Speed Headers (3-pin): CPUFAN, SFAN1/SFAN2



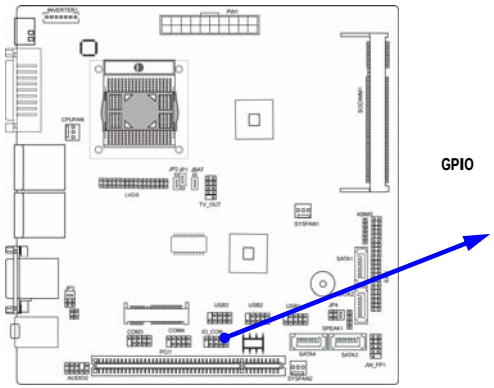
(9) COM Header (9-pin):

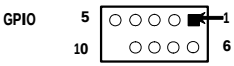




COM Header

(10) GPIO Header (9-pin):



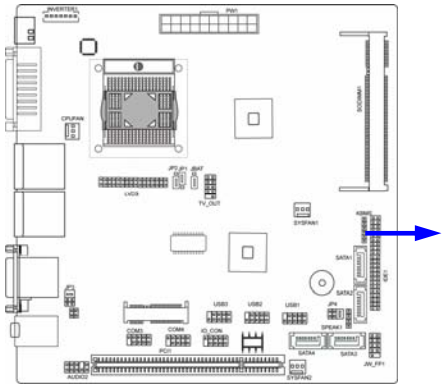


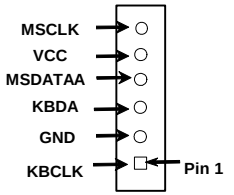
GPIO Header

PIN	Define	PIN	Define
1	GPIO_20	6	GPIO_26
2	GPIO_24	7	GPIO_23
3	GPIO_21	8	GPIO_27
4	GPIO_25	9	GND
5	GPIO_22	10	VCC

(11) **KBMS Header:**

The header is for PS/2 keyboard and PS/2 Mouse input devices.





KBMS Header

Chapter 3

Introducing BIOS

Attention:	The BIOS options shown in this manual is for reference use only. We reserve the right to update the BIOS version without advance notice.

The BIOS is a program located on a Flash Memory on the motherboard. This program is a bridge between motherboard and operating system. When you start the computer, the BIOS program will gain control. The BIOS first operates an auto-diagnostic test called POST (power on self test) for all the necessary hardware, it detects the entire hardware device and configures the parameters of the hardware synchronization. Only when these tasks are completed done it gives up control of the computer to operating system (OS). Since the BIOS is the only channel for hardware and software to communicate, it is the key factor for system stability, and in ensuring that your system performance as its best.

In the BIOS Setup main menu of Figure 3-1, you can see several options. We will explain these options step by step in the following pages of this chapter, but let us first see a short description of the function keys you may use here:

- Press <Esc> to quit the BIOS Setup.
- Press ↑↓←→ (up, down, left, right) to choose, in the main menu, the option you want to confirm or to modify.
- Press <F10> when you have completed the setup of BIOS parameters to save these parameters and to exit the BIOS Setup menu.
- Press Page Up/Page Down or +/– keys when you want to modify the BIOS parameters for the active option.

3-1 Entering Setup

Power on the computer and by pressing <Del> immediately allows you to enter Setup.
If the message disappears before your respond and you still wish to enter Setup, restart the system to try again by turning it OFF then ON or pressing the "RESET" button on the system case. You may also restart by simultaneously pressing <Ctrl>, <Alt> and <Delete> keys. If you do not press the keys at the correct time and the system does not boot, an error message will be displayed and you will again be asked to

Press <F1> to continue, or <Del> to enter Setup

3-2 Getting Help

Main Menu

The on-line description of the highlighted setup function is displayed at the bottom of the screen.

Status Page Setup Menu/Option Page Setup Menu

Press F1 to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window, press <Esc>.

3-3 The Main Menu

Once you enter Award® BIOS CMOS Setup Utility, the Main Menu (Figure 3-1) will appear on the screen. The Main Menu allows you to select from fourteen setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.

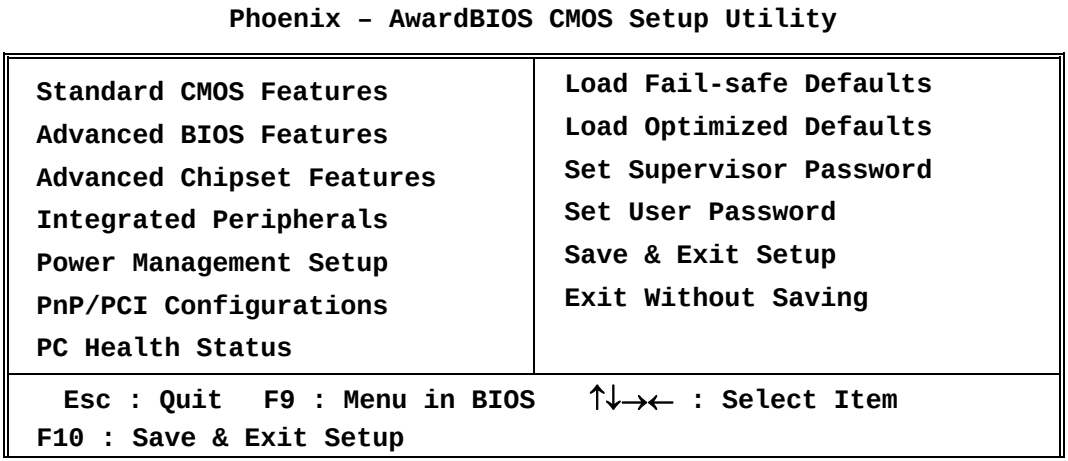


Figure 3-1

Standard CMOS Features
Use this Menu for basic system configurations.

Advanced BIOS Features
Use this menu to set the Advanced Features available on your system.

Advanced Chipset Features
Use this menu to change the values in the chipset registers and optimize your system's performance.

Integrated Peripherals
Use this menu to specify your settings for integrated peripherals.

Power Management Setup
Use this menu to specify your settings for power management.

Miscellaneous Control

Use this menu to specify your settings for **Miscellaneous Control**.

PC Health Status
This entry shows your PC health status.
Power User Overclock Settings
Use this menu to specify your settings (frequency, Voltage) for overclocking demand
CPU Thermal Throttling Setting
The selection is set for activating the active CPU Thermal Protection by flexible CPU loading adjustment in the arrangement of temperature you defined.
Load Optimized Defaults
Use this menu to load the BIOS default values these are setting for optimal performances system operations for performance use.
Password Settings
This entry for setting Supervisor password and User password
Save & Exit Setup
Save CMOS value changes to CMOS and exit setup.
Exit Without Saving
Abandon all CMOS value changes and exit setup.

3-4 Advanced BIOS Features

Phoenix – AwardBIOS CMOS Setup Utility

Advanced BIOS Features

CPU Feature	Press Enter	Item Help
Hard Disk Boot Priority	Press Enter	
Virus Warning	Disabled	
CPU L3 Cache	Enabled	Menu Level >
Quick power on self Test	Enabled	
First Boot Device	HARD DISK	
Second Boot Device	CDROM	
Third Boot Device	Disabled	
Boot other Device	Enabled	
Boot Up NumLock Status	On	
Typematic Rate Setting	Disabled	
Typematic Rate (Chars/Sec)	6	
Typematic Delay (Msec)	250	
Security Option	Setup	
APIC Mode	Enabled	
MPS Version Control For OS	1.4	
OS Select For DRAM > 64MB	Non-OS2	
Report No FDD For WIN 95	Yes	
Small Logo(EPA) Show	Disabled	
Summary Screen Show	Disabled	

↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5:Previous Values F6:Optimized Defaults F7:Standard Defaults

Hard Disk Boot Priority

The selection is for you to choose the hard disk drives priorities to boot from.

Virus Warning

The selection Allow you to choose the VIRUS Warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep.

Disabled (default) No warning message to appear when anything attempts to access the boot sector or hard disk partition table.

Enabled Activates automatically when the system boots up causing a warning message to appear when anything attempts to access the boot sector of hard disk partition table.

CPU Internal Cache

The default value is Enabled.

Enabled (default) Enable cache

Disabled Disable cache

Note: The internal cache is built in the processor.

External Cache

Choose Enabled or Disabled. This option enables the Level 2 cache memory.

Quick Power On Self-Test

This category speeds up Power On Self Test (POST) after you power on the computer. If this is set to Enabled, BIOS will shorten or skip some check items during POST.

Enabled (default) Enable quick POST

Disabled Normal POST

First/Second/Third Boot Device

The BIOS attempts to load the operating system from the devices in the sequence selected in these items. The settings are Floppy, LS/ZIP, HDD-0/HDD-1/HDD-3, SCSI, CDROM, LAD and Disabled.

Boot Up Floppy Seek

During POST, BIOS will determine if the floppy disk drive installed is 40 or 80 tracks. 360K type is 40 tracks while 760K; 1.2M and 1.44M are all 80 tracks.

Boot Up NumLock Status

The default value is on.

On (default) Keypad is numeric keys.

Off Keypad is arrow keys.

Typematic Rate Setting

Keystrokes repeat at a rate determined by the keyboard controller. When enabled, the typematic rate and typematic delay can be selected. The settings are: Enabled/Disabled.

Typematic Rate (Chars/Sec)
Set the number of times a second to repeat a keystroke when you hold the key down. The settings are: 6, 8, 10, 12, 15, 20, 24, and 30.

Typematic Delay (Msec)
Sets the delay time after the key is held down before beginning to repeat the keystroke. The settings are 250, 500, 750, and 1000.

Security Option
This category allows you to limit access to the system and Setup, or just to Setup.

System	The system will not boot and access to Setup will be denied if the correct password is not entered at the prompt.
Setup (default)	The system will boot, but access to Setup will be denied if the correct password is not entered prompt.

HDD S.M.A.R.T Capability

This option allow you to enable the HDD S.M.A.R.T Capability (Self-Monitoring, Analysis and Reporting Technology) . You can choose from Enabled and Disabled.

MPS Version Control For OS 1.4
This option is only valid for multiprocessor motherboards as it specifies the version of the Multiprocessor Specification (MPS) that the motherboard will use.

OS Select For DRAM > 64MB
Allows OS2® to be used with >64MB or DRAM. Settings are Non-OS/2 (default) and OS2. Set to OS/2 if using more than 64MB and running OS/2®.

3-4-1 CPU Feture

Phoenix – AwardBIOS CMOS Setup Utility

CPU Features

C1E Function	Auto	Item Help
CPU C State Capability	Disabled	
Execute Disable Bit	Enabled	Menu Level >
Core Multi-Processing	Enabled	
↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

3-5 Intergrated peripherals

Phoenix – AwardBIOS CMOS Setup Utility

Intergrated peripheral

SIO Device	Press Enter	Item Help
Onchip IDE Device	Press Enter	
Onboard Device	Press Enter	
Intel Dis Feature	Press Enter	Menu Level >>
USB Device Setting	Press Enter	
RS422/485 Auto Flow Cntr1	Disabled	
Power On By Mouse	Disabled	
Power On By Keyboard	Disabled	
Watch Dog set	Disabled	
Watch Dog Timer	10	
PWRON After PWR-Fail	Off	
↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5:Previous Values F6:Optimized Defaults F7:Standard Defaults		

3-5-1 Intel DTS Feature

Phoenix – AwardBIOS CMOS Setup Utility

Intel DTS Feature

Intel DTS Function	**Enabled**	**Item Help**
DTS Active temperature	**55℃**	**Menu Level >**
Passive Cooling Trip Point	95℃	
Passive TC1 Value	2	
Passive TC2 Value	0	
Passive TSP Value	10	

↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5:Previous Values F6:Optimized Defaults F7:Standard Defaults

DTS Active Temperature:

This value controls the temperature of the ACPI Active Trip Point- the point in which the os will turn the CPU on.

NOTE: If the DTS is enabled, only values below 97℃ are valid.

Passive Cooling Trip Point:

This value controls the temperature of the ACPI Active Trip Point- the point in which the os will begin throttling the CPU.

NOTE: If the DTS is enabled, only values below 97℃ are valid.

Passive TC1 value:

This value sets the TC1 value for the ACPI passive cooling Formula.

Passive TSP Value:

This item sets the TSP value for the ACPI Passive cooling Formula. It represents in tenths of a second how often the os will read the temperature when Passive Cooling is Enabled.

Critical Trip Point:

This value controls the temperature of the ACPI critical Trip point—the point in which the OS will shut the system off.

NOTES: (1) 100℃ is POP for all the Intel CPUS. (2) If value is >100℃ and DTS is enabled, the Out-of- spec Bit will be used. (3) The value will be set to 127 after ACPI initialization.

Watchdog Timer Select

This item is used to activate the watchdog function. The optional settings are: Enabled; Disabled. When set it as Enabled user can choose configuration figures in sub items.

Watchdog Timer Value

This item is only activated when Watchdog Timer Select is set as Enabled and users can set a value from the range of 0~255

***Note: User needs an additional Watchdog Programming Reference Code to make use of this BIOS function. Detailed procedures please download from our website if necessary.**

3-6 PC Health Status

This section shows the Status of you CPU, Fan, and Warning for overall system status. This is only available if there is Hardware Monitor onboard.

Phoenix – AwardBIOS CMOS Setup Utility

PC Health Status

CPU FAN Configuration	Press Enter	Item Help
SYS FAN1 Configuration	Press Enter	
SYS FAN2 Configuration	Press Enter	
Shutdown Temperature	Disabled	
VCC 3.3	3.34V	Menu Level >
VSB	3.36V	
Voltage Battery	3.36V	
CPU Temp	42	
SYS Temp	47	
CPU Fan Speed	6482RPM	
SYS1 Fan Speed	0RPM	
SYS2 Fan Speed	0RPM	

↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5:Previous Values F6:Optimized Defaults F7:Standard Defaults

CPU FAN Configurations

CPU Full-Speed Temp

This item allows you setting the FAN works in full speed when the temperature over the value which out set. If the temperature below the value but over the Idle Temperature, the FAN will works over 60% of full speed, and the higher temperature will gain higher FAN speed, after over the temperature which this item setting, the FAN works in full speed.

CPU Idle Temp

This item allows you setting the FAN works in 60% of full speed, when the temperature lower than the temperature which you setting.

3-7 Advanced Chipset Features

The Advanced Chipset Features Setup option is used to change the values of the chipset registers. These registers control most of the system options in the computer.

Phoenix – AwardBIOS CMOS Setup Utility

Advanced Chipset Features

System BIOS Cacheable	Enabled	M
Memory Hole At 15M-16M	Disabled	
Vt-d	Disabled	
VGA Setting		Menu Level >
On-chip Frame Buffer Size	32Mb	
DVMT Mode	Enabled	
Total GFX Memory	256MB	
PAVP Mode	PAVP-List	
VGA Boot Device Setting		
Boot Display	VBIOS Default	
Panel Scaling	Auto	
Panel Type	VBIOS Default	
TV1 Standard Type	VBIOS Default	
LVDS Switch	Default	
CPU Spread Support	Disabled	
Spread Mode	Down Spread	

↑↓→← Move Enter: Select +/-/PU/PD: Value F10:Save ESC: Exit F1:General Help
F5:Previous Values F6:Optimized Defaults F7:Standard Defaults

System BIOS Cacheable

Selecting Enabled allows caching of the system BIOS ROM at F0000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result. The settings are: Enabled and Disabled.

Total GFX Memory:

For WinXP, the MAX value is base on system memory size 512MB for 1GB DRAM, 768MB for 1.5GB to 2 GB, 1GB for above 2GB.

Boot Display:
Select the video Device that will be activated during POST.

3-8 Power Management Setup

The Power Management Setup allows you to configure your system to most effectively save energy saving while operating in a manner consistent with your own style of computer use.

Phoenix – AwardBIOS CMOS Setup Utility

Power Management Setup

PCI Express PM Function	Press Enter	Item Help
ACPI Suspend Type	S1(pos)	
Run VGABIOS if S3 Resume	Auto	
Power Management	USER Define	
Video off Method	DPMS	Menu Level >
Video off Suspend	Yes	
Suspend Type	Stop Grant	
MODEN USE IRQ	3	
Suspend Mode	Disabled	
Soft-off by PWR-BTTN	Instant-off	
Wake-up by PCI card	Disabled	
Power on by ring	Eabled	
USB KB Wake up from S3(S4)	Disabled	
Resume by Alarm	Disabled	
Date (of Month) Alarm	0	
Time (hh:mm:ss)Alarm	0:0:0	
HPET Support	Enabled	
HPET Mode	32-bit mde	

↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5:Previous Values F6:Optimized Defaults F7:Standard Defaults

ACPI Function
This item allows you to Enabled/Disabled the Advanced Configuration and Power Management (ACPI). The settings are Enabled and Disabled.

Video Off Method
This determines the manner in which the monitor is blanked.

DPMS (default) Initial display power management signaling.
Blank Screen This option only writes blanks to the video buffer.
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.

MODEM 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 motherboard Wake On Modem connector for this feature to work.

Soft-Off by PWRBTN

Under ACPI (Advanced Configuration and Power management Interface) you can create a software power down. In a software power down, the system can be resumed by Wake up Alarms. This item lets you install a software power down that is controlled by the power Button on your system. If the item is set to Instant-Off, then the power button causes a software power down. If the item is set to Delay 4 Sec, then you have to hold the power button down for four seconds to cause a software power down.

3-9 PnP/PCI Configuration

Phoenix – AwardBIOS CMOS Setup Utility

Pnp/PCI Configuration

Init Display First	PCI Slot	Item Help
Reset Configuration Data	Disabled	
Recourse Configuration By	Auto(ESD)	
IRQ Recourses	Press Enter	Menu Level >
PCI/VGA Palette Snoop	Disabled	
INT pin 1 Assignment	Auto	
INT pin 2 Assignment	Auto	
INT pin 3 Assignment	Auto	
INT pin 4 Assignment	Auto	
INT pin 5 Assignment	Auto	
INT pin 6 Assignment	Auto	
INT pin 7 Assignment	Auto	
INT pin 8 Assignment	Auto	
PCI Express relative items		
Maximum Payload size	128	

↑↓→← Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help
F5:Previous Values F6:Optimized Defaults F7:Standard Defaults