When you installing AGP card, please make sure the following notice is fully understood and practiced. If your AGP card has "AGP 4X notch"(show below), please make sure your AGP card is AGP 4X (1.5V).

Do not use AGP 2X card (3.3V) in this motherboard. It will burn and damage the motherboard due to Intel® 845 chipset can't support AGP 2X(3.3V)..

Example 1: Diamond Vipper V770 golden finger is compatible with 2X/4X mode AGP slot. It can be switched between AGP 2X(3.3V) or 4X(1.5V) mode by adjusting the jumper. The factory default for this card is 2X (3.3V). If you install this card in GA-8IRM series (or any AGP 4X only) motherboards without switching the jumper to 4X mode (1.5V), it will burn the motherboard.

Example 2: ATi Rage 128 Pro (Power Color)& SiS 305 golden finger is compatible with 2X/4X mode AGP slot, but it supports 2X(3.3V) only. If you install this card in GA-8IRM series (or any AGP 4X only) motherboards, it will burn the motherboard.

Note : Although Gigabyte's AG32S graphics card is based on ATi Rage 128 Pro chip, the design of AG32S is compliance with AGP 4X (1.5V) specification. Therefore, AG32S will work fine with Intel 845 / 850 based motherboards.

- **The author assumes no responsibility for any errors or omissions that may appear in this document nor does the author make a commitment to up date the information contained herein.**

- **Third-party brands and names are the property of their respective owners.**

- **Please do not remove any labels on motherboard, this may void the warranty of this motherboard.**

- **Due to rapid change in technology, some of the specifications might be out of date before publication of this booklet.**

Mise en garde : *Ne faites jamais tourner le processeur sans que le dissipatear de chaleur soit fix correctement et fermement. UN DOMMAGE PERMANENT EN RÉSULTERA !*

Achtung: *Der Prozessor darf nur in Betrieb genommen werden, wenn der W rmeableiter ordnungsgem ß und fest angebracht ist. DIES HAT EINEN PERMANENTEN SCHADEN ZUR FOLGE!*

Advertencia: *Nunca haga funcionar el procesador sin el disipador de calor instalado correcta y firmemente. ¡SE PRODUCIRÁ UN DAÑO PERMANENTE!*

Aviso: *Nunca execute o processador sem o dissipador de calor estar adequado e firmemente conectado. O RESULTADO SERÁ UM DANO PERMANENTE!*

警告：　将散热板平固地安装到处理器上之前，不要运行处理器。这将永远损坏处理器!

警告：　将散热器平以地安装到处理器上之前，不要进行处理器，这将永远损坏处理器!

경고:　히트싱크를 제대로 또 단단히 부착시키지 않은 채 프로세서를 구동시키지 마십시오. 영구적 고장이 발생합니다!

警告:　永久的な損傷を防ぐため，ヒートシンクを正しくしっかりと取り付けるまでは，プロセ

Declaration of Conformity

We, Manufacturer/Importer
(full address)

G.B.T. Technology Träding GMbH
Ausschlager Weg 41, 1F, 20537 Hamburg, Germany

declare that the product
(description of the apparatus, system, installation to which it refers)

Mother Board
GA-8IRM/GA-8IRML
is in conformity with
(reference to the specification under which conformity is declared)
in accordance with 89/336 EEC-EMC Directive

☐ **EN 55011**	Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM high frequency equipment	☐ **EN 61000-3-2*** ☒ **EN 60555-2**	Disturbances in supply systems cause by household appliances and similar electrical equipment " Harmonics"
☐ **EN 55013**	Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment	☐ **EN 61000-3-3*** ☒ **EN 60555-3**	Disturbances in supply systems cause by household appliances and similar electrical equipment " Voltage fluctuations"
☐ **EN 55014**	Limits and methods of measurement of radio disturbance characteristics of household electrical appliances, portable tools and similar electrical apparatus	☒ **EN 50081-1**	Generic emission standard Part 1: Residual commercial and light industry
		☒ **EN 50082-1**	Generic immunity standard Part 1: Residual commercial and light industry
☐ **EN 55015**	Limits and methods of measurement of radio disturbance characteristics of fluorescent lamps and luminaries	☐ **EN 55081-2**	Generic emission standard Part 2: Industrial environment
☐ **EN 55020**	Immunity from radio interference of broadcast receivers and associated equipment	☐ **EN 55082-2**	Generic emission standard Part 2: Industrial environment
☒ **EN 55022**	Limits and methods of measurement of radio disturbance characteristics of information technology equipment	☐ **ENV 55104**	Immunity requirements for household appliances tools and similar apparatus
☐ **DIN VDE 0855** ☐ **part 10** ☐ **part 12**	Cabled distribution systems; Equipment for receiving and/or **distribution** from sound and television signals	☐ **EN50091-2**	EMC requirements for uninterruptible power systems (UPS)

☒ **CE marking** (EC conformity marking)

The manufacturer also declares the conformity of above mentioned product with the actual required safety standards in accordance with LVD 73/23 EEC

☐ **EN 60065**	Safety requirements for mains operated electronic and related apparatus for household and similar general use	☐ **EN 60950**	
☐ **EN 60335**	Safety of household and similar electrical appliances	☐ **EN 50091-1**	

Manufacturer/Importer

(Stamp)

Date : Nov. 10, 2001

Signature: Timmy Huang
Name: Timmy Huang

DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2.1077(a)

Responsible Party Name: G.B.T. INC. (U.S.A.)

Address: 17358 Railroad Street
City of Industry, CA 91748

Phone/Fax No: (818) 854-9338/ (818) 854-9339

hereby declares that the product

Product Name: Motherboard

Model Number: GA-8IRM/GA-8IRML

Conforms to the following specifications:

FCC Part 15, Subpart B, Section 15.107(a) and Section 15.109 (a),Class B Digital Device

Supplementary Information:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful and (2) this device must accept any inference received, including that may cause undesired operation.

Representative Person' s Name: ERIC_LU

Signature: Eric_Lu

Date: Nov. 10,2001

GA-8IRM 系列
P4 泰坦 DDR 主機板

中文安裝使用手冊

Pentium®4處理器主機板

Rev. 2.2 First Edition

12MC-8IRM-2201

目錄

版本修改摘要

版本	修改摘要	日期
2.2	GA-8IRM系列主機板中文安裝手冊首版發行	Feb.2001

清點附件

☑ The GA-8IRM系列主機板一片
☑ 硬碟插座排線 x 1 / 軟碟插座排線 x 1
☑ 主機板驅動程式光碟片 (IUCD)
☑ GA-8IRM 系列中文安裝手冊
☑ 後方 I/O 裝置鐵片
☑ 通用串列埠插座排線 x 1

警告標語

主機板由許多精密的積體電路及其他元件所構成，這些積體電路很容易因為遭到靜電影響而損失。所以請在正式安裝前，做好下列準備。

1. **請將電腦的電源關閉，最好拔除電源插頭。**
2. **拿取主機板時請儘量避免觸碰金屬接線部份。**
3. **拿取積體電路元件**(CPU、 RAM)**時，最好能夠戴上有防靜電手環。**
4. **在積體電路未安裝前，需將元件置放在靜電墊或防靜電袋內。**
5. **當您將主機板中的**ATX**電源供應器插座上的插頭拔除時，請確認電源供應器的開關是關閉狀況。**

安裝主機板至機殼中…

大多數電腦機殼的底部會有多個固定孔孔位，可使主機板確實固定並且不會短路。請小心不要讓螺絲接觸到任何PCB**板上的線路或零件，當印刷電路主機板表面線路接近固定孔時，您可使用塑膠墊片來讓螺絲與主機板表面隔離過，避免造成主機板損壞或故障。**

第一章 序言

特色彙總

規格	● 主機板採四層設計 Flex ATX 規格 19.0 公分 x 22.9 公分
主機板	● GA-8IRM 系列主機板包括 GA-8IRM 及 GA-8IRML
中央處理器	● Socket478 支援最新 Intel Micro FC-PGA2 Pentium®4 處理器 ● 支援Intel® Pentium ®4 (Northwood, 0.13um) 處理器 ● Intel Pentium®4 400MHz FSB ● 2nd 快取記憶體取決於 CPU
晶片組	● Chipset 82845 HOST/AGP/Controller ● 82801BA(ICH2)I/O Controller Hub
記憶體	● 2 184-pin DIMM 插槽 ● 支援 PC160/PC2100 DDR DIMM ● 支援 2.5V DDR DIMM ● 支援 64bit ECC type DRAM integrity mode ● 最高容量可擴充至 2GB
I/O 控制器	● W83627HF
擴充槽	● 1 AGP 擴充槽支援 4X (1.5V)裝置 ● 3 PCI 擴充槽支援 33MHz 及 PCI2.2 compliant
內建 IDE	● 2 IDE bus master (UDMA 33/ATA 66/ATA 100) IDE 埠可連接 4 ATAPI 裝置 ● 支援 PIO mode 3,4,5,UDMA33/ATA66/ATA100 IDE 及 ATAPI CD-ROM
內建周邊設備	● 1個軟碟插座支援兩台磁碟機(360K,720K,1.2M,1.44M 及 2.88M bytes) ● 1 組並列埠插座可支援 Normal/EPP/ECP 模式 ● 2 組串列埠插座(COM A & COM B) ● 4 組 USB 埠插座(後端通用串列埠 x 2,前端通用串列埠 x 2) ● 1個紅外線連接端
硬體監控	● CPU/ 電源供應器 / 系統風扇運轉偵測 ● CPU/ 電源供應器 / 系統風扇控制 ● CPU 溫度偵測 ● 系統電壓自動偵測

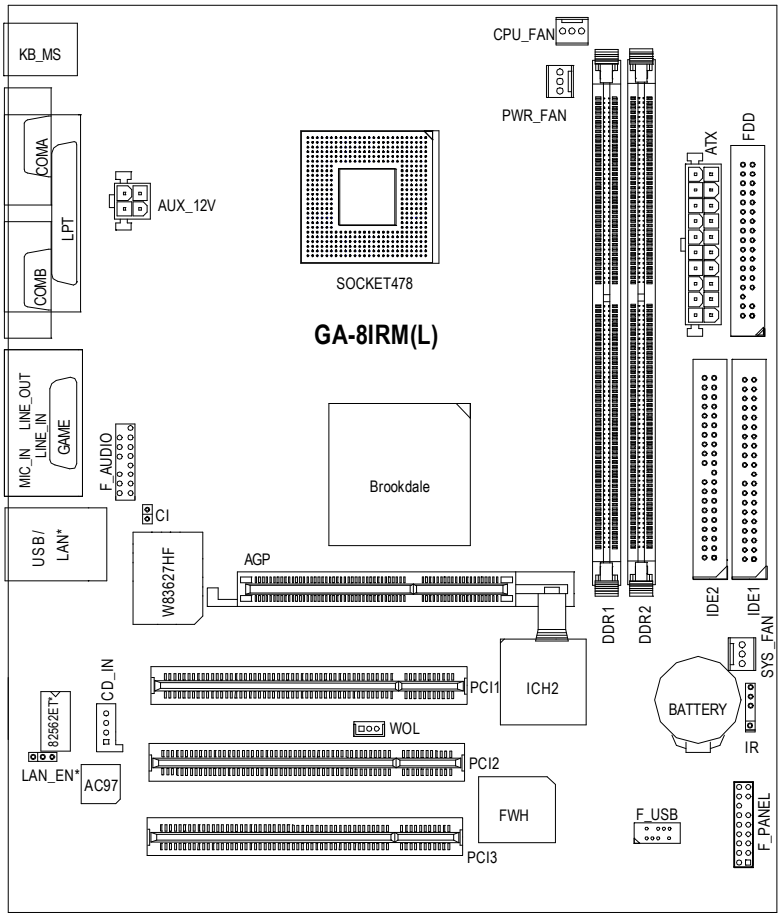
續下頁.....

內建音效晶片	● AC97 CODEC(RealTek ALC201A) ● Line In/Line Out/Mic In/CD In/Game Port
PS/2 **插座**	● PS/2 **鍵盤插座及** PS/2 **滑鼠插座**
內建網路晶片	● **內建**Intel 82562ET **晶片***
BIOS	● **使用經授權** AWARD BIOS,2M bit **快閃記憶體**
附加特色	● PS/2 **鍵盤開機** ● PS/2 **滑鼠開機** ● **外接型數據機開機功能** ● **鍵盤過電流保護** ● **網路喚醒功能** ● AC Recovery ● USB **鍵盤 / 滑鼠** wake up from S3 ● **支援** @BIOS ● **支援** Easy Tune III

請依據您 CPU **的規格來設定** CPU **的頻率,我們不建議您將系統速度設定超過硬體之標準範圍,因為這些規格對於周邊設備而言並不算是符合標準規格。如果您要將系統速度設定超出標準規格 , 請評估您的硬體規格設定, 例如**;CPU,**顯示卡**, **記憶體**,**硬碟來設定**.

*** 只有 GA-8IRML 才有此功能.**

GA-8IRM 系列主機板 Layout 圖

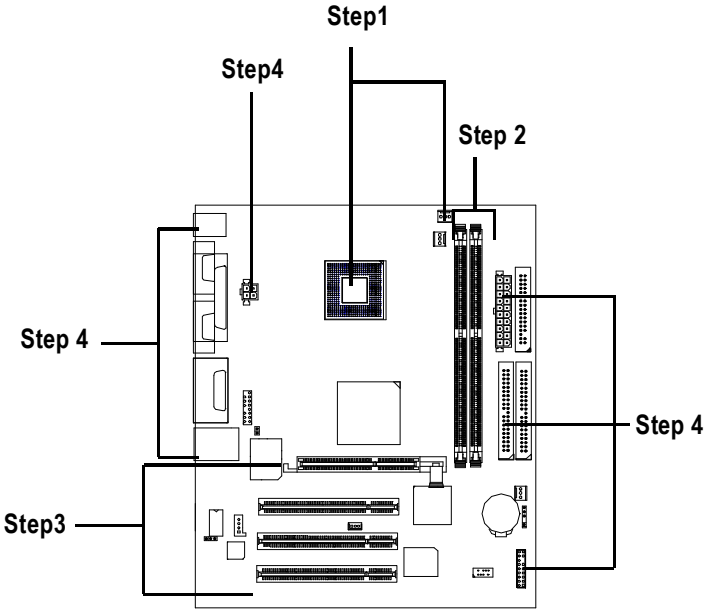


*** 只有 GA-8IRML 才有此功能.**

第二章 硬體安裝步驟

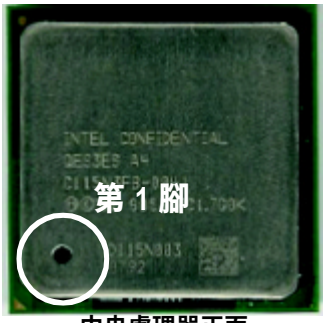
請依據下列方式，完成電腦的安裝：

步驟 1 - **安裝中央處理器** (CPU)
步驟 2 - **安裝記憶體模組**
步驟 3 - **安裝所有介面卡**
步驟 4 - **連接所有訊號線、排線、電源供應線及面板控制線**
步驟 5 - **完成** BIOS **組態設定**
步驟 6 - **安裝軟體驅動程式**

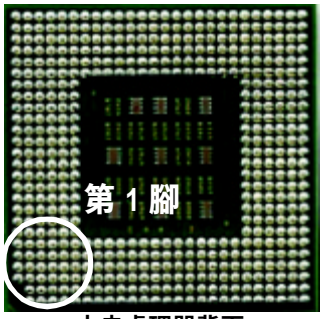


步驟 1:安裝中央處理器(CPU)

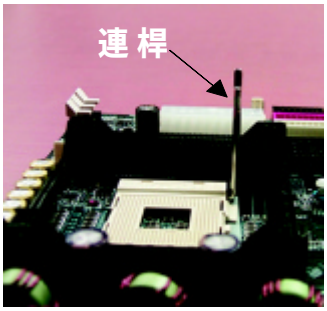
中央處理器之安裝



中央處理器正面



中央處理器背面



1.將處理器插座連桿向上拉起至90度角的位置.

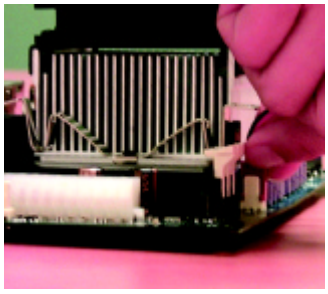
2.將處理器的第一腳(金色三腳記號處)對準插座上的缺腳記號再將處理器插入插座.

3. 處理器插入定位後,將連桿向下按至原位.

- 請確認您使用的中央處理器為本主機板的支援範圍。
- CPU 的第一腳位置,若您插入的方向錯誤,處理器就無法插入,請立刻更改插入方向.

中央處理器之散熱裝置安裝

1. 先將 CPU 散熱風扇一邊的卡榫以平均施力的方式往下壓,直至扣緊為止;以同樣地方式再將另一邊卡榫扣緊.



2. 將CPU散熱風扇的電源線插入主機板上的 " CPU 散熱風扇電源插座 ".

- 使用經 Intel 認證過的散熱風扇。
- CPU 與風扇之間建議黏上散熱膠帶以增強散熱效果。
  (當塗抹在 CPU 上的散熱膏呈現硬化的現象時，可能會產生散熱風扇黏住 CPU 的情況，在此情況下如果您想移除散熱風扇將會有損毀 CPU 的可能。為避免此情況發生，我們建議您可使用散熱膠帶來取代散熱膏，或是小心地移除散熱風扇。)
- 依您實際所使用的散熱風扇,以正確方向將風扇確實扣緊。
- 確認 CPU 散熱風扇電源線接至 CPU FAN 接頭,完成安裝。
  (詳細安裝步驟請參考散熱風扇的使用手冊。)

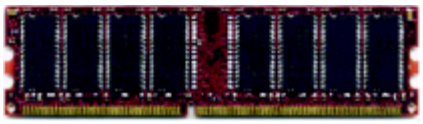
步驟 2:安裝記憶體模組

本主機板有 2 條 184Pin(DIMM)擴充槽,BIOS 會自動偵測記憶體的規格及其大小. 安裝記憶體只需將DIMM插入其插槽內即可,在不同的插槽,記憶體大小可以不同,建議使用相同顆粒的記憶體模組,如:NEC, Toshiba, PQI, Winbond.

使用 Unbuffered DDR DIMM 時的總記憶容量

Devices used on DIMM	1 DIMM x 64 / x 72	2 DIMMs x 64 / x 72
64 Mbit (2Mx8x4 banks)	128 MBytes	256 MBytes
64 Mbit (1Mx16x4 banks)	32 MBytes	64 MBytes
128 Mbit(4Mx8x4 banks)	256 MBytes	512 MBytes
128 Mbit(2Mx16x4 banks)	64 MBytes	128 MBytes
256 Mbit(8Mx8x4 banks)	512 MBytes	1 GBytes
256 Mbit(4Mx16x4 banks)	128 MBytes	256 MBytes
512 Mbit(16Mx8x4 banks)	1 GBytes	2 GBytes
512 Mbit(8Mx16x4 banks)	256 MBytes	512 MBytes

備註: Intel 845 **晶片組不支援雙顆粒** x16 DDR **記憶體模組**.



DDR

1. **記憶體模組有一個凹痕,所以只能以一個方向插入**.
2. **扳開記憶體模組插槽卡榫,以平均施力的方式,將記憶體模組下壓推入插座.記憶體模組插入定位後,將卡榫向內按至卡住**.
3. **將卡楯向內推，確實卡住記憶體模組** DIMM。**一旦固定位置，兩旁的卡楯便自動卡住記憶體模組予以固定。試著輕輕搖動記憶體模組，若不搖晃則裝置成功**.

- **記憶體模組設計有防呆標示,若您插入的方向錯誤,記憶體模組就無法插入,請立刻更改插入方向**
- **當 STR/DIMM 燈指示燈在亮的狀態時,請勿插拔 DIMM.**

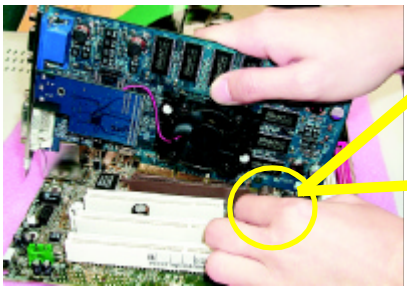
DDR 功能介紹

DDR(Double Data Rate)是PC產業在SDRAM架構上的一項重要演進，利用雙倍的記憶體頻寬可解決系統資料的瓶頸問題。建立在SDRAM的基礎架構設計之上，DDR是一項高效能及低成本兼具的創新技術，能使記憶體廠商、OEM系統廠商在熟悉的標準上建構新一代的電腦系統產品。

因為具有優良可行性、價格以及整體市場的支援性，DDR SDRAM將提供優良的解決方式以及將現有的 SDRAM 轉換到 DDR SDRAM 的最佳路徑。
DDR 可雙倍讀與寫的資料傳輸速率，利用最高可達 2.1GB/s 的傳輸速度， DDR 能使系統廠商建立一個高效能及低滯留時間的DRAM架構，適合在伺服器、工作站、高階PC以及進階整合性電腦系統使用。相對於目前SDRAM的3.3 volts 高核心電壓，DDR 的 2.5 volts 超低核心電壓將使得 DDR 為小型規格的桌上電腦以及筆記型電腦的最佳技術解決方案。

步驟 3: 安裝介面卡

1. 在安裝介面卡之前請先詳細閱讀介面卡之使用手冊並將您電腦的電源關掉。
2. 將您電腦外殼拆除，並且讓自己保持接地。(為了使人體不帶電，以防止靜電傷害電腦設備)。
3. 鬆開螺絲，移開介面卡安裝擴充槽旁的金屬擋片。
4. 將介面卡小心且確實的插入在擴充槽中。
5. 請確定所有介面卡皆確實固定插在該擴充槽，並將螺絲鎖回。
6. 重新將電腦機殼蓋上。
7. 接上電源線，若有必要請至BIOS程式中設定介面卡之相關設定。
8. 安裝相關驅動程式。

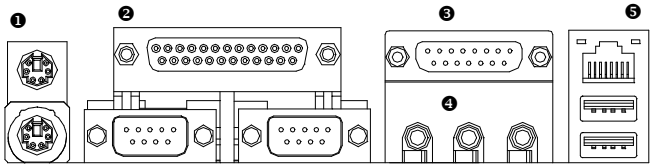


AGP 卡

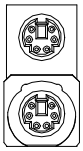
當您要安裝 / 移除 AGP 卡時,請將白色拉桿向外拉. 再將 AGP 卡緩緩插入 AGP 擴充槽中. 放開拉桿 確實卡住 AGP 卡

步驟 4: 連接所有訊號線、排線、電源供應線及面板控制線

後方 I/O 裝置鐵片介紹



❶ PS/2 鍵盤及 PS/2 滑鼠插座



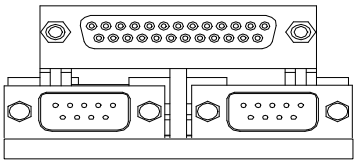
PS/2 滑鼠插座
(6 pin Female)

PS/2 鍵盤插座
(6 pin Female)

➢ 本主機板提供標準 PS/2 鍵盤介面及 PS/2 滑鼠介面插座。

❷ 串列埠 A/ 串列埠 B/ 印表機並列埠插座

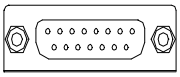
並列埠插座
(25 pin Female)



串列埠 A　　串列埠 B
串列埠 (9 pin Male)

➢ 本主機板支援兩組標準的串列埠傳輸協定之週邊裝置，及一組標準的並列傳輸協定之週邊裝置，您可以依據您的需求連接您需要的裝置，如並列埠有印表機，串列埠有滑鼠、數據機等。

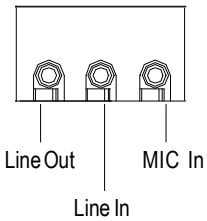
❸ 遊戲搖桿控制埠



遊戲搖桿控制埠
(15 pin Female)

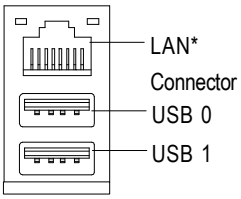
➢ 本主機板支援標準的音效輸入接腳及遊戲搖桿控制埠，您在設定完成內建音效的驅動程式後，即可將喇叭輸出接腳接在音源輸出端。

❹ 音源插座



➢ 麥克風接腳可接在麥克風輸入端，至於音源輸入端可以接上如：光碟機，隨身聽及其他音源輸入接腳。

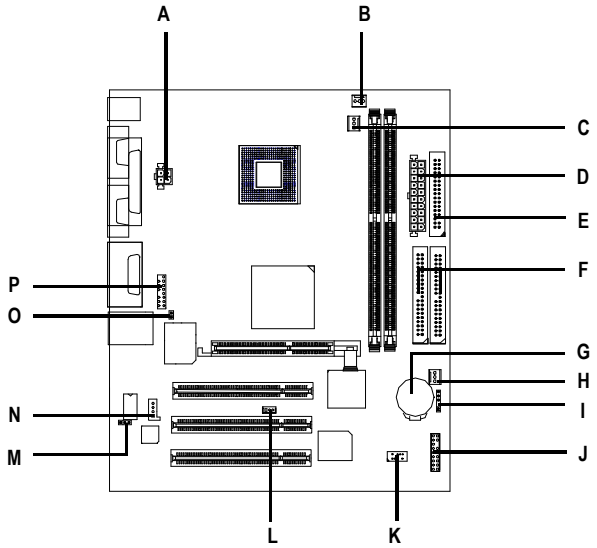
❺ 通用序列埠，網路插座



➢ 當你要使用通用串列埠連接埠時，必須先確認您要使用的週邊裝置為標準的 USB 介面，如：USB 鍵盤，滑鼠， USB 掃瞄器， USB ZIP ， USB 喇叭等….而且您也必須確認您的作業系統是否有支援此功能，或是需要另外再掛其他的驅動程式，如此才能正常工作，詳情請參考 USB 週邊裝置的使用手冊。

*** 只有 GA-8IRML 才有此功能.**

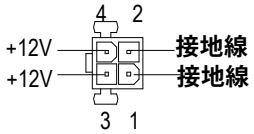
插座及跳線介紹



A) AUX_12V	I) IR
B) CPU_FAN	J) F_PANEL
C) PWR_FAN	K) FP_USB
D) ATX	L) WOL
E) FDD	M) LAN_EN*
F) IDE1/IDE2	N) CD_IN
G) BATTERY	O) CI
H) SYS_FAN	P) F_AUDIO

*** 只有 GA-8IRML 才有此功能.**

A) AUX_12 (+12V 電源插座)

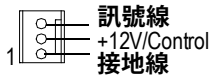


➢ 此接頭僅用在某些重負載之 AGPPRO 卡(其 +12V 消耗電流大於12安培)

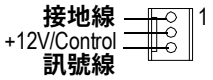
B) CPU_FAN
(CPU 散熱風扇電源插座)

➢ 請特別注意，當我們安裝處理器時要特別注意將散熱風扇安裝妥當，不然您的處理器將處於不正常的工作環境，甚至會因為溫度過高，而燒毀處理器。此CPU散熱風扇電源插座，提供最大電流及功率分別為600毫培。

C) PWR_FAN
(電源散熱風扇電插座)

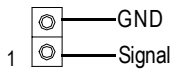


H) SYS_FAN
(系統散熱風扇電源插座)

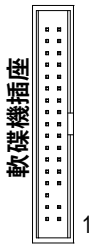


O) CI (電腦機殼被開啟偵測)

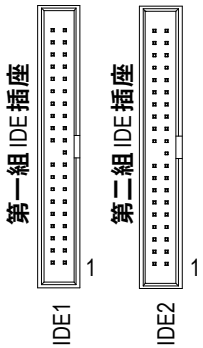
➢ 本主機板提供電腦機殼被開啟偵測功能，當您要使用此功能需搭配外接式偵測裝置.



E) FDD (軟碟機插座)

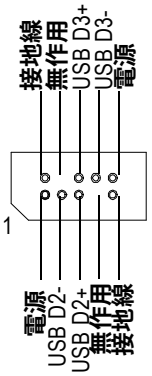


F) IDE1/ IDE2
(第一組及第二組 IDE 插座)



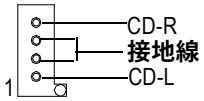
➢ **請特別注意：**
請將您的第一顆硬碟連接第一組 IDE 插座. 光碟機接至第二組 IDE 插座.

K) F_USB (前端通用串列埠插座)

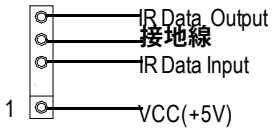


➢ **請特別注意，前端USB接腳是有方向性的，所以安裝USB裝置時，要特別注意極性，而且前端USB連接排線為選擇性的功能套件，可以聯絡相關代理商購買。**

N) CD_IN1 (光碟機音源插座)

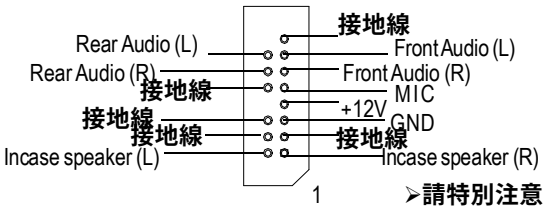


I) IR 紅外線插座



➢請特別注意，紅外線接腳是有方向性的，所以在安裝紅外線裝置時，要特別注意極性，而且紅外線裝置為選擇性的功能套件，可以聯絡相關代理商購買。

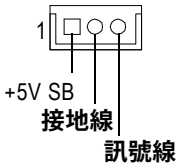
P) F_AUDIO(第二組音源插座)



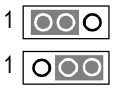
➢請特別注意，當您購買電腦機殼時，可以選購音效接腳是設計在電腦機殼的前面面板上，此時就可以使用第二組音源接腳，如果有任何問題可能就近向經銷商詢 問相關問題。

注意:若您要使用第二組音源接腳，請移除Pin11-12，Pin13-14的Jumper。

L) WOR(網路卡喚醒功能跳線)

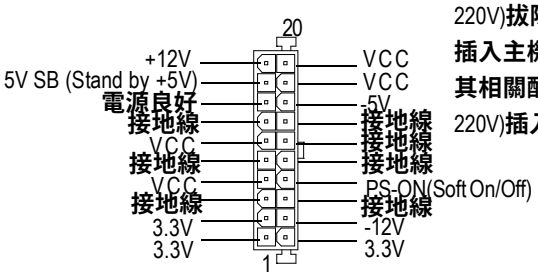


M) LEN_EN(內建網路卡功能)*



➢ 請特別注意，本主機板可支援內建網路卡功能，您購買的主機板是有內建的網路卡功能時，您可透過此 JUMP 選擇將內建網路卡開啟或關閉，當然如果原來就沒有內建網路，此 JUMPER 就無效。

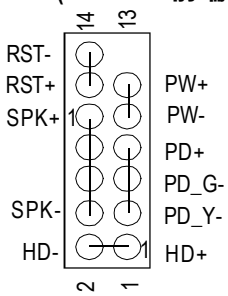
D) ATX (ATX 電源插座)



➢ 請特別注意，先將 AC 交流電(110/220V)拔除，再將ATX電源插頭緊密的插入主機板的ATX電源插座，並接好其相關配備才可以將AC交流電(110/220V)插入交流電源插座

*** 只有 GA-8IRML 才有此功能.**

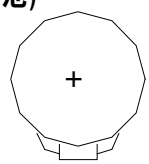
J) F_PANEL (2x7 Pins 前端控制面板跳線)



HD (IDE Hard Disk Active LED) **硬碟動作指示燈**	Pin 1: LED anode(+)**硬碟指示燈正極** Pin 2: LED cathode(-)**硬碟指示燈負極** **請注意正負極性**
SPK (Speaker Connector) **喇叭接腳**	Pin 1: VCC(+) +5v **電源接腳** Pin 2- Pin 3: NC **空腳** Pin 4: Data(-) **訊號接腳**
RST (Reset Switch)) **系統重置開關**	Open: Normal Operation **一般運作** Close: Reset Hardware System **強迫系統重置開機** **無正負極性正反皆可使用**
PD+/PD_G/PD_Y(Power LED)	Pin 1: LED anode(+) **電源指示燈正極** Pin 2: LED cathode(-)**電源指示燈負極** Pin 3: LED cathode(-)**電源指示燈負極**
PW (Soft Power Connector) **按鍵開關機**	Open: Normal Operation **開路:一般運作** Close: Power On/Off **短路:開機 / 關機** **無正負極性正反皆可使用**

➢ **請特別注意，當您購買電腦機殼時，電腦機殼的控制面板有電源指示燈，喇叭，系統重置開關，電源開關等，你可以依據上列表格的定義加上連接。**

G) BAT(電池)



警告

- **如果電池有任何不正確的移除動作，將會產生危險。**
- **如果需要更換電池時請更換相同廠牌、型號的電池。**
- **有關電池規格及注意事項請參考電池廠商之介紹。**

Chapter 3 BIOS Setup

BIOS Setup is an overview of the BIOS Setup Program. The program that allows users to modify the basic system configuration. This type of information is stored in battery-backed CMOS RAM so that it retains the Setup information when the power is turned off.

ENTERING SETUP

Power ON the computer and press <Del> immediately will allow you to enter Setup.

CONTROL KEYS

<↑>	Move to previous item
<↓>	Move to next item
<←>	Move to the item in the left hand
<→>	Move to the item in the right hand
<Esc>	Main Menu - Quit and not save changes into CMOS Status Page Setup Menu and Option Page Setup Menu - Exit current page and return to Main Menu
<+/PgUp>	Increase the numeric value or make changes
<-/PgDn>	Decrease the numeric value or make changes
<F1>	General help, only for Status Page Setup Menu and Option Page Setup Menu
<F2>	Reserved
<F3>	Reserved
<F4>	Reserved
<F5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<F6>	Load the default CMOS value from BIOS default table, only for Option Page Setup Menu
<F7>	Load the Setup Defaults
<F8>	Reserved
<F9>	Reserved
<F10>	Save all the CMOS changes, only for Main Menu

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>.

Q-Flash Utility

After power on the computer, pressing <Del> immediately during POST (Power On Self Test) it will allow you to enter Award BIOS CMOS SETUP, then press <F8> to enter Q-Flash utility.

The Main Menu (For example: BIOS Ver. :F3b)

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

CMOS Setup Utility-Copyright (C) 1984-2001 Award Software

▶Standard CMOS Features	▶Frequency/Voltage Control
▶Advanced BIOS Features	Load Fail-Safe Defaults
▶Advanced Chipset Features	Load Optimized Defaults
▶Integrated Peripherals	Set Supervisor Password
▶Power Management Setup	Set User Password
▶PnP/PCI Configurations	Save & Exit Setup
▶PC Health Status	Exit Without Saving
ESC:Quit	↑↓→←:Select Item
F8: Q-Flash	F10:Save & Exit Setup
Time, Date, Hard Disk Type...	

Figure 1: Main Menu

- **Standard CMOS Features**

  This setup page includes all the items in standard compatible BIOS.

- **Advanced BIOS Features**

  This setup page includes all the items of Award special enhanced features.
- **Advanced Chipset Features**

  This setup page includes all the items of chipset special features.
- **Integrated Peripherals**

  This setup page includes all onboard peripherals.
- **Power Management Setup**

  This setup page includes all the items of Green function features.
- **PnP/PCI Configurations**

  This setup page includes all the configurations of PCI & PnP ISA resources.
- **PC Health Status**

  This setup page is the System auto detect Temperature, voltage, fan, speed.
- **Frequency/Voltage Control**

  This setup page is control CPU' s clock and frequency ratio.
- **Load Fail-Safe Defaults**

  Fail-Safe Defaults indicates the value of the system parameters which the system would be in safe configuration.
- **Load Optimized Defaults**

  Optimized Defaults indicates the value of the system parameters which the system would be in best performance configuration.
- **Set Supervisor password**

  Change, set, or disable password. It allows you to limit access to the system and Setup, or just to Setup.
- **Set User password**

  Change, set, or disable password. It allows you to limit access to the system.
- **Save & Exit Setup**

  Save CMOS value settings to CMOS and exit setup.
- **Exit Without Saving**

  Abandon all CMOS value changes and exit setup.

Standard CMOS Features

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Standard CMOS Features

Date (mm:dd:yy)	Sun, Jan 7 2001	Item Help
Time (hh:mm:ss)	22:31:24	Menu Level
▶IDE Primary Master	Press Enter None	
▶IDE Primary Slave	Press Enter None	
▶IDE Secondary Master	Press Enter None	
▶IDE Secondary Slave	Press Enter None	
Drive A	[1.44M, 3.5"]	
Drive B	[None]	
Floppy 3 Mode Support	[Disabled]	
Halt On	[All, But Keyboard]	
Base Memory	640K	
Extended Memory	130048K	
Total Memory	131072K	
↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Figure 2: Standard CMOS Features

☞Date

The date format is <week>, <month>, <day>, <year>.

- ▸▸Week — The week, from Sun to Sat, determined by the BIOS and is display only
- ▸▸Month — The month, Jan. Through Dec.
- ▸▸Day — The day, from 1 to 31 (or the maximum allowed in the month)
- ▸▸Year — The year, from 1994 through 2079

☞Time

The times format in <hour> <minute> <second>. The time is calculated base on the 24-hour military-time clock. For example, 1 p.m. is 13:00:00.

☞ IDE Primary Master, Slave / Secondary Master, Slave

The category identifies the types of hard disk from drive C to F that has been installed in the computer. There are two types: auto type, and manual type. Manual type is user-definable; Auto type which will automatically detect HDD type.

Note that the specifications of your drive must match with the drive table. The hard disk will not work properly if you enter improper information for this category.

If you select User Type, related information will be asked to enter to the following items. Enter the information directly from the keyboard and press <Enter>. Such information should be provided in the documentation form your hard disk vendor or the system manufacturer.

▸▸CYLS.	Number of cylinders
▸▸HEADS	number of heads
▸▸PRECOMP	write precomp
▸▸LANDZONE	Landing zone
▸▸SECTORS	number of sectors

If a hard disk has not been installed select NONE and press <Enter>.

☞ Drive A / Drive B

The category identifies the types of floppy disk drive A or drive B that has been installed in the computer.

▸▸None	No floppy drive installed
▸▸360K, 5.25 in.	5.25 inch PC-type standard drive; 360K byte capacity.
▸▸1.2M, 5.25 in.	5.25 inch AT-type high-density drive; 1.2M byte capacity (3.5 inch when 3 Mode is Enabled).
▸▸720K, 3.5 in.	3.5 inch double-sided drive; 720K byte capacity
▸▸1.44M, 3.5 in.	3.5 inch double-sided drive; 1.44M byte capacity.
▸▸2.88M, 3.5 in.	3.5 inch double-sided drive; 2.88M byte capacity.

☞ Floppy 3 Mode Support (for Japan Area)

▸▸Disabled	Normal Floppy Drive. (Default value)
▸▸Drive A	Drive A is 3 mode Floppy Drive.
▸▸Drive B	Drive B is 3 mode Floppy Drive.
▸▸Both	Drive A & B are 3 mode Floppy Drives.

☞ Halt on

The category determines whether the computer will stop if an error is detected during power up.

▸▸NO Errors	The system boot will not stop for any error that may be detected and you will be prompted.
▸▸All Errors	Whenever the BIOS detects a non-fatal error the system will be stopped.
▸▸All, But Keyboar	The system boot will not stop for a keyboard error; it will stop for all other errors. (Default value)
▸▸All, But Diskette	The system boot will not stop for a disk error; it will stop for all other errors.
▸▸All, But Disk/Key	The system boot will not stop for a keyboard or disk error; it will stop for all other errors.

Memory

The category is display-only which is determined by POST (Power On Self Test) of the BIOS.

Base Memory

The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system.

The value of the base memory is typically 512 K for systems with 512 K memory installed on the motherboard, or 640 K for systems with 640 K or more memory installed on the motherboard.

Extended Memory

The BIOS determines how much extended memory is present during the POST. This is the amount of memory located above 1 MB in the CPU' s memory address map.

Advanced BIOS Features

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Advanced BIOS Features

BIOS Flash Protection	[Auto]	
First Boot Device	[Floppy]	Item Help
Second Boot Device	[HDD-0]	Menu Level
Third Boot Device	[CDROM]	
Boot Up Floppy Seek	[Disabled]	
Boot Up Num-Lock	[On]	
Password Check	[Setup]	
✡Interrupt Mode	[APIC]	
✡MPS Version Control For OS	[1.4]	
HDD S.M.A.R.T. Capability	[Disabled]	

↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help

F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults

Figure 3: Advanced BIOS Features

☞ BIOS Flash Protection

This field lets you determine the states that flash BIOS

- ▸▸Enabled — During POST, DMI/ESCD would not be updated. But flash tools can update BIOS always
- ▸▸Auto — BIOS enables flash write access automatically when updating BIOS data/ DMI/ESCD. (Default Value)

☞ First / Second / Third Boot device

- ▸▸Floppy — Select your boot device priority by Floppy.
- ▸▸LS120 — Select your boot device priority by LS120.

- ▸▸HDD-0~3 Select your boot device priority by HDD-0~3.
- ▸▸SCSI Select your boot device priority by SCSI.
- ▸▸CDROM Select your boot device priority by CDROM.
- ▸▸LAN Select your boot device priority by LAN.
- ▸▸USB-CDROM Select your boot device priority by USB-CDROM.
- ▸▸USB-ZIP Select your boot device priority by USB-ZIP.
- ▸▸USB-FDD Select your boot device priority by USB-FDD.
- ▸▸USB-HDD Select your boot device priority by USB-HDD.
- ▸▸ZIP Select your boot device priority by ZIP.
- ▸▸Disabled Disabled this function.

☞ Boot Up Floppy Seek

During POST, BIOS will determine the floppy disk drive installed is 40 or 80 tracks. 360 K type is 40 tracks 720 K, 1.2 M and 1.44 M are all 80 tracks.

- ▸▸Enabled BIOS searches for floppy disk drive to determine it is 40 or 80 tracks. Note that BIOS can not tell from 720 K, 1.2 M or 1.44 M drive type as they are all 80tracks.
- ▸▸Disabled BIOS will not search for the type of floppy disk drive by track number. Note that there will not be any warning message if the drive installed is 360 K. (Default value)

☞ Boot Up NumLock

- ▸▸On Keypad is number keys. (Default value)
- ▸▸Off Keypad is arrow keys.

☞ Password Check

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

- ▸▸System The user must enter correct password in order to access the system and/or BIOS setup.
- ▸▸Setup The user must enter correct password in order to access BIOS setup utility. (Default value)

☞ Interrupt Mode

- ▸▸APIC Through IOAPIC generate more IRQ for system use.(Default value)
- ▸▸PIC Use AT stantard IRQ controlles to generate IRQ.

When you already have IOAPIC enable system and want to upgrade the system please note, since running an IOAPIC enabled OS (like Windows NT,Windows 2000, Windows XP...) system with none IOAPIC HW support will cause the system to hang. Following are some situations users might run into:

1.An IOAPIC enabled OS and change the BIOS setting from IOAPIC to PIC, this will cause your system to hang.

☞ MPS Version Control For OS

(Support Multi Processor Specification revision 1.4)

Note: Some old MPS OS support 1.1 version only

- ▸▸1.4 Support MPS Version 1.4 . (Default Value)
- ▸▸1.1 Support MPS Version 1.1.

☞ HDD S.M.A.R.T. Capability

- ▸▸Enabled Enabled HDD S.M.A.R.T. Capability.
- ▸▸Disabled Disabled HDD S.M.A.R.T. Capability. (Default value)

Advanced Chipset Features

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Advanced Chipset Features

Configure DRAM Timing	[SPD]	Item Help
※CAS Latency Time	2.5	Menu Level
※Active to Precharge Delay	7	
※DRAM RAS# to CAS# Delay	3	
※DRAM RAS# Precharge	3	
※Refresh Mode Select	15.6usec	
DRAM Data IntegtityMode	Non-ECC	
DRAM Read Thermal Mgmt	[Disable]	
Delay Transaction	[Enable]	
AGP Aperture Size(MB)	[64]	
Delay Prior to Thermal	[16Min]	

↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help

F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults

Figure 4: Advanced Chipset Features

☞ Configure DRAM Timing

Warning: Wrong DRAM Timing may make system can' t boot .Clear CMOS to overcome wrong Timing issue)

- ▸▸SPD Set Configure DRAM Timing Control by SPD. (Default value)
- ▸▸Manual Set Configure DRAM Timing Control by Manual.

☞ CAS latency Time

- ▸▸2.5 Set CAS latency Time is 2.5. (Default Value)
- ▸▸2 Set CAS latency Time is 2.
- ▸▸1.5 Set CAS latency Time is 1.5.

☞ Active to Precharge Delay

- ▸▸5 Set active to Precharge delay timing is 5 clk.
- ▸▸6 Set active to Precharge delay timing is 6 clk.

- 7 Set active to Precharge delay timing is 7 clk.(Default value)

☞ DRAM RAS# to CAS# delay

- 3 Set DDR RAM RAS# to CAS# delay 3 SCLKs. (Default value)
- 2 Set DDR RAM RAS# to CAS# delay 2 SCLKs.

☞ DRAM RAS# Precharge

- 3 Set DDR RAM RAS# Precharge Time to 3. (Default value)
- 2 Set DDR RAM RAS# Precharge Time to 2.

☞ Refresh Mode Select

- 7.8 usec Set active to Refresh mode timing is 7.8 usec.
- 15.6 usec Set active to Refresh mode timing is 15.6 usec.(Default)
- 64 usec Set active to Refresh mode timing is 64 usec.

☞ DRAM Data Integrity Mode

- ECC ³]©wDRAM Data Integrity Mode by ECC.
- Non-ECC ³]©wDRAM Data Integrity Mode by Non-ECC. (¹ w³]- È)

☞ DRAM Data Integrity Mode

- ECC Set DRAM Data Integrity Mode by ECC.
- Non-ECC Set DRAM Data Integrity Mode by Non-ECC. (Default value)

☞ DRAM Read Thermal Mgmt

- Disabled Disabled this function.(Default)
- Enabled Enabled can reduce DRAM heat issue.

Note:DRAM heat thermal mangement is always enabled in write cycle.

☞ Delay Transaction

- ▸▸Disabled Normal operation.
- ▸▸Enabled For slow speed ISA device in system. (Default value)

☞ AGP Graphics Aperture Size

(Driver use selected size of system memory for 3D texturing to increase video performance)

- ▸▸4 AGP Graphics Aperture Size is 4MB.
- ▸▸8 AGP Graphics Aperture Size is 8MB.
- ▸▸16 AGP Graphics Aperture Size is 16MB
- ▸▸32 AGP Graphics Aperture Size is 32MB.
- ▸▸64 AGP Graphics Aperture Size is 64MB.(Default Value)
- ▸▸128 AGP Graphics Aperture Size is 128MB.
- ▸▸256 AGP Graphics Aperture Size is 256MB.

☞ Delay Prior to Thermal

- ▸▸4Min Set active CPU Thermal function after booting 4 Min.
- ▸▸8Min Set active CPU Thermal function after booting 8 Min.
- ▸▸16Min Set active CPU Thermal function after booting 16 Min. (Default Value)
- ▸▸32Min Set active CPU Thermal function after booting 32 Min.

Integrated Peripherals

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Integrated Peripherals

		Item Help
On-Chip Primary PCI IDE	[Enabled]	
On-Chip Secondary PCI IDE	[Enabled]	
IDE Primary Master PIO	[Auto]	Menu Level
IDE Primary Slave PIO	[Auto]	
IDE Secondary Master PIO	[Auto]	
IDE Secondary Slave PIO	[Auto]	
IDE Primary Master UDMA	[Auto]	
IDE Primary Slave UDMA	[Auto]	
IDE Secondary Master UDMA	[Auto]	
IDE Secondary Slave UDMA	[Auto]	
IDE1 Conductor Cable	[Auto]	
IDE2 Conductor Cable	[Auto]	
USB Controller	[Enabled]	
USB Keyboard Support	[Disabled]	
USB Mouse Support	[Disabled]	
Init Display First	[AGP]	
AC97 Audio	[Auto]	
Mouse Power On	[Disabled]	
Keyboard Power On	[Disabled]	
※KB Power ON Password	Enter	
Onboard FDC Controller	[Enabled]	
Onboard Serial Port 1	[3F8/IRQ4]	
Onboard Serial Port 2	[2F8/IRQ3]	
UART Mode Select	[Normal]	
※RxD,TxD Active	Hi,Lo	
※IR Transmission Delay	Enabled	
※UR2 Duplex Mode	Half	
※Use IR Pins	IR-Rx2Tx2	

Onboard Parallel Port	[378/IRQ7]	
Parallel Port Mode	[SPP]	
※EPP Mode Select	EPP1.7	
※ECP Mode Use DMA	3	
AC BACK Function	[Soft-Off]	
Game Port Address	[201]	
Mdi Port Address	[330]	
Midi Port IRQ	[10]	
↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Figure 5: Integrated Peripherals

☞ On-Chip Primary PCI IDE

- ▸▸Enabled — Enable onboard 1st channel IDE port. (Default value)
- ▸▸Disabled — Disable onboard 1st channel IDE port.

☞ On-Chip Secondary PCI IDE

- ▸▸Enabled — Enable onboard 2nd channel IDE port. (Default value)
- ▸▸Disabled — Disable onboard 2nd channel IDE port.

☞ IDE Primary Master PIO (for onboard IDE 1st channel)

- ▸▸Auto — BIOS will automatically detect the IDE HDD Accessing mode. (Default value)
- ▸▸Mode0~4 — Manually set the IDE Accessing mode.

☞ IDE Primary Slave PIO (for onboard IDE 1st channel)

- ▸▸Auto — BIOS will automatically detect the IDE HDD Accessing mode. (Default value)
- ▸▸Mode0~4 — Manually set the IDE Accessing mode.

☞ IDE Secondary Master PIO (for onboard IDE 2nd channel)

- ▸▸Auto — BIOS will automatically detect the IDE HDD Accessing mode. (Default value)
- ▸▸Mode0~4 — Manually set the IDE Accessing mode.

☞ IDE Secondary Slave PIO (for onboard IDE 2nd channel)

- ▸▸Auto — BIOS will automatically detect the IDE HDD Accessing mode. (Default value)
- ▸▸Mode0~4 — Manually set the IDE Accessing mode.

☞ IDE Primary Master UDMA

- ▸▸Auto — BIOS will automatically detect the IDE HDD Accessing mode. (Default value)
- ▸▸Disabled — Disable UDMA function.

☞ IDE Primary Slave UDMA

- ▸▸Auto — BIOS will automatically detect the IDE HDD Accessing mode. (Default value)
- ▸▸Disabled — Disable UDMA function.

☞ IDE Secondary Master UDMA

- ▸▸Auto — BIOS will automatically detect the IDE HDD Accessing mode. (Default value)
- ▸▸Disabled — Disable UDMA function.

☞ IDE Secondary Slave UDMA

- ▸▸Auto — BIOS will automatically detect the IDE HDD Accessing mode. (Default value)
- ▸▸Disabled — Disable UDMA function.

☞ IDE1 Conductor Cable

- ▸▸Auto — Will be automatically detected by BIOS (Default Value)
- ▸▸ATA66/100 — Set IDE1 Conductor Cable to ATA66/100 (Please make sure your IDE device and cable is compatible with ATA66/100)
- ▸▸ATA33 — Set IDE1 Conductor Cable to ATA33 (Please make sure your IDE device and cable is compatible with ATA33)

☞ IDE2 Conductor Cable

- ▸▸Auto — Will be automatically detected by BIOS (Default Value)
- ▸▸ATA66/100 — Set IDE2 Conductor Cable to ATA66/100 (Please make sure your IDE device and cable is compatible with ATA66/100)
- ▸▸ATA33 — Set IDE2 Conductor Cable to ATA33 (Please make sure your IDE device and cable is compatible with ATA33).

☞ USB Controller

- ▸▸Enabled — Enabled USB Controller. (Default value)
- ▸▸Disabled — Disabled USB Controller.

☞ USB Keyboard Support

- ▸▸Enabled — Enabled USB Keyboard Support.
- ▸▸Disabled — Disabled USB Keyboard Support. (Default value)

☞ USB Mouse Support

- ▸▸Enabled — Enabled USB Mouse Support.
- ▸▸Disabled — Disabled USB Mouse Support. (Default value)

☞ Init Display First

- ▸▸PCI — Set Init Display First to PCI Slot.
- ▸▸AGP — Set Init Display First to AGP. (Default value)

☞AC97 Audio

▸▸Auto	BIOS will automatically detect onboard AC97 Audio or Creative CT5880 audio. (Default value)
▸▸Disabled	Disabled AC97 Audio.

☞Mouse Power On

▸▸Disabled	Disabled this function. (Default value)
▸▸Double Right	Set mouse power on by double click mouse right bottom.
▸▸Double Left	Set mouse power on by double click mouse left bottom.

☞ Keyboard Power On

▸▸Password	Enter from 1 to 5 characters to set the Keyboard Power On Password.
▸▸Disabled	Disabled this function. (Default value)
▸▸Keyboard 98	If your keyboard have " POWER Key" button, you can press the key to power on your system.
▸▸Any Key	Set Keyboard power on by any key

☞KB Power ON Password

▸▸Enter	Input password (from 1 to 5 characters) and press Enter to set the Key board Power On Password..

☞Onboard FDC Controller

▸▸Enabled	Enable onboard FDC port. (Default value)
▸▸Disabled	Disable onboard FDC port.

☞Onboard Serial Port 1

▸▸Auto	BIOS will automatically setup the port 1 address.
▸▸3F8/IRQ4	Enable onboard Serial port 1 and address is 3F8. (Default value)
▸▸2F8/IRQ3	Enable onboard Serial port 1 and address is 2F8.
▸▸3E8/IRQ4	Enable onboard Serial port 1 and address is 3E8.
▸▸2E8/IRQ3	Enable onboard Serial port 1 and address is 2E8.

- ▸▸Disabled Disable onboard Serial port 1.

☞Onboard Serial Port 2

- ▸▸Auto BIOS will automatically setup the port 2 address.
- ▸▸3F8/IRQ4 Enable onboard Serial port 2 and address is 3F8.
- ▸▸2F8/IRQ3 Enable onboard Serial port 2 and address is 2F8. (Default Value)
- ▸▸3E8/IRQ4 Enable onboard Serial port 2 and address is 3E8.
- ▸▸2E8/IRQ3 Enable onboard Serial port 2 and address is 2E8.
- ▸▸Disabled Disable onboard Serial port 2.

☞UART Mode Select

(This item allows you to determine which Infra Red(IR) function of Onboard I/O chip)

- ▸▸ASKIR Set onboard I/O chip UART to ASKIR Mode.
- ▸▸IrDA Set onboard I/O chip UART to IrDA Mode.
- ▸▸Normal Set onboard I/O chip UART to Normal Mode. (Default Value)

☞RxD, TxD Active

- ▸▸Hi, Hi Set RxD,TxD Active to Hi, Hi.
- ▸▸Hi, Lo Set RxD,TxD Active to Hi, Lo. (Default Value)
- ▸▸Lo, Hi Set RxD,TxD Active to Lo, Hi.
- ▸▸Lo, Lo Set RxD,TxD Active to Lo, Lo.

☞IR Transmission Delay

- ▸▸Enabled Enabled IR Transmission delay. (Default Value)
- ▸▸Disabled Enabled IR Transmission delay.

☞UR2 Duplex Mode

- ▸▸Half IR Function Duplex Half. (Default Value)
- ▸▸Full IR Function Duplex Full.

☞ Use IR Pins

- ▸▸IR-Rx2xTx2 Set IR Pins use IR-Rx2xTx2. (Default Value)
- ▸▸RxD2,TxD2 Set IR Pins use RxD2,TxD2.

☞ OnBoard Parallel port

- ▸▸378/IRQ7 Enable On Board LPT port and address is 378.(Default Value)
- ▸▸278/IRQ5 Enable On Board LPT port and address is 278.
- ▸▸3BC/IRQ7 Enable On Board LPT port and address is 3BC.

☞ Parallel Port Mode

- ▸▸SPP Using Parallel port as Standard Parallel Port. (Default Value)
- ▸▸EPP Using Parallel port as Enhanced Parallel Port.
- ▸▸ECP Using Parallel port as Extended Capabilities Port.
- ▸▸ECP+EPP Using Parallel port as ECP & EPP mode.

☞ EPP Mode Select

- ▸▸EPP 1.9 EPP Version is 1.9.
- ▸▸EPP 1.7 EPP Version is 1.7.(Default value)

☞ ECP Mode Use DMA

- ▸▸3 Set ECP mode use DMA 3. (Default value)
- ▸▸1 Set ECP mode use DMA 1.

☞ AC Back Function

- ▸▸Memory System power on depends on the status before AC lost.
- ▸▸Soft-Off Always in Off state when AC back. (Default value)
- ▸▸Full-On Always power on the system when AC back.

☞ Game Port Address

▸▸Disabled	Disabled this function.
▸▸201	Set Game Port Address to 201. (Default Value)
▸▸209	Set Game Port Address to 209.

☞ Midi Port Address

▸▸Disabled	Disabled this function.
▸▸290	Set Midi Port Address to 290.
▸▸300	Set Midi Port Address to 300.
▸▸330	Set Midi Port Address to 300.(Default Value)

☞ Midi Port IRQ

▸▸5	Set 5 for Midi Port IRQ.
▸▸10	Set 11 for Midi Port IRQ. (Default Value)

Power Management Setup

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Power Management Setup

		Item Help
ACPI Suspend Type	[S1(POS)]	
※USB Device Wake-Up From S3	Disabled	
Power Management	[User Define]	Menu Level
Video Off Method	[DPMS]	
Video Off In Suspend	[Yes]	
Suspend Type	[Stop Grant]	
MODEM Use IRQ	[3]	
Suspend Mode	[Disabled]	
HDD Power Down	[Disabled]	
Soft-Off by PWR-BTTN	[Instant-off]	
PME Event Wake Up	[Enabled]	
ModemRingOn/WakeOnLan	[Enabled]	
Resume by Alarm	[Disabled]	
※ Date(of Month) Alarm	Everyday	
※ Time(hh:mm:ss) Alarm	0 0 0	
** Reload Global Timer Events **		
Primary IDE 0	[Disabled]	
Primary IDE 1	[Disabled]	
Secondary IDE 0	[Disabled]	
Secondary IDE 1	[Disabled]	
FDD,COM,LPT Port	[Disabled]	
PCI PIRQ[A-H]#	[Disabled]	

↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help

F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults

Figure 6: Power Management Setup

☞ ACPI Suspend Type

▸▸S1/POS	Set ACPI Suspend Type to S1/POS (Power On Suspend). (Default value)
▸▸S3/STR	Set ACPI Suspend Type to S3/STR (Suspend To RAM).

☞ USB Device Wakeup From S3

▸▸Enabled	Enable USB Device Wakeup From S3.
▸▸Disabled	Disable USB Device Wakeup From S3. (Default value)

☞ Power Management

▸▸User Define	For configuring our own power management features (Default Value)
▸▸Min Saving	Disabled Green & software APM function.
▸▸Max Saving	Enabled Green & software APM function.

☞ Video off Method

▸▸V/H SYNC+Blank	BIOS will turn off V/H-SYNC when gets into Green mode for Green monitor power saving.
▸▸Blank Screen	BIOS will only black monitor when gets into Green mode.
▸▸DPMS	BIOS will use DPMS Standard to control VGA card. (The Green type VGA card will turn off V/H-SYNC automatically.)(Default value)

☞ Video Off In Suspend

▸▸Yes	Set Suspend type is stop grant. (Default value)
▸▸No	Set Suspend type is Power on Suspend.

☞ Suspend Type

▸▸Stop Grant	Set Suspend type is stop grant. (Default value)
▸▸PwrOn Suspend	Set Suspend type is Power on Suspend.

☞ MODEM Use IRQ

▸▸N/A	Set MODEM Use IRQ to NA.
▸▸3	Set MODEM Use IRQ to 3.(Default value)
▸▸4	Set MODEM Use IRQ to 4.
▸▸5	Set MODEM Use IRQ to 5.
▸▸7	Set MODEM Use IRQ to 7.
▸▸9	Set MODEM Use IRQ to 9.
▸▸10	Set MODEM Use IRQ to 10.
▸▸11	Set MODEM Use IRQ to 11.

☞ Suspend Mode

▸▸Disabled	Disabled Suspend Mode. (Default value)
▸▸1 min - 1 Hour	Setup the timer to enter Suspend Mode.

☞ HDD Power Down

▸▸Disabled	Disabled HDD Power Down mode function. (Default value)
▸▸1-15 mins.	Enabled HDD Power Down mode between 1 to 15 mins.

☞ Soft-off by PWR-BTTN

▸▸Instant-off	Press power button then Power off instantly. (Default value)
▸▸Delay 4 Sec.	Press power button 4 sec to Power off. Enter suspend if button is pressed less than 4 sec.

☞ PME Event Wake up

▸▸Disabled	Disabled PME Event Wake up function.
▸▸Enabled	Enabled PME Event Wake up function. (Default Value)

☞Modem Ring On/ WakeOnLAN

- ▸▸Disabled Disabled Modem Ring On / Wake On LAN function.
- ▸▸Enabled Enabled Modem Ring On / Wake On LAN function. (Default Value)

☞Resume by Alarm

You can set "Resume by Alarm" item to enabled and key in Data/time to power on system.

- ▸▸Disabled Disable this function. (Default Value)
- ▸▸Enabled Enable alarm function to POWER ON system.

If RTC Alarm Lead To Power On is Enabled.

Date (of Month) Alarm : Everyday, 1~31

Time (hh: mm: ss) Alarm : (0~23) : (0~59) : (0~59)

☞Primary IDE 0/1

- ▸▸Disabled Disabled this function. (Default value)
- ▸▸Enabled Enabled monitor Primary IDE 0/1 for Green event.

☞Secondary IDE 0/1

- ▸▸Disabled Disabled this function. (Default value)
- ▸▸Enabled Enabled monitor Secondary IDE 0/1 for Green event.

☞FDD,COM,LPT Port

- ▸▸Disabled Disabled this function. (Default value)
- ▸▸Enabled Enabled monitor FDC,COM,LPT for Green event.

☞PCI PIRQ[A-H]

- ▸▸Enabled Monitor PCI PIRQ[A-H]# IRQ Active.
- ▸▸Disabled Ignore PCI PIRQ[A-H]# IRQ Active. (Default value)

PnP/PCI Configurations

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PnP/PCI Configurations

Resources Controlled By	[Auto]	Item Help
※IRQ Resources	Press Enter	Menu Level
PCI1 IRQ Assignment	[Auto]	
PCI2 IRQ Assignment	[Auto]	
PCI3 IRQ Assignment	[Auto]	
↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help		
F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Figure 7: PnP/PCI Configurations

☞ Resources Controlled by

- ▸▸Manual — User can set the PnP resource (I/O Address, IRQ & DMA channels) used by legacy ISA DEVICE.
- ▸▸Auto(ESCD) — BIOS automatically use these PnP rescuers. (Default value)

☞ IRQ Resources (3,4,5,7,9,10,11,12,15)

- ▸▸PCI Device — The resource is used by PCI device.
- ▸▸Reserved — Set the resource to reserved.

☞ PCI1 IRQ Assignment

- ▸▸Auto — Auto assign IRQ to PCI 1. (Default value)
- ▸▸3,4,5,7,9.,10,11,12,15 — Set 3,4,5,7,9,10,11,12,15 to PCI1/ PCI5.

☞ PCI2 IRQ Assignment

- ▸▸Auto — Auto assign IRQ to PCI 2. (Default value)
- ▸▸3,4,5,7,9.,10,11,12,15 — Set 3,4,5,7,9,10,11,12,15 to PCI2/ PCI6.

☞ PCI3 IRQ Assignment

▸▸Auto	Auto assign IRQ to PCI 3. (Default value)
▸▸3,4,5,7,9.,10,11,12,15	Set 3,4,5,7,9,10,11,12,15 to PCI3.

PC Health Status

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PC Health Status

Reset Case Open Status	[Disabled]	
Case Opened	No	
VCORE	1.746V	Item Help
+3.3V	3.296V	Menu Level
+ 5V	5.080 V	
+12V	11.904V	
Current System Temperature	34°C/93°F	
Current CPU Temperature	45°C/113°F	
Current CPU FAN Speed	4821 RPM	
Current POWER FAN Speed	0 RPM	
Current SYSTEM FAN speed	0 RPM	
CPU Warning Temperature	[Disabled]	
CPU FAN Fail Warning	[Disabled]	
POWER FAN Fail Warning	[Disabled]	
SYSTEM FAN Fail Warning	[Disabled]	

↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help

F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults

Figure8: PC Health Status

☞Reset Case Open Status

☞Case Opened

If the case is closed, "Case Opened" will show "No".

If the case have been opened, "Case Opened" will show "Yes".

If you want to reset "Case Opened" value, set "Reset Case Open Status" to "Enabled" and save CMOS, your computer will restart.

☞Current Voltage (V) VCORE / +3.V / +5V / +12V

Detect system' s voltage status automatically.

☞Current CPU / SYSTEM Temperature (°C)

Detect CPU /SYSTEM Temp. automatically.

☞Current CPU FAN / POWER FAN/ SYSTEM FAN Speed (RPM)

Detect Fan speed status automatically.

☞CPU Warning Temperature

- ▸▸60°C / 140°F Monitor CPU Temp. at 60°C / 140°F.
- ▸▸70°C / 158°F Monitor CPU Temp. at 70°C / 158°F.
- ▸▸80°C / 176°F Monitor CPU Temp. at 80°C / 176°F.
- ▸▸90°C / 194°F Monitor CPU Temp. at 90°C / 194°F.
- ▸▸Disabled Disabled this function.(Default value)

☞Fan Fail Warning (CPU / POWER / SYSTEM)

- ▸▸Disabled Fan Fail Alarm Function Disabled. (Default value)
- ▸▸Enabled Fan Fail Alarm Function Enabled.

Frequency/Voltage Control

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Frequency/Voltage Control

CPU Clock Ratio	[x 15]	Item Help
CPU Host Clock Control	[Disable]	Menu Level
CPU Host Frequency(MHz)	100	
Host/DRAM Clock ratio	[Auto]	
Memory Frequency(MHz)	266	
PCI/AGP Frequency(MHz)	33/66	
↑↓→←: Move Enter:Select +/-/PU/PD:Value F10:Save ESC:Exit F1:General Help F5:Previous Values F6:Fail-Safe Defaults F7:Optimized Defaults		

Figure 9: Frequency/Voltage Control

☞CPU Clock Ratio

Set CPU Ratio if CPU Ratio is unlocked.

- ▸▸X8~X 24 It' s depends on CPU Clock Ratio.

☞CPU Host Clock Control

Note: If system hangs up before enter CMOS setup utility, wait for 10 sec for times out reboot . When time out occur, system will reset and run at CPU default Host clock at next boot.

- ▸▸Disable Disable CPU Host Clock Control.(Default value)
- ▸▸Enable Enable CPU Host Clock Control.

☞CPU Host Frequency

- ▸▸100MHz ~ 200MHz Set CPU Host Clock from 100MHz to 200MHz.

☞ Host/DRAM Clock Ratio

(Warning: wrong frequency may make system can' t boot, clear CMOS to overcome wrong frequency issue)

- ▸▸2.0 Memory Frequency = Host clock X 2.0.
- ▸▸2.66 Memory Frequency = Host clock X 2.66.
- ▸▸Auto Set Memory frequency by DRAM SPD data. (Default value)

☞ PCI/AGP Frequency(Mhz)

▸▸The values depend on CPU Host Frequency(Mhz) .

☞ Memory Frequency(Mhz)

▸▸The values depend on CPU Host Frequency(Mhz) .

Load Fail-Safe Defaults

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▶Standard CMOS Features	▶Frequency/Voltage Control
▶Advanced BIOS Features	Load Fail-Safe Defaults
▶Advanced Chipset Features	Load Optimized Defaults
▶Integrated Peripherals	Set Supervisor Password
▶Power Management Setup	Set User Password
▶PnP/PCI	
▶PC Health Status	Exit Without Saving
ESC:Quit	↑↓→←:Select Item
F8: Q-Flash	F10:Save & Exit Setup
Load Fail-Safe Defaults	

Load Fail-Safe Defaults? (Y/N)?Y

Figure 11: Load Fail-Safe Defaults

☞ Load Fail-Safe Defaults

Fail-Safe defaults contain the most appropriate values of the system parameters that allow minimum system performance.

Load Optimized Defaults

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▶Standard CMOS Features	▶Frequency/Voltage Control
▶Advanced BIOS Features	Load Fail-Safe Defaults
▶Advanced Chipset Features	Load Optimized Defaults
▶Integrated Peripherals	Set Supervisor Password
▶Power Management Setup	Set User Password
▶PnP/PCI C	
▶PC Health	
ESC:Quit	↑↓→←:Select Item
F8: Q-Flash	F10:Save & Exit Setup

Load Optimized Defaults? (Y/N)?Y

Load Optimized Defaults

Figure 12: Load Optimized Defaults

☞ Load Optimized Defaults

Selecting this field loads the factory defaults for BIOS and Chipset Features which the system automatically detects.

Set Supervisor/User Password

CMOS Setup Utility-Copyright (C) 1984-2001 Award Software

▶Standard CMOS Features	▶Frequency/Voltage Control
▶Advanced BIOS Features	Load Fail-Safe Defaults
▶Advanced Chipset Features	Load Optimized Defaults
▶Integrated Peripherals	Set Supervisor Password
▶Power Management Setup	Set User Password
▶PnP/PCI Configurations	Save & Exit Setup
▶PC Health	
ESC:Quit	↑↓→←:Select Item
F8: Q-Flash	F10:Save & Exit Setup

Enter Password:

Change/Set/Disable Password

Figure 13: Password Setting

When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

Type the password, up to eight characters, and press <Enter>. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.

To disable password, just press <Enter> when you are prompted to enter password. A message " PASSWORD DISABLED" will appear to confirm the password being disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

The BIOS Setup program allows you to specify two separate passwords: a SUPERVISOR PASSWORD and a USER PASSWORD. When disabled, anyone may access all BIOS Setup program function. When enabled, the Supervisor password is required for entering the BIOS Setup program and having full configuration fields, the User password is required to access only basic items.

If you select "System" at "Security Option" in Advance BIOS Features Menu, you will be prompted for the password every time the system is rebooted or any time you try to enter Setup Menu.

If you select " Setup" at " Security Option" in Advance BIOS Features Menu, you will be prompted only when you try to enter Setup.

Save & Exit Setup

CMOS Setup Utility-Copyright (C) 1984-2001 Award Software

▶Standard CMOS Features	▶Frequency/Voltage Control
▶Advanced BIOS Features	Load Fail-Safe Defaults
▶Advanced Chipset Features	Load Optimized Defaults
▶Integrated Peripherals	Set Supervisor Password
▶Power Management Setup	Set User Password
▶PnP/PCI Configurations	Save & Exit Setup
▶PC Health	
ESC:Quit	
F8: Q-Flash	F10:Save & Exit Setup

Save to CMOS and EXIT (Y/N)? Y

Save Data to CMOS

Figure 14: Save & Exit Setup

Type " Y" will quit the Setup Utility and save the user setup value to RTC CMOS.

Type " N" will return to Setup Utility.

Exit Without Saving

CMOS Setup Utility-Copyright (C) 1984-2001 Award Software

▶Standard CMOS Features	▶Frequency/Voltage Control
▶Advanced BIOS Features	Load Fail-Safe Defaults
▶Advanced Chipset Features	Load Optimized Defaults
▶Integrated Peripherals	Set Supervisor Password
▶Power Management Setup	Set User Password
▶PnP/PCI Configurations	Save & Exit Setup
▶PC Health Status	Exit Without Saving
ESC:Quit	
F8: Q-Flash	F10:Save & Exit Setup
Abandon all Data	

Quit Without Saving (Y/N)? N

Figure 15: Exit Without Saving

Type " Y" will quit the Setup Utility without saving to RTC CMOS.

Type " N" will return to Setup Utility.

第四章 技術文件參考資料

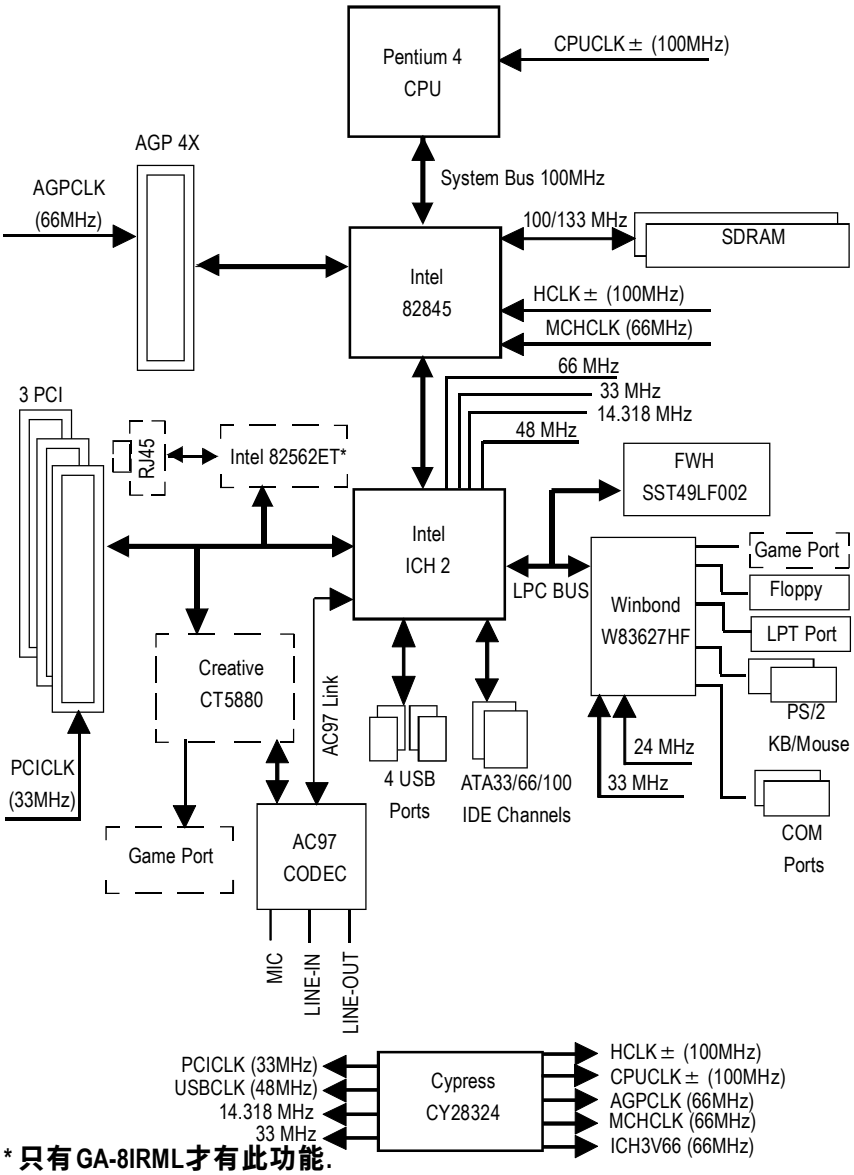
效能測試

以下的測試數據僅供參考，因為不同的軟、硬體配備都會影響測試結果，所以我們無法保證使用者自行測試的數據會與下列公佈數值完全吻合。

中央處理器	Intel Pentuim®4 2.0GHz **處理器**
記憶體	(128 x 2) MB RAM (NANYA NT5DS16M8AT-7K S)
快取記憶體	CPU **內建** 256KB **快取記憶體**
顯示介面卡	Gigabyte GV-GF3000D (NUCD 1.9)
儲存裝置	**內建** IDE (Quantum AS30000AT 30GB)
作業系統	Windows 2000+ SP2+DX 8.0a
驅動程式	Display Driver at 1024 x 768 x 64K colors x 75Hz IUCD ver. 19 For Intel chipset M.B.

Processor	Intel Pentium®4 2GHz (100x20)
WCPUID 3.0D Clock Frequency	
Internal MHz	2019.88
External MHz	100.99
SiSoft Sandra 2001	
CPU/FPU Benchmark	3895/2484
CPU Multi-Media Benchmark	8025/9945
Drives Benchmark	20663
Memory Benchmark	1015/1073
SPECviewperf 6.12	
Pro CDRS-03	14.76
MedMCAD-01	30.19
Light-04	8.283
DX-06	27.13
DRV-07	18.18
Awadvs-04	62.11
QUAKE III Arena (without sound)	
640*480*16 Demo1	199.2
1024*768*32 Demo2	181.2
3D Mark 2001 1.0	6852

晶片組功能方塊圖



*** 只有 GA-8IRML才有此功能.**

Easy TuneIII™ 介紹

技嘉科技 EasyTuneIII™ 視窗超頻軟體

技嘉科技全新推出視窗超頻軟體 EasyTuneIII™，一改以往超頻方式，顛覆超頻科技！

有了技嘉科技視窗超頻軟體 EasyTuneIII™ 後，從此超頻不須更改 BIOS 上之設定，更不須膽戰心驚地調整主機板上的任何 Jumpers 或 Switches，絢麗、簡單的使用者界面更提供了超頻的親切性，在簡易模式下，僅需按下 " 自動最佳化 " 一鍵， EasyTuneIII™ 便能自動在短短數秒鐘之內找出最佳化值，並直接超頻，無須其他設定便能達軟體建議之最佳化狀態，即使是從未超頻的生手也能輕鬆超頻。除此之外， EasyTune III™ 更提供了進階模式，符合進階使用者的需求，可自行更改 CPU 的外頻，找出自己系統的最佳化設定，最重要的是不須重開機即可生效。

經由以上簡單地介紹，您是否已有躍躍欲試而想趕快拿到
EasyTuneIII™ 視窗超頻軟體來玩玩的衝動呢？試試看！相信你會愛上它！
如須更多資訊，請至 http://www.gigabyte.com.tw

備註: 如果您手上的 IUCD 版本為 1.6 或是以下的版本，請至網站下載最新版 EasyTuneIII™ 工具程式

@ BIOS™ 介紹

技嘉科技 @BIOS™ 視窗版 BIOS 更新軟體

技嘉科技繼視窗超頻軟體 EasyTune III™ 之後再度推出另一石破天驚，為擺脫傳統須在 DOS 模式下更新 BIOS 之 Windows 版軟體！

技嘉科技 @BIOS™ 為一提供使用者在視窗模式下更新 BIOS 的軟體，使用者可透過 @BIOS™ 友善的使用者界面，簡易的操作模式，從此更新、儲存 BIOS 不再是電腦高手的專利，輕輕鬆鬆完成不可能的任務，更炫的是使用者可透過 @BIOS™ 與 Internet 連結，選取距離最近的 BIOS 伺服器並下載最新的 BIOS 更新，所有過程皆在 Windows 模式下完成，從此不再害怕更新 BIOS !

相信如此重量級的工具程式應是大家引領期盼很久了吧！試試技嘉科技 @BIOS™ 從此更新 BIOS 不再驚聲尖叫！

第五章 附錄

以下安裝畫面為作業系統 Windows ME 下所示(光碟片版本為：1.9)
將驅動程式光碟片置入光碟機中，光碟機將自動執行，請參考以下步驟進行安裝(若沒有自動執行該程式，請在"我的電腦"中雙擊光碟機圖示，並執行其中的 setup.exe檔)。

A. Installing Intel 845 Chipset Driver
請先安裝此 INF 更新程式. 此程式會開啟對Intel 晶片組元件的隨插即用 INF 支援.

B. Installing Sound Driver
單擊滑鼠左鍵, 安裝音效驅動程式.

C. Installing LAN Driver*
單擊滑鼠左鍵, 安裝網路驅動程式.

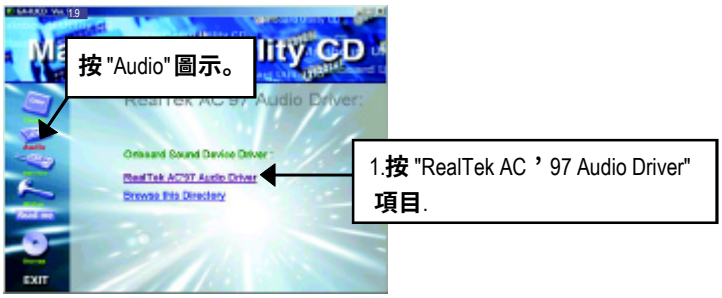
A: 安裝 Intel 845 晶片組驅動程式
請依照安裝程式的指示進行安裝置.

A-1.安裝 Windows 9x/ME/2000/XP INF 更新驅動程式按 "Windows 9x/ME/2000/XP INF Update Utility" 項目.

A-2.安裝Intel Ultra ATA Storage 驅動程式按"Intel Ultra ATA Storage Driver" 項目.

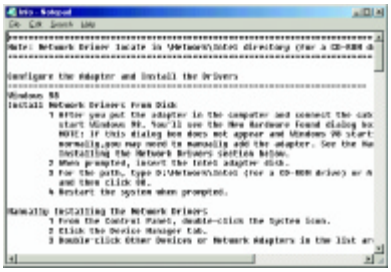
* 只有 GA-8IRML 才有此功能.

附錄 B： AC97 音效晶片驅動程式



附錄 C：Intel 82562 Network 驅動程式 * (8IRM 跳過此步驟)

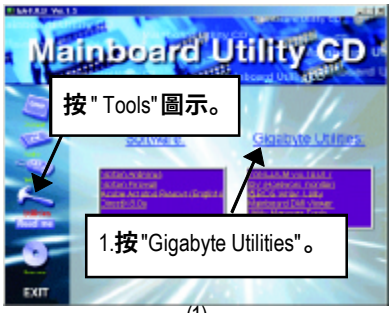
"Intel 82562 Network Driver" 在作業系統為 Windows ME 下將會自動安裝。
如果您想自行 更新 LAN 的驅動程式，請參考說明檔(README.txt) ，安裝路徑為 D:\Network\Rtl (我們假設光碟機的代號為 D:)



*** 只有 GA-8IRML 才有此功能.**

附錄 D： 安裝 EasyTuneIII

將驅動程式光碟片置入光碟機中，光碟機將自動執行，請參考以下步驟進行安裝(若沒有自動執行該程式，請在"我的電腦"中雙擊光碟機圖示，並執行其中的 setup.exe**檔**)。



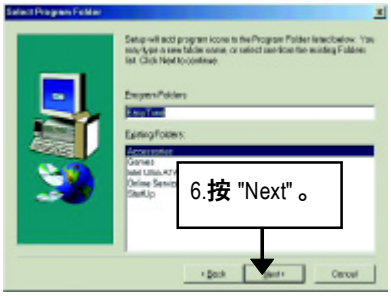
(1)

(2)

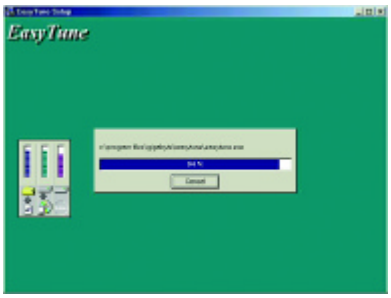
(3)

(4)

(5)



(6)



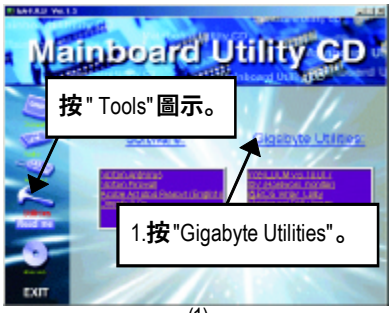
(7)

(8)

附錄 E：BIOS 更新程序

BIOS **更新程序：**

假如您 OS **是** Win9X，**我們建議您使用技嘉** @BIOS **更新程式。**



(1)

(2)

(3)

1. **操作選項及步驟：**

   I. **透過** Internet **更新** BIOS：

   a. **點選** "Internet Update"**選項。**

   b. **點選** "Update New BIOS"。

   c. **選擇** @BIOS **伺服器** (**目前已開放** "Gigabyte @BIOS server 1 in Taiwan" **和** "Gigabyte @BIOS server 2 in Taiwan")。

   d. **選擇您使用本公司主機板正確的型號。**

   e. **系統將下載** BIOS **檔案，接著作更新的動作。**

II. 不透過 Internet 更新 BIOS：

a. 不要點選 "Internet Update"選項。
b. 點選 "Update New BIOS" 。
c. 在 " 開啟舊檔的對話框中，將檔案類型改為 "All Files (*.*)" 。
d. 找尋透過網站下載或其它管道得到之已解壓縮的 BIOS 檔案 (如 : 8ITXE.F1)。
e. 接著按照指示完成更新的動作。

III. 儲存 BIOS 檔案：

在一開始的對話框中， "Save Current BIOS" 這個選項是讓您儲存目前使用版本的 BIOS 。

IV. 查看支援那些晶片組主機板及 Flash ROM 廠牌：

在一開始的對話框中，"About this program" 這個選項是讓您查閱 @BIOS 支援那些晶片組系列的主機板，及支援那些Flash ROM的廠牌。

2. 注意事項：

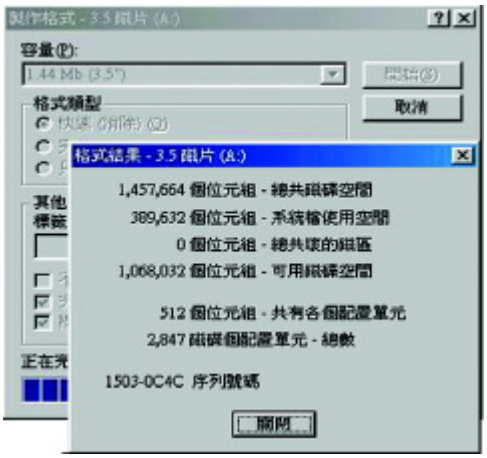
a. 在上述操作選項 I 中，如果出現二個(含)以上的型號供您選擇時，請再次確認您的主機板型號，因為選錯型號來更新 BIOS 時，會導致您的系統無法開機。
b. 在上述操作選項 II 中，已解壓縮的 BIOS 檔案所屬的主機板型號，一定要和您的主機板型號相符，不然會導致您的系統無法開機。
c. 在上述操作選項 I 中，如果 @BIOS 伺服器找不到您主機板的 BIOS 檔案時，請到本公司網站下載該主機板型號最新版的 BIOS 壓縮檔，然後經由解壓縮後，利用步驟 II 的方法來更新 BIOS 。
d. 在更新 BIOS 的過程中，絕對不能中斷。如果在更新的過程中斷的話，會導致系統無法開機。

我們使用 GA-7VTX 主機板和版本為 Flash841 的 BIOS 更新工具作為範例。
假如您是在 DOS 模式下，請照下列的方法更新 BIOS。
Flash BIOS 步驟：
步驟(一)：
(1) 確認您已將 "BIOS Feature Setup" 中 "BIOS Flash Protection" 選項設定為 Auto，詳細說明請參考第 32 頁。
(2) 確認您的電腦已安裝如Winzip等解壓縮程式。
您的電腦需安裝pkunzip或winzip等應用程式，以利待會兒要執行解壓縮。
此應用程式可在很多的網站免費下載，如: http://shareware.cnet.com
步驟(二)：製作DOS開機磁片(範例：Windows 98作業系統)
注意：Windows ME/2000 無法製作 DOS 開機磁片
(1) 將空白磁片放入磁碟機中(將防寫鎖撥至 "可寫入")。再用滑鼠雙擊桌面 "我的電腦 " 圖示後，將滑鼠點選 "3.5 磁片(A)" 並按滑鼠右鍵，選擇 " 製作格式 " 。

(2) 在格式類型中，選擇"快速(消除)"，並勾選"完成時顯示摘要"及"複製系統檔"，再按"開始"。

注意：執行此步驟後，磁片中原有的檔案將全部消失！

(3) 當複製系統檔的動作完成後，請按"關閉"即可。



步驟(三)：下載 BIOS 及 BIOS 燒錄工具程式

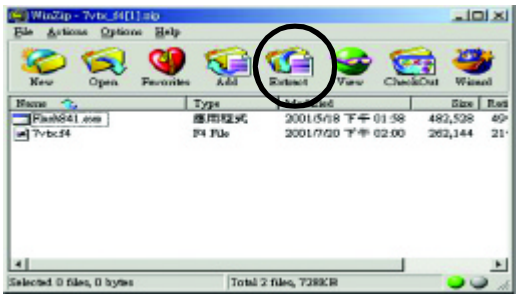
(1) **請進入本公司中文網站** (http://www.gigabyte.com.tw/chinese-web/index.html)**後，選擇" 技術支援 "。**

(2) **請選擇 " 主機板** BIOS & Driver"**。**

(3) 以GA-7VTX為範例，可從左邊的BIOS選單畫面依型號或晶片組的分類方式，來尋找您的主機板型號。

(4) 請點選您想要下載的版本(例如：F4)後，出現一個對話框，選擇"從檔案目前所在位置開啟這個檔案"並按"確定"。

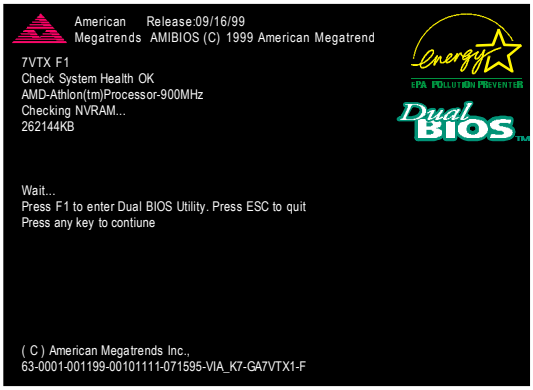
(5) **此時會出現以下畫面，並選擇**"Extract"**按鈕來執行解壓縮程式。**



(6) **請選擇將檔案存放至步驟(二)的磁片** A **中，再按下** "Extract"**。**

步驟(四)：確認系統會先從磁碟機來開機

(1) **將剛做好的磁片(含開機程式及解壓縮的檔案)放入磁碟機A之後重新開機，剛開機時馬上按下** "DEL" **鍵進入** BIOS Setup **主畫面**



(2) **進入主畫面將光棒移至** BIOS FEATUERS SETUP **之選項。**

AMIBIOS SIMPLE SETUP UTILITY - VERSION 1.24b

(C) 1999 American Megatrends, Inc. All Rights Reserved

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	HARDWARE MONITOR & MISC SETUP
CHIPSET FEATURES SETUP	SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP	USER PASSWORD
PNP / PCI CONFIGURATION	IDE HDD AUTO DETECTION
LOAD BIOS DEFAULTS	SAVE & EXIT SETUP
LOAD SETUP DEFAULTS	EXIT WITHOUT SAVING

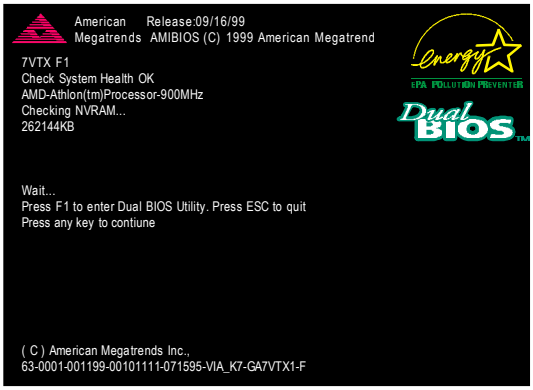
ESC: Quit ↑↓←→ : Select Item (Shift)F2 : Change Color F5: Old Values

F6: Load BIOS Defaults F7: Load Setup Defaults F10:Save & Exit

Time, Date , Hard Disk Type...

步驟(四)：確認系統會先從磁碟機來開機

(1) **將剛做好的磁片(含開機程式及解壓縮的檔案)放入磁碟機A之後重新開機，剛開機時馬上按下** "DEL" **鍵進入** BIOS Setup **主畫面**



(2) **進入主畫面將光棒移至** BIOS FEATUERS SETUP **之選項。**

AMIBIOS SIMPLE SETUP UTILITY - VERSION 1.24b

(C) 1999 American Megatrends, Inc. All Rights Reserved

STANDARD CMOS SETUP	INTEGRATED PERIPHERALS
BIOS FEATURES SETUP	HARDWARE MONITOR & MISC SETUP
CHIPSET FEATURES SETUP	SUPERVISOR PASSWORD
POWER MANAGEMENT SETUP	USER PASSWORD
PNP / PCI CONFIGURATION	IDE HDD AUTO DETECTION
LOAD BIOS DEFAULTS	SAVE & EXIT SETUP
LOAD SETUP DEFAULTS	EXIT WITHOUT SAVING

ESC: Quit ↑↓←→ : Select Item (Shift)F2 : Change Color F5: Old Values

F6: Load BIOS Defaults F7: Load Setup Defaults F10:Save & Exit

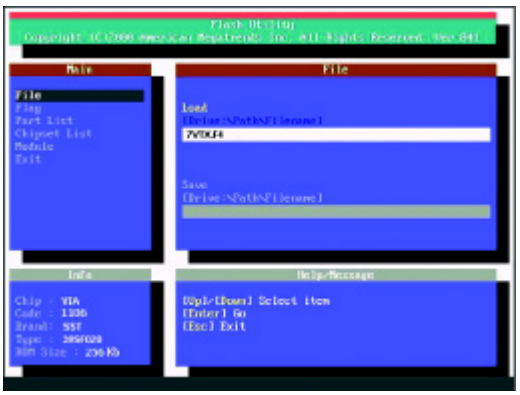
Time, Date , Hard Disk Type...

步驟(五)：開始執行 BIOS 燒錄動作

(1) **用磁片開完機後，在** A:\>**輸入** dir/w **及按** "Enter" **查看磁片中有那些檔案，然後在** A:\>**輸入** "BIOS **燒錄工具程式** " **及** "BIOS **檔案** " **，在此例中就為** "Flash841 7VTX.F4" **再按下** "Enter"。

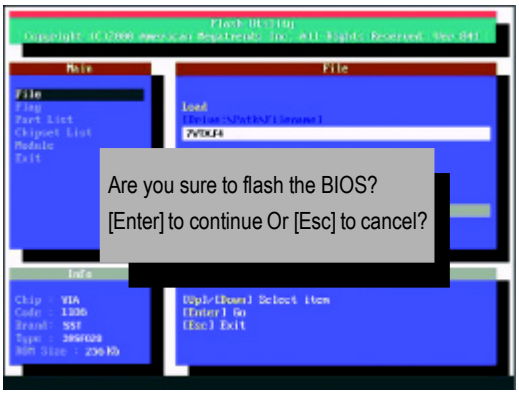
```
Starting Windows 98
Microsoft(R) Windows98
   © Copyright Microsoft Corp 1981-1999

A:\> dir/w
   Volume in drive A has no label
Volume Serial Number is 16EB-353D
Directory of A:\
COMMAND.COM     7VTX.F4     FLASH841.EXE
          3 file(s)      838,954  bytes
          0 dir(s)       324,608  bytes free

A:\> Flash841 7VTX.F4
```

(2) **會出現更新程式畫面，如下圖：直接按下**[Enter]**之後，光棒會落在右邊**Load [Drive:\Path\Filename]**處呈反白顏色，按下**[Enter]**即會開始執行。**

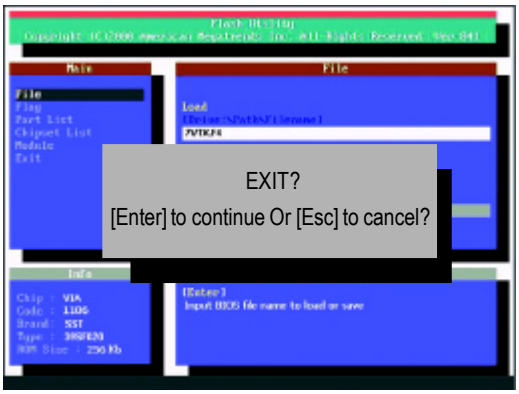


(3) **此時會出現一對話方塊詢問是否確定更新**BIOS **？選擇**[Enter]**為繼續執行，或按**[Esc]**為取消。**

注意：當系統在更新 BIOS **過程中，不要關掉電源，不然會損壞** BIOS **導致系統無法開機。**



(4) BIOS **更新完成。必需按**[ESC]**離開更新程式畫面。**

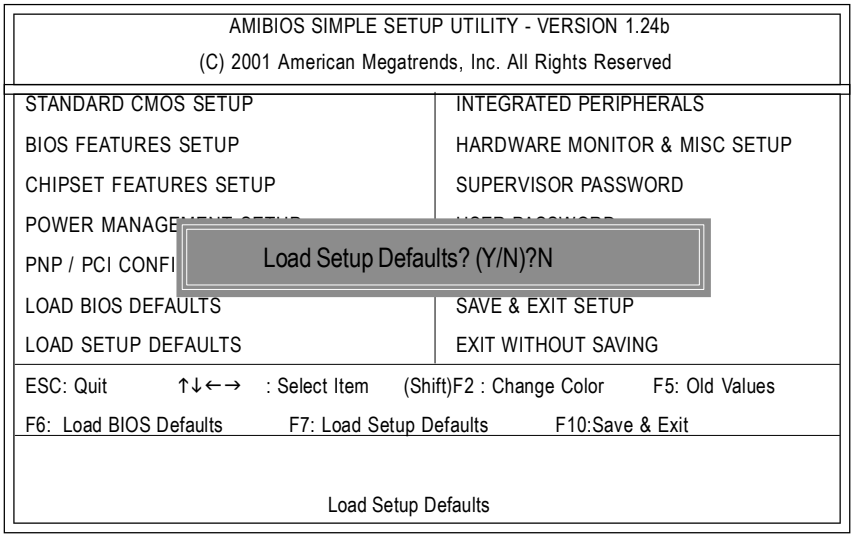


步驟(六)：將燒錄完成的BIOS設成預設值

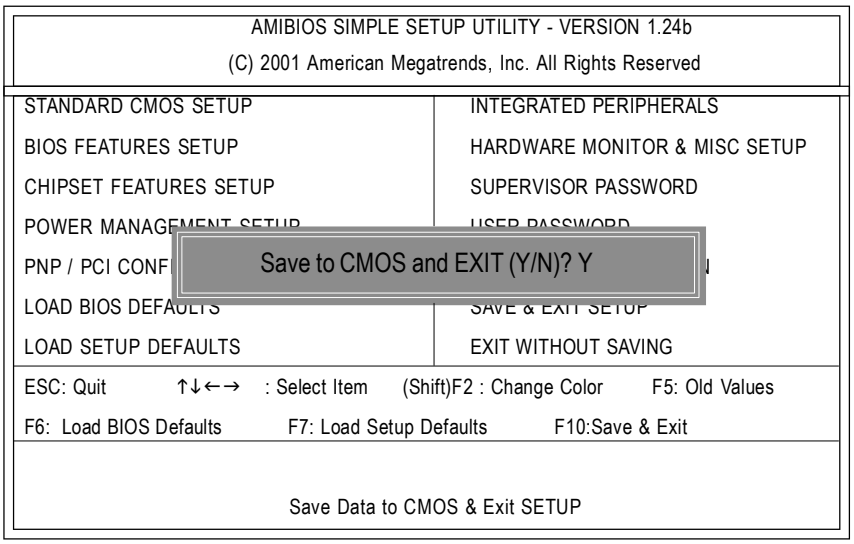
因為BIOS升級後，系統需再次偵測所有的裝置，所以強烈建議當升級BIOS後，需再次設成預設值。

(1) **將磁碟機中的磁片取出，重新開機。開機畫面會出現主機板型號及更新完成之BIOS版本。**

(2) **此時別忘記再按下**<DEL> **再次進入**BIOS **設定畫面，將光棒移至**"LOAD SETUP DEFAULTS" **後按**"Enter"**，系統會問您確定嗎？按**"Y" **及**"Enter"**。**



(3) **將光棒移至** "SAVE & EXIT SETUP" **後按** "Enter"**，會詢問您是否將修改的資料儲存並離開？此時則鍵入** "Y" **後按** "Enter"**，此時系統會重新開機。**



(4) **如果順利的進行至此，那得要跟您說一聲恭禧！因為您完成了**BIOS**燒錄的動作。**

專有名詞	含意
LBA	Logical Block Addressing
LED	Light Emitting Diode
MHz	Megahertz
MIDI	Musical Interface Digital Interface
MTH	Memory Translator Hub
MPT	Memory Protocol Translator
NIC	Network Interface Card
OS	Operating System
OEM	Original Equipment Manufacturer
PAC	PCI A.G.P. Controller
POST	Power-On Self Test
PCI	Peripheral Component Interconnect
RIMM	Rambus in-line Memory Module
SCI	Special Circumstance Instructions
SECC	Single Edge Contact Cartridge
SRAM	Static Random Access Memory
SMP	Symmetric Multi-Processing
SMI	System Management Interrupt
USB	Universal Serial Bus
VID	Voltage ID

技術支援/送修單

國家別	公司名稱：	電話：
聯絡人：	E-mail信箱：	

產品型號：	主機板版本：	Lot批號：
BIOS 版本：	作業系統/應用軟體名稱：	

硬體設備名稱	廠牌	品名	規格	驅動程式
中央處理器(CPU)				
記憶體(RAM)				
顯示卡(Video)				
音效卡(Audio)				
硬式磁碟機(HDD)				
CD-ROM / DVD-ROM				
數據機(Modem)				
網路卡 (Network)				
AMR / CNR				
鍵盤				
滑鼠				
電源供應器				
其他硬體設備				

問題描述 :