

AX5TC

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# AX5TC

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## ÍÓÒqÑÁÇ€

İP³QÍÓ11ÑÁàl

%ØİēÄİēİhÈ %ēÉdÈ çıñú»T

İP³KÍÓ11İŞB ÅŞÖà

İŞB ÅŞÖàÄÖÆÝ Ò Èà»R;ıñı Jumper Å^ ÈİÚj (Connector) ÄÖÀ Ò~»RÅŞÖàÈ` ØēB Ò÷Äq  
Ñ\_ÄÖÄäĐİ»T

İP³eÍÓ11AWARD BIOS

AWARD BIOS ÄÖÆÝ Ò Èà»RÄf ÈēÖàİñÄŞÇäÄÖÑ\_Ò,,»R;Y³eÜ\_Ü İ' Å»ÄÖçēÄ|»T

Ä Ò 1A11ÈqÄ'Æ÷ÝUĐÈÖè

ÄéçèÈäÈqÓ|Ä ÄÖÄøÍ\_È÷ÝU»T

Ä Ò 1B 1ÜİÄ ÅXÖöÈäÈ½

çıñıÄ Äf È' ÖēÄ^ È÷ÝUÄÖÖ ÈäÖaÄoĐİ»T

Ä Ò 1C Jumper1İnÄŞÄ

ÄiÄİ Jumper ÄÖÄTÄ »T

# Óé;öõ»Ã

¿Y%ƒÆ ¿Ö%ü¿f Èq;èÃÖÖé¿öõ»Ã »X



×èÄqÑ\_  
Àa%Q¿UYU%ÁÆóÝ Ö»Ã »T



PIÁz  
%4Ñ ÆoÁQÈë»R¿zÉúØãÇaÀ^ÚZÁüÄX»T



×è%ƒ%ü  
ÓŠ¿ ÄØ×uÈ÷ÝUÍ, ¿ÇÄÖ% Ä | »T



ÇÄÇ€  
Î¼Ü È‘ ØoÁQÇÁÜZ»T



Î¼ö  
Î¼ÈÁ%¿ ÁQÈPÌ%ÄÖØoÁQÈÈ“»T

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# ÌP³QÍÓ ÑÁàl

AX5TC Æ çYPCI/ISA ÆÆÔtÄÖ ATX Pentium® çUØ Ä` »RÄpËPçè»Mntel 82430TX  
PCIset ÎÓ% Îi»SUItra I/O ÈÈÄ ØÓ»RçS%ÖÄöÄÖPCI IDE ÈÈÄ ØÓçz»pIÄ PIO mode 4»SBUS  
Master Ä^ Ultra DMA/33 ÐaÙ ÒiÀ»»RØ ÈaÐaÙ Î%çZÓW 33MB/s»TÀÓççUØ Ä` »çhÜó%ÖÄö  
(onboard) 512KB PBSRAM (pipelined-burst SRAM) ÁðÄ È` Øeß »RççIÄðÄÏeÍSi` ÈP  
Éú»TÁY»pIÄ3 È 168 pin ÄÖ DIMM Î»Öe»Rçz»ÓÍmEDO Ä^ SDRAM ÀaÈaÄYçè»RÄpIæ%  
È` Øeß ÈvÐçZÓW 256MB»TÀÓçç»RAX5TC ÄéçèÄÖÆ 2M bit Flash ROM»RØ çÖÄiÑ†Öh  
çnúÄÖ»pIÄÉú% »RÑ Î^ Æ Á çIÈvÄ »T

È»ÄÓ%Äçç»RAX5TC ÄçmÄ»YççÎi ÇiÇÄÇÈÄÖÉðÄ»X

Ú Ð»Ð"Ø (Suspend To Hard Drive) ÓSçèÍ, ÐIçnú»RÐ"Ø Èa»ÄRØçÇÈÄÄÖÖ Ä ÄÖÈa  
Ð»ÇÄÑ†Ö ç Win95»SOffice ÄeÄpçÄÍÈß »W»RÄIçZÄ»ÈIÄ ÎpÇ ç Ý Ø »ÄÄ»ÄÖÄÖR»RÆçY  
Ø »ÄÄQÑ»ÄÏè»eUÍçèi'À»ÄÖÍÜÑè»TÄ »eÈaçIÄéçè VESA ÍhÈ ÆÈvÄÖPCI VGA çu (Äf  
AOpen S3 PV70/PT70)»RSound Blaster ÆÈvÄÖÇIÈPçu (Äf AOpen AW35/MP56)»RçY  
»e Rockwell ÆÈvÄÖ Modem (Äf AOpen F56/MP56)»R»Éú»eÄ` Í, ÇiçnúçÛ»eÓSAQ»T  
Ä\Óçç»ÖaØØØ ÖÖÈÈÐ"Ø (0V Modem Wake up) ÄbçèATX Soft Power ÄÖçnú»RÄÏè  
ççYÄsÝ Ø ÄÖÄÖR»R»RØççèÖaØØØ ÈiÈaÄYÄöÈaÈIßçÖ,Øö»TÍ, ÐIçnúÄUÈçQRAi çeÄiØiÚ  
ÐaÉ`Ø ÒaIÄÜ Ø »TAOpen çUØ Ä` ÀsÄÓ% ÇÈÖaÄpçÄÖÏaIæ»ÄÖ%ÄaAsÄ »RÈ»ÄWÄIèÄÖçç  
ÈIÄ»ÖaØØØ »Äçç»RÈ`ÜóççYÜ çè»ÖÈIÄ»ÖaØØççu (Internal Modem Card) Äi»pIÄI, ÐIçm  
Éú»TCj ÄéçèAX5TC ÑÈÄöÇaÄÖ MP56 »ÖÈIÄ»ÖaØØççu»RçÇÈÈöçÖIjØ»ÄéçèÄ` ÝSçç»ÄÖçç,  
Ñ»»T

Ø ò ÖÖÈÈÐ"Ø (LAN Wake up) ÄI»QÜZÝ Ä »çç`ÄÖÖaØØØ ÖÖÈÈÐ"Ø »R»ÄÖjÍ, Æ`ØççèÈé  
È ò ò ÄiÍ Ü ÄÏè»TÇÈÄéçèØ ò ÖÖÈÈÐ"Ø »RÈ`çIDNÜ ÜaÄI»pIÄI, ÐIçnúÄÖÖ ò çu»RAY  
Ø»ASÖaØRÑ ÄÖÖ ò ØsI`ÍÈß »RÄfççUØ Ä` ÜYÄ ÄÖDM È^ ÖaI'À»»T

ÍnÄŠaÖÈaÐ"Ø ÈaÐ» (RTC Wake Up Timer) Í, ÇiçnúçZ È`ÓŠç ÄŠÖ,Äe»QÇiÈaÐ»»RÄT  
Ñ ÈaÐ»»QÄ »RÄÏèÄ`Ñ»aÖÈaÐ"Ø »TÈ`ççYÈ\_Ð"Ø ÈaÐ»ÍnÄŠAsÄTÇiççÄÖÄç »Qçè»RÄèÆ ÄT  
»eÄÖÄç ÇiÈdÄŠÈaÄ »TÄpØ »eÄñçZÓWÄ Æ »T

# ÑÁàl

ÀaÀS; ÎÁÀ» CPU ÝÇÚ<sup>1/2</sup> (Synchronous Switching Regulator) ÀaÀS; ÎÁÀ»Ò %Q É ÁÓÀUÀaÀS; ÎÁÀ»ÁÿÁÍÁ ÈÁÁÓÈÏ%T;Y%QÉ ÚÍ;èÁÍÁ;»RÀaÀS; ÎÁÀ»ÁÓ%ÁQÑBÀñÈ\_ÖÑÁT Á ÁUÀaÀSÀ»»T

**CPU Ó]Ö Á`BQ (CPU Thermal Protection)** AX5TC ÁÿÁÍÉdÈ ÍçfÁÖÓ]Ö Á`BQÓ,,Ò »R Ñ CPU ÑBÀñÈÁÁ %QÇiÓS; ÁSÒ,,ÁÖÑBÀñÈ»CPU ÍñÈ\_ÀöÈaÇÉÁT»RÁÿ;SÖx;èÚÍ;èÍ€B Í,;i ÞÍÁ»T

**Ó]Ö,,ÁB`BQÓ,,Ò (Over Current Protection Circuit)** ÀSÐaÌè 3.3V/5V/12V Baby AT Àè ATX ; ÎÁÀ»Ó,,Ñ×ÁèÚÍÖÓ%»RÓ]Ö,,ÁB`BQÉ ÁöÈqÁ`ÁÖÓ,,Ò »TÓ Á ÓaØ Èa%»%»ÁÖÍ`Ò »RÓ]Ö,,ÁB`BQÁÖ×eÁUÈqÁÍÈ»RÁ Ñ%Q;\_ÁÖPU Áè;è%»%»ÁaÁÖÓ,,Ú%»RÁÞ»Ó÷ÇEYÇÚ½ ÖÖÈ\_5V ÚúÍÁÁÁ CPU Èð%»Ó,,Ú½ (ÁiÀf 2.8V)»RÇ ÁiÁÖ5V Ó]Ö,,ÁB`BQÁiÍ]Á|;ÈÈÓS ÁQ»TX5TC ;UØ Á`ÁÖÁaÀS; ÎÁÀ»ÝÇÚ<sup>1/2</sup>»RÁÿÁÍCPU Èð%»Ó,,Ú]Ö,,ÁB`BQÁÖ;»m Éú»RÈ;Ái Ç ÁiÁÖÓ,,Ñ×ÁèÚÍÖÖÈ\_çÍ`Áè; % À ÁÖÍ`Ò Á`BQÉú% »T

**CPU ÓaØ ÍuÇÑÈÈÖaÈÈ (CPU and Housing Fan Monitoring)** AX5TC Í`Áè%»»ÑÈÈÖa ÈÈÁÖ;»R;ZÁØ% CPU Ó]Ö »TÍ,Ð ;UØ Á` %»ÁÍ%»ÇiÇÑÈÈÍÚj »RÁüÇi;ç;èCPU ÇÑÈÈ (%ÁÁ`ÆE 2-pin Óa 3-pin)»RÁi ;ç;QÇiÁÿ;ç;YÁ` ÈuÍÖÖ ÍuÁÖÇÑÈÈÁè;è»TÁB;èÍ, Çi;»ú»RÁ; ÈèSÇÑÈÈÿÈÖÈ»RÈ\_çÍ`Ó] %»ÁÿÍ`Á» (ÁiÀf Hardware Monitor Utility) ÀöÈÁÍ%ç; ÞÍÁ»T

**Á;ÌèÓ,,Ú%ÖaÈÈ (System Voltage Monitoring)** AX5TC %»Í`Áè%»»Ö,,Ú%ÖaÈÈÁè»RÁèÈ` ÈiÈaÁèÈÁ»RÍ, ÇiÁèÈÈ\_Ñ`Á Þ ÖaÈÈÁèÈè%»ÁQÓ,,Ú%»RÚa»»ÁpÁÍÁèÈ,,Ú%»ÐhÓ]»D; Öè ÑaÁÖÈ»Áè»RÇj ÁÍÍ, ÖöÈ»Áè»RÍ\_Ñ`Öx;è%»ÁÿÍ`Á»(ÁiÀf Hardware Monitor Utility) Ó Áè;è Áaí,;i ÞÍÁÈÈeÈÁ»T

**ÁÓØÿÁÖ CPU Èð%»Ó,,Ú%»ÞÍÁÈú% (Full-range CPU core voltage)** Í,Ð ;UØ Á` ;ç;Y%Þ ÍÁ 1.3V Á 3.5V ÁÖ CPU Èð%»Ó,,Ú%»RÓ ;ÖÁi CPU ÁÖÁQÉBÁBÐ»È\_Á ;ÌÖ†Á»»T

**PCI ÇÍÈÞ;ç;ÈÍÚj (PCI Sound Card connector)** SB-LINK ÈÍÚj ;ç;Y;èÁiÍ†ÈÍ Creative ÁÈVÁÖ PCI ÇÍÈÞ;ç;u»TÁSÓaÍ, ÖðPCI ÇÍÈÞ;ç;uÈ»RÐÑ;èÁ ÁÖÈÍÚj %»ÈúÈeÁ`DOS Ú ÓiÁÖÁÈ ÈVÈ=ÝU»T

**ÀöÍpÀ»Á`ÚZÍÑ (Resetable Fuse)** Ð`Ø ÈaÍ»ÁöÚÞ×]Áè USB ÓaØ~»RÁöÈVÁ ÍÖÁÁ`ÚZÍÑ%½ ;ÜÈqÚ\_ÑÍ»TAX5TC ÈÞ;è%»»ÁöÍpÀ»Á`ÚZÍÑ»RÈ\_ç;YÁÍÈPÁØ×uÍ, ÖöÈ»ÁfÍ, ;ç»T

**FCC DoC Ó`Ýi (FCC DoC certificate)** AX5TC ÌBÁi È È FCC DoC ÁTÍÈÈxÖèÑaÓ` Ýi»RÁj ÁèÁsÍ]Ø ÍuÁÖBQÁÁÖR%»RÁÍ` ^ %»Ñ`ÐaÈqYB »TÁÿ;SÁS;ç;Í%» ÇÈ»RHSQ-9001 Ó`Ýi %»»ÖÞ;ç;Y×eÁ`Á× ÝÇÁS»T

È{ %»ÁÖÚÍ;èÍ€B %ÞÍÁ (Powerful utility softwares supported) ÚYÁ ÁÖ AOpen Bonus Pack CD òa%»ÁÍIn;È{ %»ÁÖÚÍ;èÍ`Á»»RÁi Àf ADM (Advanced Desktop

## ÑÀl

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Manager)»SAOchip»SHardware Monitor ¼rÂý»SAcePhone»SEasyAxess»SSuspend to  
Hard Drive ¼rÂý»R;Y%eBIOS flash ¼rÂýI'À»»T

¼pIÀÿ0G†Ä0 BIOS (Multi-language BIOS) Í, ĐIÆ É"È\_ÂéÈ'ÀsÍMŠ BIOS Û ĐIËã»R  
¼4ARAIÛ0G¿ÔóYÄ¼W»T

# ÑÀàl

## 1.1 ÍhÈ

¿UØ Ä`ÀÆÀ»	ATX
¿UØ Ä`¾¾¾	305 mm x 208 mm
CPU	Intel Pentium P54C»SPP/MT (P55C)»RAMD K5/K6»R Cyrix 6x86/M2 Óa IDT C6»T
¿UÈ`Øeß	3V EDO Æè SDRAM»Rl 68-pin DIMM x3»RÍæ»(ÈvD,, ¿ØW 256MB»T
ÁðÄ È`Øeß	¾ØÀò 512KB PBSRAM»T
ÍÓ¾ Ìi	Intel 82430TX PCIset
Üi ¿cØè	ISA x4 and PCI x4
À ÀTÈ	2 Çí UART 16C550 ÆÈvÀÒ RS-232 À ÀTÈ »R¿ÍÁÍ»Q Çí UART ¿¾ÍÁÆ ¿·x`Øi Ìi»T
¿ÇA È	1 Çí ¿¾ÍÁ SPP/ECP/EPP »eØòØeÑaÀÓÁYÁTÈ »T
Floppy ¾ÐÇÈ	1 Çí ÍÈÀ»ØeØeØ Í†ÈÏÚj »R¿ZÁé¿è 720 KB»R.44MB Æè 2.88MB È À»ÀÓ 3.5 ÆeØeØeØ »R»¿60KB»R.2MB È À»ÀÓ5.25 ÆeØeØeØ »T
IDE ¾ÐÇÈ	2 Çí IDE Channel ¿Í†ÈÏ 4 Çí IDE ØaØ~(ÍŠØeÆe CDROM)»R¾ÍÁPIO mode 4»SBus master»RÆèUltra DMA/33 Ì¿ÐaÛ Øi À»»T
USB ¾ÐÇÈ	2 Çí USB Í†ÈÏÚj »RBIOS ¿ÍÁÍ USB Bi ÈaÍ'À»¿Øi ÚÚÐaÍeÀÓ AT Æè PS/2 Úp×j»T
PS/2 ÑaÓÁ	¾ØÀò Mini-Din PS/2 ÑaÓÁÍ†ÈÏÚj »T
Úp×j ¾ÐÇÈ	¾ØÀò Mini-Din PS/2 Úp×j Í†ÈÏÚj »T
RTC ÓaÓ,,ÀÚ	RTC À Æ Intel PIIX4 chipset ¾Ø»RÁé¿èCR-2032 Øj Ó,,ÀÚ»T
BIOS	AWARD Plug-and-Play»R2M bit Flash ROM BIOS»T ¾ÍÁÍÁyÓØÍÁÓÁ¿Ø»R¿nR¾¾¾»T

Ú Ð»Ð"Ø (Suspend to Hard Drive)	¿ëBIOS %PÍÁ»RÚ<Á†ÁR¿ðÁvÁ0%¿ÁQÁÁÐRÁö0ë0ëØ %0»R%¿%QÀ0Ð"Ø Èä¿ùÁ ¿†¿i Ç %¿ÁQÍvÇÈ»T0-Áé¿è VESA ÍhÈ ÆÈvÁ0PCI VGA ¿u»RSound Blaster ÆÈvÁ0ÇÍÈP¿u»T
Á\0,,Ñ×0a00Ø 00ÈÈÐ"Ø (0V Modem Wake Up)	Í'0JÉdÈ Á0×^0 ÍnÇ¿R¿¿YÜá¿é¿•ÈÌÁ»Áë%0ÈÌÁ»0a00Ø (Áf AOpen MP56)»RB Á†èÀsÁÍ0,,00ÐÁi Èä0 ÈäÈÌ¿¿»T
0 0 00ÈÈÐ"Ø (LAN Wake Up)	È†Ái Áé¿è%PÍÁÍ, ÐÍ¿múÁ00 0 ¿u0a0 00Í€B (Áf ADM)»RÈ' ¿¿YÍ'0JÈÈÈ 0 0 Í Ù Á†è»T
ÍnÁŠÁ0ÈäÐ"Ø ÈäÐ» (RTC Wake Up Timer)	È' ¿¿YÍmS%QÇiÁeÁŠÁ0ÈäÐ»»RB Á†èÀsÍ, ÇiÈäÐ»Á0ÈäÐ"Ø »T
ÀaÁS¿ ÍÁÁ»YÇÚ%×^0	ÈÁÈPÍ%ÀaÁS¿ ÍÁÁ»YÇÚ%×^0 (Synchronous Switching Regulator)»T
0J0,,ÆÁ`BQ	ÁyÁÍ CPU Èð%ú0,,Ú%0J0,,ÆÁ`BQÁ0¿mú»RÈ†Ái Ç Ái Á00,,Ñ×ÁeÚÍ00»R¿¿'Áé¿ % À Á0Í^0 Á`BQÉú% »T
CPU 0J0 Á`BQ	Ñ CPU ÑBÁñÐh0J0ŠÍnÇaÁ0ÈäÇiÍ, ¿i ÐÍÁ»T
CPU ÇÑÈÈ0aÈÈ	Ñ CPU ÇÑÈÈYrÈ0ÈÁÍ, ¿i ÐÍÁ»T
Á†È0,,Ú%0aÈÈ	Ñ Á†è0,,Ú% (5V»S12V»S3.3V 0a 2.8V) %¿¿ ÜÈqÈÁÍ, ¿i ÐÍÁ»T
SB-LINK ÈÍÚj	¿¿èÁi Í†ÈÍ Creative ÆÈvÁ0 PCI ÇÍÈP¿u»T

# ÑÁàl

## 1.2 Ú Ð»Ð"Ø (Suspend to Hard Drive)

»^Ú Ð»Ð"Ø »%Œ\_Æ È\_çòÁvÁÔÁŒÈÄÄDR»RÈ` ØeB ò Èà»RÙÝÓ İvÇÈÚ<À†ÀŒİŠÖe%Ô»Tİ^ ÁúÁ† İèçÁÓç ÜpÓ„»RN %f%QÀØÐ"Ø Èà»RÈ' ççYÄ×ÈİÀoÁ Ç ÁİÁÔ%ÄQÄÄDR»R%ÄÖ=İçWIn95 Ð"Ø ÄH' »R%ÄÄÖ=ÇÄŒ†Èİ ÈáÚİçèİ' À»»T

ÀfÄXÈ' Áİ 16MB È` ØeB »RÁÔÔ %Äö%ÐÖ=Ç€16MB ÔeÔeÄBD»Áİ Ú<À†ÀŒÈÈ` ØeB »T×eÄqŒ\_ È' çİĐŒÁeçèÒa VESA ÍhÈ ÄÈvÁÔPCI VGA çu»RÔa Sound Blaster ÄÈvÁÔÇİÈPçu%Æ APM Drive»TŒ İ^»RÁöÇæÁöPİÈ' Ü çèÁò ÄOpen PT70 VGA»ÄAW35 (ÇİÈPçu) Ôa MP56 (ÔaØØØ +ÇİÈPçu) çY×eÄ` ÍaÄeÄÖÄÈvÄä»T

ÀÓçŒúÄÔİŒÄŠ% Ä|Äf%Æ »X

1. Ð»Ä BIOS setup»Power Management à Suspend Mode Option»RÙ Øö "Suspend to Disk"»T
2. Ð»Ä BIOS setup»PNP/PCI Configuration à PnP OS Installed»RÙ Øö "No"»TÍ, ÁeÈ, BIOS ÁİØ ÑÄoÄ Á^ ÄŠÄŒÈò Ñ»»T
3. Ð"Ø ÈáÚ ØöÐ»Ä DOS ÔiÄ»»RÀfÄXÈ'Æ Win95 ÄéçèÄ»R×eÄsÐ"Ø çİ İ' "Windows 95 Starting ..." ÈäÄ %f "F8"»RÙ Øö "Safe Mode Command Prompt Only"»T
4. È\_AOZVHDD.EXE Í, ÇİçÄyİ' À»×àÔ†Ä C ÔeÔeÄÖÈòçòÙ %f »T
5. % Ä|çQ»XÄéçfile ÈeÒa (ØRçeÄ FAT16 ÚaÈŒÄŒÈè )

×eÙ %Ä%ÄTÄ ç` ÁsİŠÖe%Äòçù%QÇİÚ ÜYÚä»RçèÁİ Ú<À†ÀŒÈÄÄDR%ÆÈ` ØeB ò Èà»X

C:>AOZVHDD /c /file

×e×eÄŠÈ'Æ ÁpÁÍÄÆ ÄÔİ†P ÔeÔeÄBD»È\_Áİ İ½çÚ ÜYÚä»TÁİ Àf»RÀfÄXÈ'ÄÈ2MB çU È` ØeB Ôa 4MB ÄÔ VGA È` ØeB »RÁÔÔ Í\_Ô=Ç€Äö%Ø36MB (32MB+4MB) ÄÔİ†P ÄB Ð»»TÀfÄXAOZVHDD Áp%Ä Í†P ÄBÐ»»RÈ' ççYÄéçè DOS ÄÔ DEFRAG İ' À»ÄeÆ Win95 ÄÖ»` ÔeÔeÇÄİİ' À»»%ÄİØyİ' İŠÖe»RçYİ½çÄÆ ÄÔİ†P ÄBÐ»»T

## ÑÀàl

¼ Ä|¼X»XÄé¿è/partiton ÈèÒà (ØR¿èÄ FAT16/FAT32 ÚäÈñÄÏÈ) Äé¿è AOZVHDD ÀsÏSÔé¼¼Äò¿¼¼QÇí¼¼ÍeÈé»RÄíÚ«ÄfÄÏÈÄÄÄØR¼¼È` Øeß ò Èà»TÇÈÄé ¿èÍ, Çí¼¼ Ä|¼ÄÄv»R¿¿ÌÐÑ¿ ÀsÏSÔé¼¼ÓŠÉu¼¼QÐ ÄBD»»TÄòÇæÄòPÍÈ`ÈòØò¿¿ÖÄíÈ` Øeß Üí ¿cÄÖ¿¿ÉúÄÄÄf»RÓŠÉuð ¼¼ÄÖéØéÄBD»»TÄíÄf»XÇj È` ¿òÄvÄÍ 32MB ÄÏÈ¿¿UÈ` Øeß Òa 4MB ÄÖ VGA È` Øeß »RÄí¿¿ÖÄíÇfÖÖ¼¼äÉBÄ 64MB ¿UÈ` Øeß »RÄÖÖ È` ÍæÄÄé¿¿ØeØe ¼¼ÄýÍ`À» (Äf fdisk) ÓŠÉu¼¼QÐ 68MB (64MB+4MB) ¿Y¼¼ÄÖ¿¿ÍeÈéÈ »TÍ` ÄúÜ ¼¼¼ÄTÄ ¿` »X

C:>AOZVHDD /c /partition

ÄfÄXÈ` ÄÖÏSÔéÄÄÄÍ¿¿ÍeÈéÈ »R¼¼¼¼ÄäÈ ¿òÄvÖéØé¼¼ÄÖÖ ÈäÜ ¿¼¼R×è¼¼BÄé¿èÍ, Çí ¼¼ Ä|»T

6. ÇÄÑÏÈÈÈäÄÏÈ (Reboot)»T
7. Üä¿èÍ|Ä,Ä ÜPÄ» (Momentary) Suspend switch»RÄéÈ Ü Ä Win95 Ð"Ä¿¿múÄ ¼¼ÄÖ »`ÖäÈÈ»¼¼RÈ(ÇÄÏÈÐ¼¼ Suspend to Hard Drive ÖíÄ»»RÍ` ÄúÈ\_Ö,,Ñ×Ð"Ý Ý ÍÄ»T
8. ¼¼¼QÄÖ"Ø Èä»RÄÏÈÈÍ\_Ñ"ÄòÈäÄòÄ ¿ Äv¼¼¼ÄQÍvÇÈ»T



ÞÍÄz: xéÄqÑ»RIntel Bus Master and Ultra DMA/33 IDE driver ÄÝ¼¼ÄÖ¿ Öa Suspend to Hard Drive ¿mÉúÄÖÈv»T ÄŠ ÖÄÍ, Çí driver ¿zÉúÑ"ÄéÄÏÈÈBoÈ, ¼¼¼ÇÄŠ»RÇj Í, Í` Í, ÖðÈ» Äé»R xéÍØÈ¼¼ÄÖ drivers»T

## ÑÁàl

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Î½ö: %fÀT VGA çu0xÎ ÒiÆE VESA ÆÈv»RÄYçSØRçèÃ  
Suspend to Hard Drive»T

- AOpen PV90 (Trident 9680)
- AOpen PT60 (S3 Virge/BIOS R1.00-01)
- AOpen PV60 (S3 Tiro64V+)
- AOpen PT70 (S3 Virge/DX)
- ProLink Trident GD-5440
- ProLink Cirrus GD-5430
- ProLink Cirrus GD-5446
- ATI Mach 64 GX
- ATI 3D RAGE II
- Diamond Stealth64D (S3 868)
- Diamond Stealth64V (S3 968)
- KuoWei ET-6000



Î½ö: %fÀTÇIÈPçu0xÎ Òi çzØRçèÃ Suspend to Hard  
Drive»T

- AOpen AW32
- AOpen AW35
- AOpen MP32
- Creative SB 16 Value PnP
- Creative SB AWE32 PnP
- ESS 1868 PnP

ÀfÄXÈ' ÄÖÇIÈP çuÀs Suspend to Hard Drive ÄûI |Ä| çÜÈq%ç  
ÄQ»R»èAg0†Èi Æu0uÄpÆ ÄpÄI'çpIÄ APM Bi ÈäI' À»»RÄYÄS  
Òä%Ä»T



×èÄqÑ\_: USB çmÉúçðÄvÄYçÜçç%ÜÖa Suspend to Hard  
Drive È†Äi Î Òi»TÄfÄXÈ' I, I' %ÄÇÄSÄÖI' ÆY»R»èDz%ç  
BIOS»RIntegrated Peripherals à USB Legacy Support»T  
Ý ÈÖ USB Legacy çmÉú»T

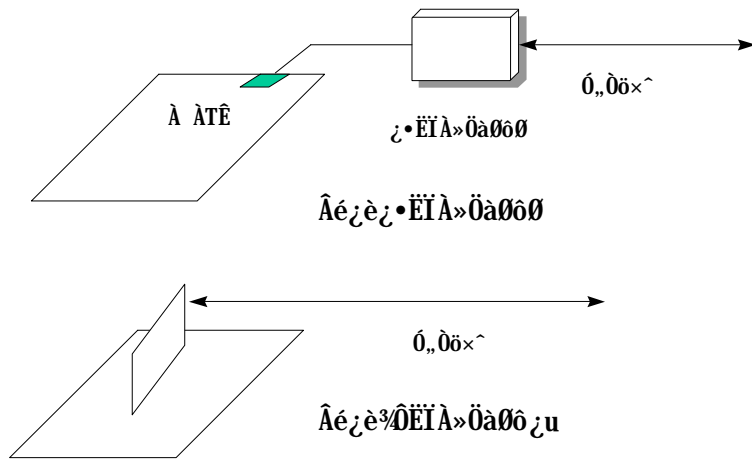


### 1.3 Á\Ó,,Ñ×ÒàØØØ ÕÕËËË"Ø (0V Modem Wake Up)

ÁóÇæÀsÀÓÁiÇÈÈb×ñÁÖ 0V Modem Wake Up çUÇÈÈ ÈŠÓ ÀsÉ^Ó ÄÖÝ Ø ÄÄÖRÁaÜp% Ä| ÆÈÚaÄuÓ,,Ñ×ÁÖÇÑÈÈÈÈ ÁpÈÈÈ% ÚúÈä)»RÍ, Ð çUØ Á`Û Í^%ÄpÍÁÄaÈeÄ@green PC suspend mode»RÀ Í, ÁÝ%ÄsÁóÇæÈb×ñÁÖ×uÍ %»T

Üáçè ATX soft power On/Off»RÁóÇæççYB ÄpÈèÀsÁÓç Ý Ø ÄÖÄÄÖR%F (çYÁÖÓ,,Ñ×ØøÍ' çm Èú%ÄÖ suspend mode ÄÝ%ÄÈ È^çÜÝ ÍÄÄpÈeÓ,,Ñ×) ÀðÈaÈËBçÓ,,Øø»RÀfÁÖÈ\_ççYÈÍÁ ÍÄ Û Ø ÒaÐaÈ^Ø ÄÖçmú»T

Ï]×ñÈ %ÖÈÍÁ»ÛóÈ ç•ÈÍÁ»ÒaØØØ »RÍ%ççY%pÍÁÖV Modem Wake Up çmú»RÀ È Áéçè ç•ÈÍÁ»ÒaØØØ ÄÖÈaÜZE »RE' çÌÐÑB ÒaØØØ ÍSÁ Ð"ÈiÄÖÄÄÖR»TOpen ÄÖ AX5TC Òa%ÖÈÍ À»ÒaØØçUÍ'Áe%WÉdÈ ÄÖ×^ð »RÁiçYÈ'Í]ÐÑÈ Ð`ç À Ó,,Ñ×TÄÄÖRçj È'ÑbÁéççV Modem Wake Up çmúÄÖØø»RÁóÇæÄðPÍÈ'ÈPçè AOpen ÄÖ%ÖÈÍÁ»ÒaØØçU (F56 Äè MP56)»T



# ÑÁàl

## Áéçè%ÖËÄ»Öà06çüEä (AOpen MP56)»X

1. **Ð¼** BIOS setup»RPower Management à Modem Wake Up»RÛ Á Enable»T
2. **ÀŠ**ÖaË' ÁaË Ç€ÀsÐ"Ø ÈãÈ À ÄÖÚÍ çèÏ' Á»»RÁÝË\_ Áp0~ Á » ^ Èi Èä»%0† Ìi %¼ÁèÁb çè Suspend to Hard Drive çüñú»T
3. çY soft power switch Ý ÍÁÁÏè»T
4. çY 4-pin ÄÖ Modem Ring-On Èà×^»RÍ†ËÏ MP56 ÄÖ RING Í†ËÏÛj Öa AX5TC ÄÖ WKUP Í†ËÏÛj »T
5. È\_0,,0ö×^Í†ËÏÄ MP56»TÀ€Ëi»ZÌ' ÁsË' ççY0i0i Modem Ring-On ÄÖçüñú»T

## Áéçèç•ËÏÄ»Öà060 Èä»X

1. **Ð¼** BIOS setup»RPower Management à Modem Wake Up»RÛ Á Enable»T
2. **ÀŠ**ÖaË' ÁaË Ç€ÀsÐ"Ø ÈãÈ À ÄÖÚÍ çèÏ' Á»»RÁÝË\_ Áp0~ Á » ^ Èi Èä»%0† Ìi %¼ÁèÁb çè Suspend to Hard Drive çüñú»T
3. çY soft power switch Ý ÍÁÁÏè»T
4. È\_Öà060 ÄÖRS232 Èà×^Í†ËÏÄö COM1 Áè COM2»T
5. È\_0,,0ö×^Í†ËÏÄ Öà060 »RÍ ^ ÁúçÏD"Öà060 Ö,,Ñ×»RÌ' Ás0i0iÆ:Ár»Z



Í½ö: ç•ËÏÄ»Öà060 ÄÖ wake up Èe00Æ çè COM1 Áè COM2 Ç† ÍuÈ0Ï »W%ÖËÄ»Öà060 ÁyÆ çèÍ†ËÏ RING (Öà060 %h) Öa WKUP (çUØ Ä`%h) ÄÖÈà×^Ç†Íu»T

Í½ö: Suspend to Hard Drive»SModem Wake Up Öa Acephone ÚÍ çèÍ€B ÑwÈ†Áéçè»RE ÍÄÜ Ø ÖaÄÁÍ, ÐaÉ^ÄÖÍæÁè0èÁ^% Èñ»T

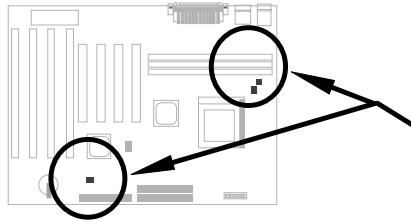


×èÄqÑ\_: Áéçèç•ËÏÄ»Öà060 ÄÖ0ö»RÖa060 ÄÖ,,Ñ×Í\_çÏÐÑÁ`Á ÁsÐ"ÈiÄÖÁÆÖ»WÁÁéçè%ÖËÄ»Öà060 ÄÖ0ö»RÌ\_ÁdÁÍÍ, ÖoÇÇÁ %W»T

## 1.4 À†ÌèÓ,,Ú%ÔäËË (System Voltage Monitoring)

AX5TC ÁyÁÍ%QÇiÓ,,Ú%ÔäËËË»TÑ È'D"ÈiÓ,,Ò%Áù»R Í, ÇiÔäËËÁËËË\_Ñ'Á Þ ÀrÔäËËÁ† ÌèÄ0%ÁQÓ,,Ú%»RÚaÀuÆ ÁpÁÍÁËËèÓ,,Ú%ØhÓ] %Òç ÖeÑaÄ0Ë»Áe»TÇj ÁÍÍ, ÔoË»Áe»RÍ\_Ñ'òxçè ÚÍçèË'À» (Áf Hardware Monitor Utility) Ó ÁéçèÀaË, çì ÞÍÁZèÈÁ»T Í, ÇiÔäËËÁËËççYÔa Æ: CPU Èð%úÓ,,Ú%»TÍ, Æ Òxçè BIOS Ôa Hardware Monitor Utility (ÚaÀh ÚÍ Ý À aohw100.exe»RÁp%¼100 Æ Á ÄÄç000×i) Á % ÓWÁÄÄ0»RÍ|ÐÑÁéçèÄ ÁpçÁËŠB »T

## 1.5 ÇÑÈÈÔäËË (Fan Monitoring)



Í, Ð çUØ Ä` %hÁÍÁùçB-pin Ä0ÇÑÈÈËËÚj CPUFAN Ôa FAN»R%QÇiÍCPU ÇÑÈÈÁéçè»Rç† %QÇiÁyççèÄ Ø Íù%hÄ0ÇÑÈÈ»TÍ, ÇiçmúÆ ÒxçèBIOS ÔaÚÍçèË'À» (Áf Hardware Monitor Utility) ÁiÁ % ÓWÁÄÄ0»RÍ|ÐÑÁéçèÄ ÁpçÁËŠB »T

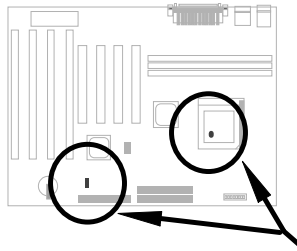


×eÁqÑ\_: È' çÌÐÑÁéçè 3-pin Ä0ÇÑÈÈ»RÍ, ÔoÇÑÈÈ%çpÍÁ CPU ÇÑÈÈÔäËËçmÉúÁi Ô÷Ä0 SENSE Èe00»T

# ÑÁàl

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## 1.6 CPU Ó]Ö Å`BQ (CPU Thermal Protection)



¿Ö¿UØ Ä`ÍñÁÑBÁñÁ`BQ×`ð »RÑ ÑBÁñEÁÁ ÓŠ¿ ÁSÖ„ÁÖÖaÇaEÈRU ÍñÑ`ÁoÈaÇEÁT»R  
ÁY¿SÖx¿èUÍ¿èÍ`Á» (Äf Hardware Monitor Utility) Í, ¿i ÞÍÁZÜEß»Í, Çi¿ñúÆ`Öx¿è BIOS  
Öa Hardware Monitor Utility ÁiÁ`%`ÖWÁÁÁÖ»RÍ]ÐÑÁé¿èÄ`Áp¿ÁÍŠB`»T

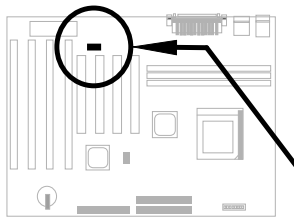
## 1.7 ³pÎÄÄyÖÇÄ‡ÄÖ BIOS (Multi-language BIOS)

ÆÈÍ`Äè AOpen Äé¿èÄæÍæÄèÄÖ³pÎÄ»RAOpen Í€B`Ð`Í, Í»Ä`ÖxÖ]`³³pÄÖÖÖÜi`»RÌñÄ`Á[ÄR  
³³ÄiÁÍÁÖÈ-ÝU»RAÄ¿ñÖÍ, Èz¿i Í`ÄèÄyÖÇÄ¿ÄÄ¿Ö BIOS`ÄÖÄöÍ`»T

È`¿¿YÈ„ÁoÇæÄÖÖ`ÉÖ`¿`ð`È`ÄiÇEÄÖ BIOS`ÄÄ¿Ö` (ÓÍÆ`³³³³) »RÇÄÑ`Ù`Ü`Ä`È`ÄÖ¿UØ`Ä`  
³³¹»T¿YÄñDz¿BIOS Setup`ÍvÇÈÈ»R¿`ÇEÄ`³³F9`Ä`Ûp»RÍ`¿¿Y³³ÜÍÄÄ³³³³ÄÖÍvÇÈ»R  
ÀRÄ`³³QÄÖF9`Áj¿zÄoÄ`Ço³³ÍvÇÈ»T

ÆÄYÍ, ÇiÁöÍ`Ö`È`AsÍñŠBIOS`ÐÍ¿öÈä»RÈ`ÄÍÄiÄfÈ„»T

## 1.8 PCI ÇÌÈÐ¿uÈÌÚj (PCI Sound Card connector)



AX5TC Í¼Áè%W/QÇiSB-LINK ÈÌÚj»R¿z#pÍÁ Creative ÁòÈvÄ0 PCI ÇÌÈÐ¿u»TÀŠ0áí, 0òPCI ÇÌÈÐ¿uÈä»R¿ìDÑ¿èÁ ÀÓÈÌÚj %•Éú0èÁ ^DOS Ú Ói %f Ä0ÁòÈvÈ-YU»T

# İP³XİÓ İŞB ÀŞÒà

¿ÓÍÓË\_ËŞÓ ¿Ó¿UØ À`ÀÓİŞB ÆØt¿¿Y%ØİøR/ØËv¿n¿ÀfÀ Üi ØhÊ` ØeßØBU%æËß»S  
Jumper İmÅ»SÁ İÁÀfıeÓ„AÚİ¿İ¿»T



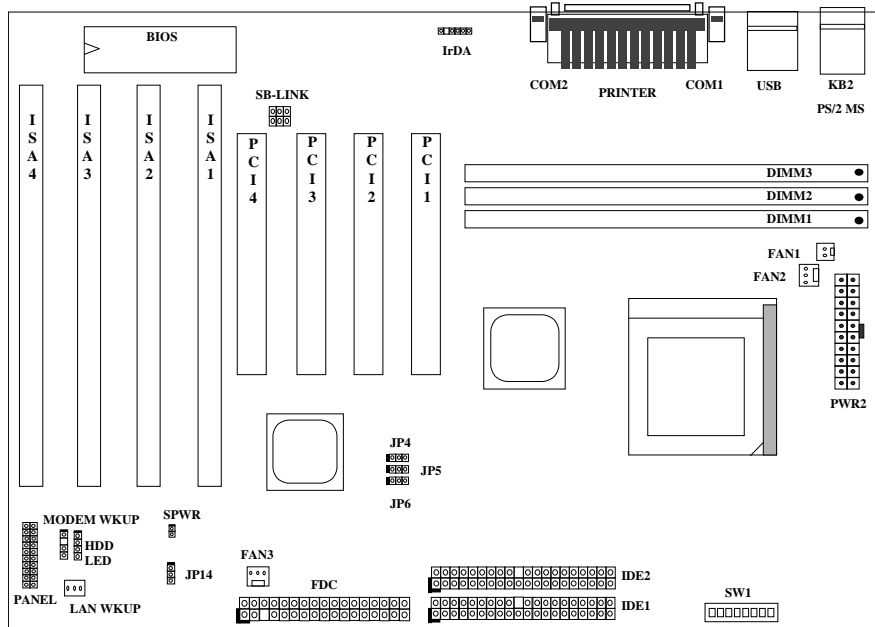
¾f¾ı: ESD (Electrostatic Discharge) ÆËÚcÓ„Á Ó„¾Á  
Ñ\_»R¿eÄ Ü€B Ó„Ø (IC) ÁøËvÁ Á Á ÚcÓ„ÑaÚÍÁÖÖ%ø  
Be»RÁnÁÓÑ“ÁeÑ]ÍŚİ`ØÓ»RØéøeØ »RÜi ¿c¿u%eÁp¿] |  
ÁÖÓ†¿ Á Á ÐaËq»TÆË%WÓŞÁØÚcÓ„Á Ó„ÁiÑ}ÝrÍÓ  
¾ »R×eÜ ÁÆfÁTÁÖÓŞÁØËÓÆZ»X

1. Ê¼ÁUË' %ŞÑÁÍaÀ€Ç€Ð"Á}ÀŞÒaÓ†¿ »RÁpÁy¾ıØf¾½  
Ç€Ë\_Ó†¿ ÁøÁØÚcÓ„¿nØa%¾Á ¿i»T
2. ÀsË' ÀŞÒaÓ†¿ Èã»RÍæÀ€Ër¾ıÁÍËİÁr×^ÁÖ¾ı Ü »R  
¾Í»¿ ÁÖÓ„¾Ó†¿ Á Í¼ÁÍ× »TÁfÁXÁdÁÍ¾ıÜ »R  
×eÁé¿è¿ Á ¿z¿YÁØ¾ ÚcÓ„ÁÖİÜ¿\_Á•ÁiÖaÁıİeÓ†  
¿ %e¿UØ À`ËİĐİ»T

# İŞB ÅŠ0à

## 2.1 Jumper Å^Ëi Új (Connector) ÄÔÀ 0~

¼f ÓeÆzUØ Ä` ¼h Å0umper Å^ ËiÚj ÄÔËt0~ Óe»X



## İŞB ÅŞÒà

### Jumpers

SW1:	CPU Èð%aó,,Ú%ðaÇÙÚh
JP4,JP5,JP6:	CPU ç.Í»ÚhÌ%ç.Úh)
JP14:	Ì^Ê%CMOS

### ËÏÚj

PS2 MS:	PS/2 ÑaÓÁËÏÚj
KB2:	PS/2 Úp×JËÏÚj
COM1:	COM1 Í†ËÏÚj
COM2:	COM2 Í†ËÏÚj
PRINTER:	ÀJÄ Ø Í†ËÏÚj
PWR2:	ATX Ó,,Ñ×ËÏÚj
USB:	USB Í†ËÏÚj
FDC:	Floppy Í†ËÏÚj
IDE1:	ÌP%QÌi IDE Í†ËÏÚj
IDE2:	ÌP%XÌi IDE Í†ËÏÚj
FAN1:	CPU ÇÑÈËÍ†ËÏÚj
FAN2:	CPU ÇÑÈËÍ†ËÏÚj
FAN3:	ÇÑÈËÍ†ËÏÚj
IrDA:	IrDA (Æ ç.×^ÐaÙ ) Í†ËÏÚj
HDD LED:	HDD LED Í†ËÏÚj
PANEL:	Åv¼ ÇÈÅ`À ÚpÓaÙ`ÒÓÍ†ËÏÚj
SPWR:	ATX Soft-Power Switch Í†ËÏÚj
MODEM-WKUP:	MODEM Wake Up Í†ËÏÚj
LAN-WKUP:	LAN Wake Up Í†ËÏÚj
SB-LINK:	Creative PCI ÇÌÈPçuf†ËÏÚj



# İŞB ÅŠ0à

## 2.2 Jumpers

Åi Üñ Jumper İ\_E Ñ Åé:èÄaÇÈÈÄ çUØ Ä`Æ ÄpÈiÈäÄeÝ ÍÆËj DÍçnúÈä»RçİDN×iØý  
 Å0À 0~»Tumper İ„ÈqE %QÄeÄyÇiDUÜÄ0Ä ×A% D İ»As%QÈaÄ ÄüÄ0ÈaÈS%r»RAi×iØý  
 Å0% A»E È\_D ×ÄÍfÖñ NáÇEAS0~Ä00”A (pin) ÅÄÄ×İ»ÄtÄj çz»Tç0I½Ä•çi 0iÈaÄ0  
 Jumper Ä»İnÄsİæÈq:èÄèİæÄè%aÄ0ÄÄ0R»RÄs×iØýÄv×e×e0’ È’ ççç %Ä0èÄpÑ\_0,,»T  
 Äs0 0ðÄ0çUØ Ä`%r»RÍ„ÈqÑ”ÄÍçi ÄüÄ0İä×`0èç0Ä İP%Q0”(pin1)Ä Ä »RÑ Áo  
 Çæ0»Äü Jumper İñÄs 1-2Ä0Ä 0~ Èä»RÑ\_ÄpÆ Ä È\_D ×Ä0Ä D )İ»Äs pin1 Ä^  
 pin2 Ä0Ä 0~%r »RÈ\_ÄpÍ†KÛ^0 )Äs%QÈp»TÄfÄXÄoÇæ0»Äü Jumper Open  
 Èä»R Ñ\_ÄpÆ Ä È\_D ×Ä% D İ0D”»WÑ ÁoÇæ0»Äü Jumper Short Èä»RÑ\_ÄpÆ  
 Ä È\_D ×Ä% D İ»%r »RÄéÄpİ^0 »T



Open



Short

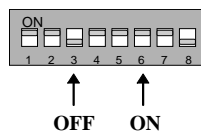


Jumper set at 1-2



Jumper set at 2-3

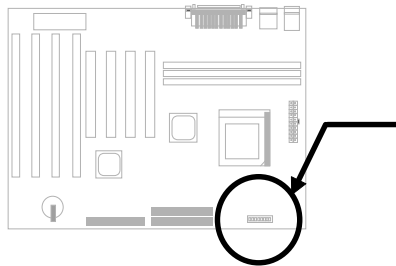
È½Ä0ÄèÄ0 Jumper %Äç•»RÍ„D çUØ Ä`%r»RÍ„ÈqÑ”ÄÍçi ÄüÄ0İä×`0èç0Ä İP%Q0”(DIP Switch) **SW1** Äí  
 İñÄS CPU Èð%Ä0„Ü½(Vcore) 0aÇÜÜh»R×eÈe0ñ0ÄüÄ00e0èÄi ÈİİñÄS»TÄsç0üçf %Ä»R  
 Çj ÄÍI½Ä Ä 0ÑD”Ý Ä0 ON/OFF»RÍ½E Äé:èÄfÄa%ç 0éÄ0Ä ç0% Ä»T



## 2.2.1 İnÅŠ CPU 0,,Ú½

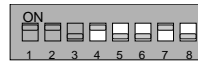
S4	S5	S6	S7	S8	Vcore
ON	ON	ON	ON	OFF	3.52V
OFF	ON	ON	ON	OFF	3.45V
OFF	OFF	ON	ON	OFF	3.2V
ON	OFF	OFF	ON	OFF	2.9V
OFF	OFF	OFF	ON	OFF	2.8V
OFF	ON	OFF	OFF	OFF	2.2V
OFF	ON	OFF	ON	ON	1.8V

**SW1** çèÁí İnÅŠ CPU Èð%ı0,,Ú½ (Vcore) ÓaÇÜÚh»RÀĐIP %hÀQÀŠ Û %ŰİÁÁ»Đ"Ý »RÅŠÒàŁ€ CPU %Á Áú»R×è çè İĐ4-8 İi Đ"Ý Ái Á ÅŠ Vcore»T



**3.2V**

K6-233



**2.9V**

K6-166/200 or M2



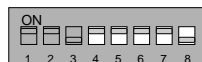
**2.8V**

P55C (MMX)



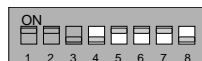
**2.2V**

K6-266/300



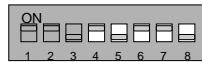
**3.52V**

6x86, K5 or IDT C6



**3.45V**

P54C



**3.3V**

IDT C6

## İŞB AŞÖa

»Ä DaÄTzi çöÄvzÄÇE»ÄzÄ»ÄCPU İNÄŞ»Ä»R Ó ÖöÄÖİnÄŞÇa;ZEUÑÖaÑ†ÄÖ CPU ÄİÄÄzi »RİnÄŞEa»eEÄİEeÖmE' CPU ÄÖÖ»Ä »T

CPU	Type	Vcore	S4	S5	S6	S7	S8
INTEL P54C	Single Voltage	3.45V	OFF	ON	ON	ON	OFF
INTEL P55C	Dual Voltage	2.8V	OFF	OFF	OFF	ON	OFF
AMD K5	Single Voltage	3.52V	ON	ON	ON	ON	OFF
AMD K6-166/200	Dual Voltage	2.9V	ON	OFF	OFF	ON	OFF
AMD K6-233	Dual Voltage	3.2V	OFF	OFF	ON	ON	OFF
AMD K6-266/300	Dual Voltage	2.2V	OFF	ON	OFF	OFF	OFF
Cyrix 6x86	Single Voltage	3.52V	ON	ON	ON	ON	OFF
Cyrix 6x86L	Dual Voltage	2.8V	OFF	OFF	OFF	ON	OFF
Cyrix M2	Dual Voltage	2.9V	ON	OFF	OFF	ON	OFF
IDT C6	Single Voltage	3.52V 3.3V	ON ON	ON OFF	ON ON	ON ON	OFF OFF



PIÄz: ÄfÄXE' Äe;è Intel PP/MT-233 Äe AMD K6-200/233 »eÄe;è Ö »ÄÖ CPU ÇNEE»TÄfÄXİ JA|İBÄİ İ, Äa CPU ÄÖİİÖ Ö=ÄU»RÄ†İè;ZEUÑ'İ, çç»ÄÇÄŞÄÖİ' DÜ»TÄİY Ä CPU ÇNEE»RÄSÄöÇæÄÖ web EÖ (<http://www.aopen.com.tw>) »ÄÄÄTzi »BY' ÄÖÖ Ee»T



İ½ö: İ Ö,,Ü½CPUÄÖ I/OÖ,,Ü½Vcpuio (CPU I/O Voltage) İ;Ä Eö»Ä Ö,,Ü½Vcore»RÄ E Ö Ä Ü Ö,,Ü½CPU Äf PP/MT MMX (P55C)»SAMD K6 Äe Cyrix 6x86L/M2»RVcpuio Öa Vcore ÄY»ÄÄa»RVcpuio »EÄİ İ;Ä Vio (PBSRAM »e Chipset Voltage)»T;Ö;UÖ Ä ÄİÉdE »^Ö çz çYÄöEÄEÖİ İ Ö,,Ü½ÄeÜ Ö,,Ü½CPU»T

İ½ö: İ, D çUÖ Ä Äe;è»ÄV5 İi»ÄİÄD"Y ÄİÄ ÄŞ Vcore»RÄİ çYÜqÄQçz Äİ 32 ÖöİnÄŞÇa»RÄİ»R»ÄW 1.3V Ä 3.5V »ÄD»ÄÖÄİÄİÖ,,Ü½»RÄe;YÄÜ ÄQÉB CPU EÄE Ä ÄyÖÄä»T

İ½ö: IDT WinChip C6 ÄİÄüÖö»ÄaÄÖÖ,,Ü½Ça»R»ÄÜÄ E 3.3V Öa 3.52V»RİnÄŞÄv»eEeÖmE' ÄÖ CPU Ö»Ä Ee»T

## IŠB AŠ0a

Í, Ð ĺU0 Ā ĺY%pĪĀ 1.3V Ā 3.5V %AD»Ā0 CPU Èð%u0,,Ú%»RĀs CPU ĀQEÈEĀĪaĀy0`  
 Āa»TĺY%F Ē ĀiĀI0,,Ú%CaĀ0ĪnĀŠ% A»»X

<b>Vcore</b>	<b>S4</b>	<b>S5</b>	<b>S6</b>	<b>S7</b>	<b>S8</b>
1.30V	OFF	OFF	OFF	OFF	ON
1.35V	ON	OFF	OFF	OFF	ON
1.40V	OFF	ON	OFF	OFF	ON
1.45V	ON	ON	OFF	OFF	ON
1.50V	OFF	OFF	ON	OFF	ON
1.55V	ON	OFF	ON	OFF	ON
1.60V	OFF	ON	ON	OFF	ON
1.65V	ON	ON	ON	OFF	ON
1.70V	OFF	OFF	OFF	ON	ON
1.75V	ON	OFF	OFF	ON	ON
1.80V	OFF	ON	OFF	ON	ON
1.85V	ON	ON	OFF	ON	ON
1.90V	OFF	OFF	ON	ON	ON
1.95V	ON	OFF	ON	ON	ON
2.00V	OFF	ON	ON	ON	ON
2.05V	ON	ON	ON	ON	ON
2.0V	OFF	OFF	OFF	OFF	OFF
2.1V	ON	OFF	OFF	OFF	OFF
2.2V	OFF	ON	OFF	OFF	OFF
2.3V	ON	ON	OFF	OFF	OFF
2.4V	OFF	OFF	ON	OFF	OFF
2.5V	ON	OFF	ON	OFF	OFF
2.6V	OFF	ON	ON	OFF	OFF
2.7V	ON	ON	ON	OFF	OFF
2.8V	OFF	OFF	OFF	ON	OFF
2.9V	ON	OFF	OFF	ON	OFF
3.0V	OFF	ON	OFF	ON	OFF
3.1V	ON	ON	OFF	ON	OFF
3.2V	OFF	OFF	ON	ON	OFF
3.3V	ON	OFF	ON	ON	OFF
3.4V	OFF	ON	ON	ON	OFF
3.5V	ON	ON	ON	ON	OFF

# İŞB AŞ0à

## 2.2.2 Ü Øö CPU ÚhÌ%

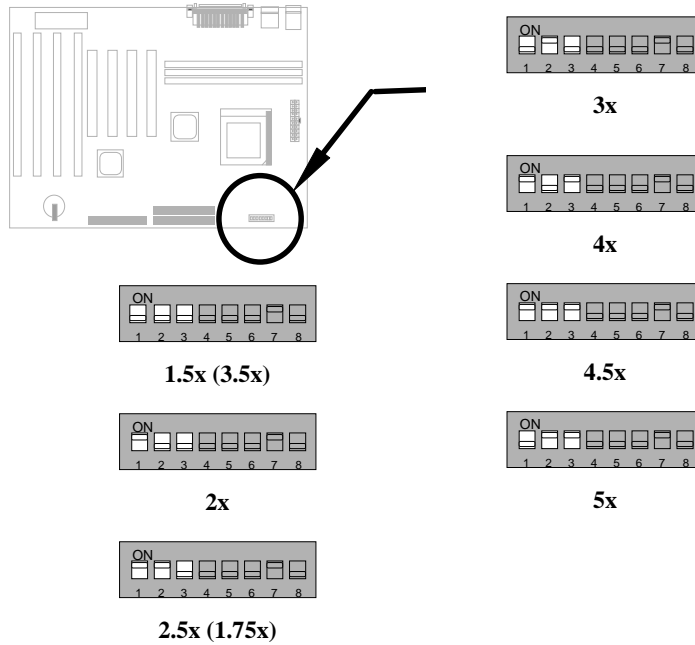
S1	S2	S3	CPU ÇÜÚh
OFF	OFF	OFF	1.5x (3.5x)
ON	OFF	OFF	2x
ON	ON	OFF	2.5x (1.75x)
OFF	ON	OFF	3x
ON	OFF	ON	4x
ON	ON	ON	4.5x
OFF	ON	ON	5x

SW1 1-3 İi%ÖTÄB"Y Æ çè  
 ÂiİnÅÇÜÚh(CPU Ratio) çèÄÖ»T



Ä İ : Intel PP/MT MMX 233MHz Âéçè 1.5x ÄÖİnÅŞÄiÑ ÄQ 3.5x ÇÜÚh  
 çè»RÄi AMD PR166 Âéçè 2.5x ÄÖİnÅŞÄiÑ ÄQ 1.75x ÇÜÚhçè»T

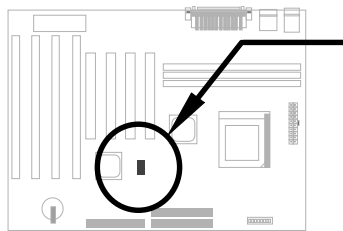
**Taf1%ÖI»ÚhÌ% = ÇÜÚh (Ratio) \* ç·İ»ÚhÌ%(External bus clock)**



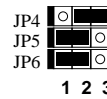
## İŞB ÅŞÒà

JP4	JP5	JP6	CPU ç•İ»Ùhİ%
2-3	1-2	1-2	60MHz
1-2	1-2	1-2	66MHz
1-2	2-3	1-2	75MHz
2-3	1-2	2-3	83.3MHz

JP4»SJP5 òa JP6 çèÁíÍnÅŞ  
CPU ç•İ»Ùhİ%(bus clock)»R  
Áj Ùhİ%½ç00ÅÖÜ çì Ùhİ%Tç•  
Í»Ùhİ%QÉ Ùİ0óç•Ùh»T

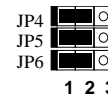


JP4 & JP5 & JP6



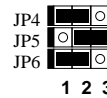
60MHz

JP4 & JP5 & JP6



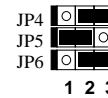
66MHz

JP4 & JP5 & JP6



75MHz

JP4 & JP5 & JP6



83.3Mz



ÞİÁz: INTEL TX İ0% İiĐa%pİİÅ 60/66MHz CPU ç•  
Ùh»R 75/83.3MHz ÅÖİnÅŞAj`ÉuÅe%Öİ»İ Òiçè»RİnÅŞ  
ÅÅ75/83.3MHz Đhçì TX İ0% İi%pİİÅÖİhÈ »RçzÉúÑ»  
Þj ÇÅÑ}ÈqÉ` ÅÖÅİè»T



×e%ç%â: çÖÅ È ĐàATçìçòÁvçÇÈ%h%ŞHE,,ÅÖ CPU»Rån  
ÆE%4İpİİÑ† CPU ÈÚçì»RçÛ»eÅÖİnÅŞ»eÈèÀi CPU ÒİÉİ  
İ¼ÅeÅÖİhÈ »T



ÞİÁz: Cyrix 6x86 P200+ Âéçè75MHzç•Ùh»RÀTçìİpİİn  
ÅŞçòÅÖÅsÅRÈâ Cyrix P200+ÅÖÅéçèÅæ»R»eÅqÑ\_İnÅŞÅÅ  
75MHz»RçzÉúÑ»Þj ÇÅÑ}ÈqÉ` ÅÖÅİè»T

INTEL	%Öİ»Ùhİ%	ÇÙÙh%	ç•Ùh	S1	S2	S3	JP4 & JP5 & JP6
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## İŞB AŞÖä

<b>Pentium</b>							
P54C 90	90MHz =	1.5x	60MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
P54C 100	100MHz =	1.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2
P54C 120	120MHz =	2x	60MHz	ON	OFF	OFF	2-3 & 1-2 & 1-2
P54C 133	133MHz =	2x	66MHz	ON	OFF	OFF	1-2 & 1-2 & 1-2
P54C 150	150MHz =	2.5x	60MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
P54C 166	166MHz =	2.5x	66MHz	ON	ON	OFF	1-2 & 1-2 & 1-2
P54C 200	200MHz =	3x	66MHz	OFF	ON	OFF	1-2 & 1-2 & 1-2

<b>INTEL Pentium MMX</b>	»Ühİ%	ÇÜh¼	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
PP/MT 150	150MHz =	2.5x	60MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
PP/MT 166	166MHz =	2.5x	66MHz	ON	ON	OFF	1-2 & 1-2 & 1-2
PP/MT 200	200MHz =	3x	66MHz	OFF	ON	OFF	1-2 & 1-2 & 1-2
PP/MT 233	233MHz =	3.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2

<b>Cyrix 6x86 &amp; 6x86L</b>	»Ühİ%	ÇÜh¼	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
P150+	120MHz =	2x	60MHz	ON	OFF	OFF	2-3 & 1-2 & 1-2
P166+	133MHz =	2x	66MHz	ON	OFF	OFF	1-2 & 1-2 & 1-2
P200+	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 1-2

<b>Cyrix M2</b>	»Ühİ%	ÇÜh¼	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
MX-PR166	150MHz =	2.5x	60MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
MX-PR200	166MHz =	2.5x	66MHz	ON	ON	OFF	1-2 & 1-2 & 1-2
	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 1-2
MX-PR233	200MHz =	3x	66MHz	OFF	ON	OFF	1-2 & 1-2 & 1-2
	166MHz =	2x	83.3MHz	ON	OFF	OFF	2-3 & 1-2 & 2-3
MX-PR266	233MHz =	3.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2

<b>AMD K5</b>	»Ühİ%	ÇÜh¼	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
PR90	90MHz =	1.5x	60MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2

## İŞB AŞÖa

PR100	100MHz =	1.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2
PR120	90MHz =	1.5x	60MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
PR133	100MHz =	1.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2
PR166	116MHz =	1.75x	66MHz	ON	ON	OFF	1-2 & 1-2 & 1-2

AMD K6	»Ühİ%	ÇÜh%	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
PR2-166	166MHz =	2.5x	66MHz	ON	ON	OFF	1-2 & 1-2 & 1-2
PR2-200	200MHz =	3x	66MHz	OFF	ON	OFF	1-2 & 1-2 & 1-2
PR2-233	233MHz =	3.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2
PR2-266	266MHz =	4x	66MHz	ON	OFF	ON	1-2 & 1-2 & 1-2
PR2-300	300MHz =	4.5x	66MHz	ON	ON	ON	1-2 & 1-2 & 1-2

IDT C6	»Ühİ%	ÇÜh%	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
C6-150	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 1-2
C6-180	180MHz =	3x	60MHz	OFF	ON	OFF	2-3 & 1-2 & 1-2
C6-200	200MHz =	3x	66MHz	OFF	ON	OFF	1-2 & 1-2 & 1-2



«ÄqÑ: Cyrix 6x86/M2 Ä^ AMD K5 CPU Äéçè P-rating ÄQÄÖa  
Intel P54C İ†Äñ% Ö ÈäÄÖÈèÄi Ä Öe»RÄp»ÖI»Ühİ»ÄY%ÄBAi ÖeçöAs  
ç•ÄÖP-rating»TÄiÄf»RCyrix P166+ Äp»ÜhÄE133MHz Ä ÈDÉúE İç  
Ä P54C 166MHz»RÄi AMD PR133Äp»ÜhÄE100MHz Ä ÈDÉúE İçÄ  
P54C 133MHz»T

«ÄqÑ: INTEL TX İÖ% ÄY%ÄpİÄ50/55MHzÄÖç•Üh»RÄi çYçÖçUØ  
Ä`ÄÉÄéçè INTEL P54C 75MHz»RCyrix P120+»RP133+ Ä^ AMD  
PR75 İç CPU»T

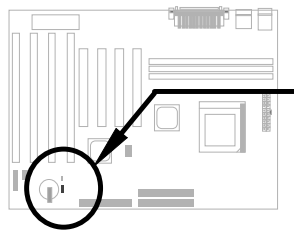


# İŞB ÅŠ0à

## 2.2.3 İ^Ê½CMOS

JP14	Clear CMOS
1-2	Normal operation (default)
2-3	Clear CMOS

ÀfAXÈ'ÁeÈ`ÁiİnÅŠ0ÀİèÈ\×i Èã»RçİDÑç È\_  
 ÅÓI[~fv.İİmÈC>D>Rİ^È'ÁYÇÁİmT^`diÅÓIİÅŠ  
 ÇâÁú»R%•ÉúÇÅÑ†D"Ø »T



JP14



Normal Operation  
(default)

JP14



Clear CMOS

### İ^Ê½CMOS ÅÓI' ÁáÀf³f:

1. ×ê×eÅŠ0,,Ø¼ÅÓ0,,Ñ×%ŠY È0»T
2. Åã06 Jumper Èİ0~0éÁpçi JP14 Åi ÅsÅ0À 0~»T
3. È\_D ×Åİf0†¼ D )Å %fÁi»RÁ È^Å2-3 0"À %4»T
4. %QÑ'ÁúÈãD»Áú»RÁ %fD ×Åİf0†¼ÇÅÑ†È^ ÅoÅ 1-2 0"À %4»RÁ İpçÜÈç06ÁQÅMØR»T
5. ÇÅÑ†çİD"0,,Ø¼0,,Ñ×»T
6. ÀfAXÑbÇ€İnÅŠÑ†Å0ÀİèÈ\×i »RçÅsÅİèÈi ÈãÈã»RÁ %f [DEL] Å ÜpDz¼ BIOS Setup İ'À»%¼»RÅÇÅÑ†İnÅŠÑ†È\×i »T

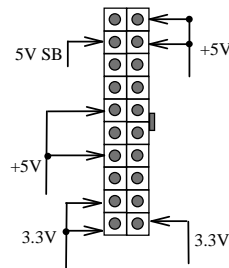
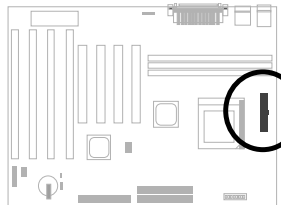
## 2.3 İ†ËİÚj

### 2.3.1 Ó,,Ñ×İ†Ëİ×^

ATX Ó,,Ñ×İ†ËİÚj ÅéçèÀf%Ä Å020-pin İ†ËİÚj »R×è×eÅŞÈ'İ»%4Å0% ÅgÆ çÛ×eÅ0»T



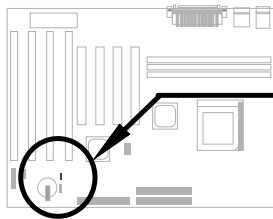
×è%4%å: Åsİ†ËİÅeÅ0E¼Ó,,Ñ×İ†Ëİ×^%4Åv»R×èç Ý  
İÅ†İeÓ,,Ñ×»T



PWR2

### 2.3.2 ATX Soft-Power Switch ËİÚj

ATX soft-power switch İ†ËİÚj Å 2-pin Å0»T×èç È,, ATX 0 İuÅ0Åv% ÇÈÀ` %4hÅpçi 0è çöÅE "power switch" Å0 4-pin İ†Ëİ×^»Rİ^ Åuİ†ËİçU0 Å` %4hÅE soft-power switch İ†ËİÚj (0èçöÅE SPWR)»T

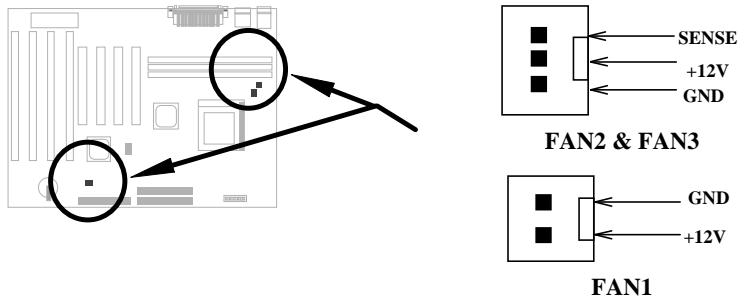


SPWR

# İŞB AŞ0a

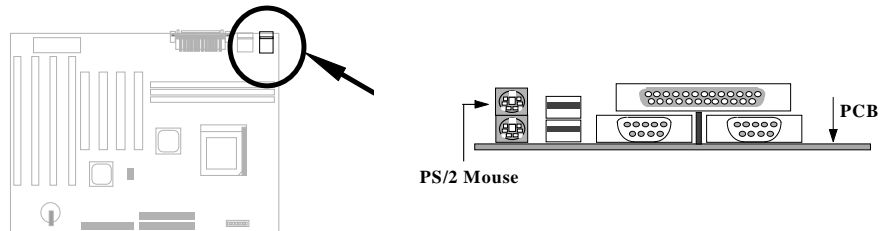
## 2.3.3 ÇNĖĖ

Í, Ð çU0 Ä` %41ÄFAN1»SFAN2 0a FAN3 %eÇiÇNĖĖĖİÜj »XCPU ÇNĖĖççYĖİAs 2-pin Ä0 FAN1 Äè 3-pin Ä0 FAN2 ĖİÜj %41»WÄFAN3 ÄyççYİtĖİ0 İüÄ0ÇNĖĖ»T×eÄq N\_»Rç^Äİ3-pin ĖİÜj %pİÄÇNĖĖ0aĖĖçnú»RÄMĖİ, 0oĖİÜj ÄİÄy%QÇiSENSE Ėİ0»T



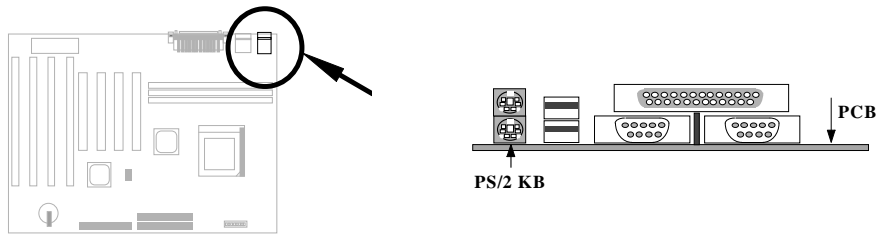
## 2.3.4 PS/2 Nã0Ä

×eİtĖİ PS/2İNã0ÄÄ 0eçöÆİPS2 MSİÄ0ĖİÜj %41»T



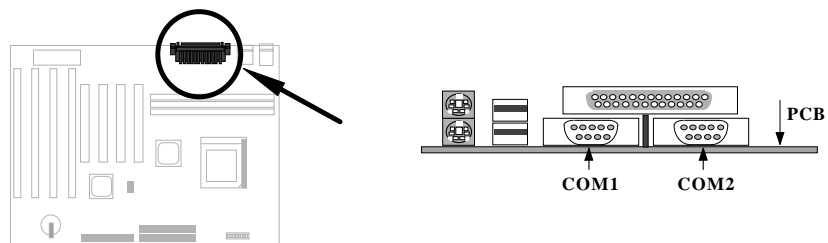
### 2.3.5 PS/2 Ûp×]

×èÈ\_PS/2 Ûp×] ÈÏÀ ÒèçöÈ KB2 ÄÔÏ†ÈÏÛj %41»T



### 2.3.6 À ÀTÈ (COM1/COM2)

Åû% ÇÈÀ` %41ÀÏÀüçì ÖèçöÈ COM1 Òa COM2 ÄÔ 9-pin D-ÄÈÏÛj »RççèÀÏ†ÈÏÀ AT È ÑàÓÀ(serial mouse) ÄèÈ Òà000 »TÀp%41P%QÇÏÀ ÀTÈ ÈÏÛj ÖèçöÈ COM1»WÏP%K ÇíÅyÖèçöÈ COM2»T

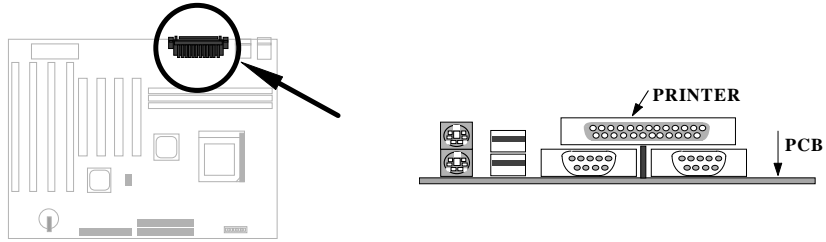


# İŞB AŞÖà

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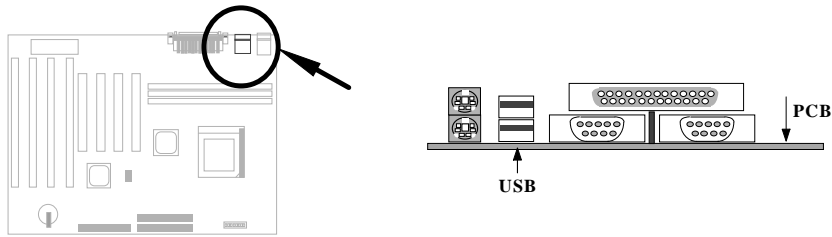
## 2.3.7 À]Ä Ø

çUØ Ä` Äü% ÇÄÄ` %11ÁÍ%QÇi Öêö«PRINTER ÄÖ 25-pin D-ÄÄËÏÚj »RçêÄíÀŠÌ»ÄÝÄTÄÄj  
Ä Ø »T



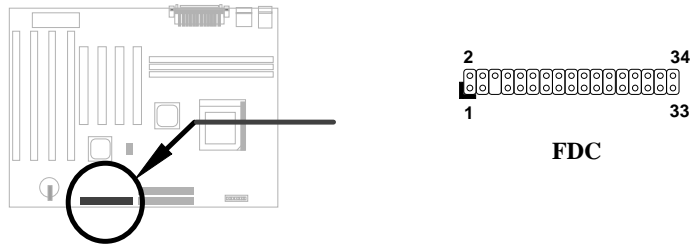
## 2.3.8 USB ÖàÖ~

Ë` çË\_ USB ÖàÖ~ Í†ËÏÄ USB ËÏÚj »TÍ, Ð çUØ Ä` %11ÁÍÄüçUSB ËÏÚj »RÖêçöÄË  
USB»T



### 2.3.9 Í€ÒèØ

Às¿UØ Ä` %hÁÍ%QÇiÖè¿öÄFDC ÄÔ 34-pin ÈÏÚj »R¿z¿eÁÍÍ†ÈÏÄü¿<Í€ÒèØ »T

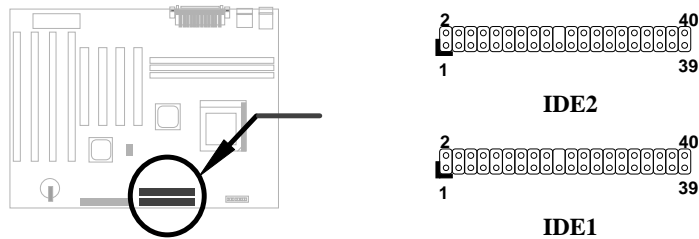


### 2.3.10 IDE İŞÖèØ Òa CDROM

Às¿UØ Ä` %h»RÈ†ÄÍÄüÇiÖè¿öÄIDE1 Ä^IDE2 ÄÔ 40-pin ÈaÈŠ»R¿z¿ÁÍÍ†ÈÏÄüÇi IDE  
 ÒaÒ~»RÍa¿y¿zÍ†ÈÏ¿Çi IDE ÒaÒ~»R%QÉIDE1 %dÖöÄÈ¿ÚÍ„ÖU(primary channel)»R  
 IDE2 %dÖöÄÈÄÖÍ„ÖU (secondary channel)»T

Í†ÈÏÄ ¿ %QÍ„ÖUÄÖİP%Q¿<ÒaÒ~¿İĐNÍInÄFmaster mode»WİD%K¿<ÒaÒ~¿İĐNÍInÄF  
 slave mode»T¿ %QÇiÒaÒ~Ä»¿zÄÈİŠÖèØ Äè¿ ÖèØ »T

×èÈ\_È'İP%Q¿<ÒaÒ~ÍnÄFmaster mode ÄYÈİÄ IDE1»RİD%K¿<ÒaÒ~ÍnÄFslave mode  
 ÄaÖaÈİÄ IDE1»TÄfÄXÈ'ÄİİP%e¿<%èİP¿¿<>R×èÄÄaÈİÄÄ IDE2 ÄÔ master %è slave  
 mode»T

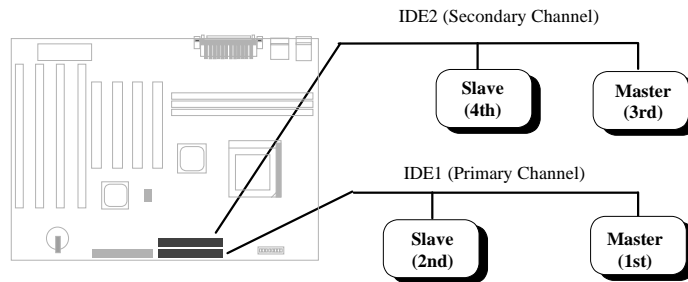


## İŞB ÅŠ0à



×è%ƒ%u: IDE İhÈ À0PİÈà×^İæÄ %4%zDhÓ] 46 %×%U  
(18Ç0àe)»R;YÁ\Ò ÈàĐaÜ %4/»T

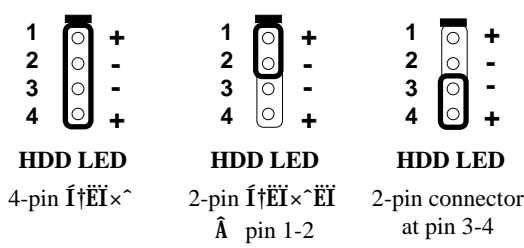
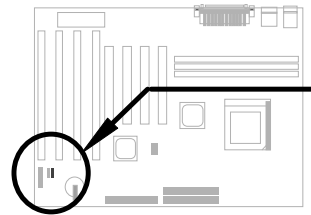
×è%ƒ%u: ÅÈÓWÄ İæÄeÄ0AY00Ä•× »RÈä×^İæÖÑ0÷Ä0  
0a0~İæÄ€İnÄÄ master mode»RÄYÄæNi %ƒ0èÄ0PİÄ0ĐĐ  
ÄäÅŠ0aÑ†0a0~»T



### 2.3.11 İŞ0ê LED Ä çöÜ`

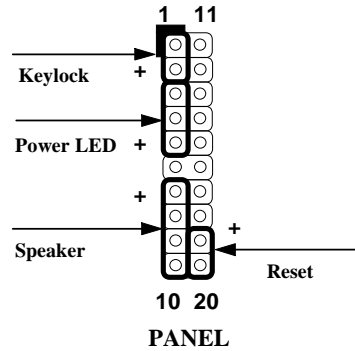
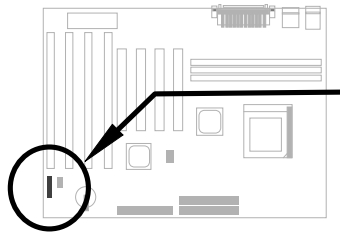
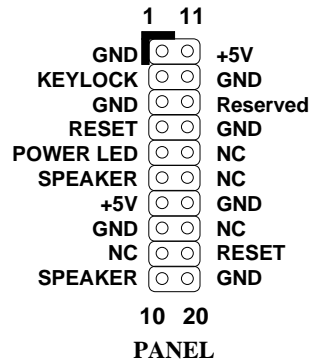
İŞ0ê LED Ä çöÜ` 0èç0äÄÄ HDD LED»Rİ, Çi ÈaÈŠ  
çRçèÄ Äƒ 0è%4/ÄaÄ00 İu»RÄfÄXÄi ÅŠ0aÄ00 İuÄv  
% ÇÈÄ` Ä Äİ 4-pin İ†Èİ×^»R×èÄ×Èİİ»%4»TÄfÄXç  
Ä 2-pin Ä0İ†Èİ×^»Rçç;YÜ 0èÄŠİ» 1-2 Äè 3-4»R  
Ä ×èÄqŃ\_ÑçÄä»T

Pin	Description
1	HDD LED
2	GND
3	GND
4	HDD LED

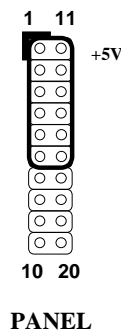


2.3.12 Av¼ ÇEÄ`EİÜj

Av¼ ÇEÄ`EİÜj 20-pin Èa ÈŠ »R Öè çö ÅÅ  
**PANEL**»TÀÖÈa`EİÜj çZİ†EİÖ„N× (power) LED  
 Å çöÜ`»RÜp×]Ü (keylock)»RÇÄÑ†Ø (reset) Å  
 Ø»Rİüç' (speaker) İç»TE' çç YÄæç|ÖéÄiÅŞÖa»T  
 ÄÍÄáØ İüÆ Äéçè 5-pin Í†Eİ×`ÄiÍ†EİÜp×]Ü Öa  
 Ö„N× LED Å çöÜ`»RÄEÍ, ÄüliÈaÈŠÆ ÅØWÄÖ»R  
 ÄiçYÄéçè¼¼¼¼ÄÍE÷YU»T



ÄfÄXØ İüAvÇEÄ`EİÜj 12-pin1 ÄÖÍ†Eİ  
 ×`»RE' çç YÄæç|ÖéÄÖ¼ Ä»ÄiÅŞÖa»R×è×e  
 ÄŞÍ†Eİ×`ÄÖÆ ×`Æ Í†EİÄ 1+5V1 ÄÖA  
 Ö~»T





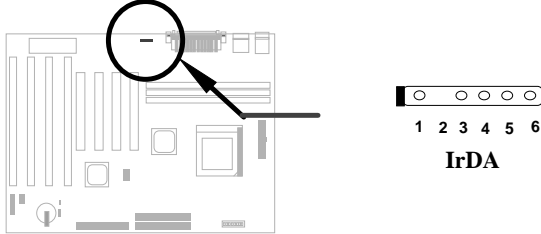
# İŞB AŞ0à

## 2.3.13 İ•x^ĐaÙ Ê (IrDA)

İÖİU0 Ä` Ä0İP%XA` ATÊ (serial port 2) İz%İİÄ IrDA İ İ•x^İi»TÄi Üñ IrDA (Infrared Data Association) Ç İÖÊ İëHP»SCompaq»SBM İİÜfÄi ÄÄüÄ0%QÇİİi Üİ»RİëÄi ÈÜ0†0S İëİ İ•x^Đa x^0 ÈÄÄ0Ä0İ\_0aÜİ İë»TÄüÄi İÊP Äİ0İÊİ İİ%»R IrDA Ä\İ%ÄSÄeÄÄE İ•x^ĐaÜ Ä00eÑ»TÇÊÊ`Ä00,,0%ÄyİaE İ•x^ĐaÜ İñü»RİSİBÄi IrDA İñÄŞ»Rİ\_ÉuÉ Äs%QÄŞĐKÜ %0»R%40-ÇÊİ†Êİ×%ÄÊİ†Êİ»RÄj İzÄoÈa0aİÄÊ` ÄÄ0,,0% ÄeÇi %Y0aÄ Äfİ` (PDA) ÄÊ%Äİ†x^»SĐa00ÜaÈn0 ÈaÄeÈ\_ %İ İvÄ %İİÄ IrDA Ä0Ä] Ä 0 ÄTÄ]»TİÖİU0 Ä` İz%İİÄ-İPSIR (115Kbps, 1 meter) »SASK-IR (56Kbps) 0a Fast IR (4Mbps, 2 meters) İİİhÈ »T

ÄŞ0aÈ»R«eÈ IrDA İ İ•x^İiÄŞİ»Ä İU0 Ä` %Ä0eÄİ IrDA Ä0ÈaÈŞ»TÄŞ0a%ÄÄu»RÈ` Üóİ İ0-Đ"Èi ISZ dİdv† fİÄ0Ä0E İ•x^ İñü»R% İz İÜÊ%ÄQ»T

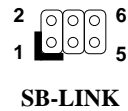
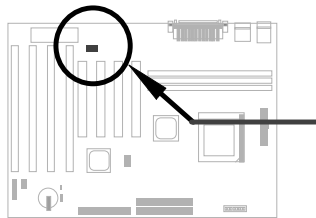
Pin	Description
1	+5V
2	NC
3	IRRX
4	GND
5	IRTX
6	NC



## 2.3.14 SB-LINK

SB-LINK Æ çèÁíÍ†ĚĪ Creative ÆòĚv PCI ÇĪĚPçuÄÖ»T  
 ÅŠÒà»Creative ÆòĚvÄÖ PCI ÇĪĚPçu»RĪçĪĎĪ†ĚĪÄÖĚĪ  
 Új »RçYÒèÄ ÐOS Ú Ói »f ÄÖ»ĚvÈ÷ÝU»T

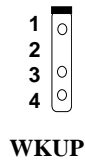
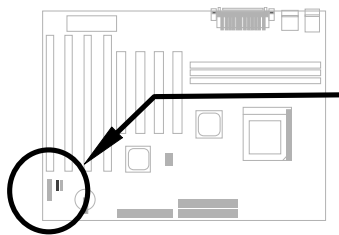
Pin	Description
1	GNT#
2	GND
3	NC
4	REQ#
5	GND
6	SIRQ#



## 2.3.15 Wake-up ĚĪ Új

çÒçUØ Ä` »ÄÄýÁÍÉdÈ ×^Ò Ínçf»Rçz»pĪÄÖàØØØ ÖÖĚĚ»Ø  
 (Modem Ring-On) çĪú»R»ÖĚĪ» (AOpen MP56) Äèç•ĚĪ  
 À»ÖàØØØ Ä»çØRçè»TçĚÄ Äéçè»ÖĚĪ»ÖàØØçuÄÖÖ»RçÇĚã  
 ĚòçÖ»Ä÷ĚİÐ`Ó„Ń»RĪiçYÁóÇa» Ò ÄòPĪĚ`Äéçè»TCj Ě`ĚP  
 çèÄÖÆ AOpen MP56»RĪy×èÄéçè 4-pin Í†ĚĪ×^»RĪ†ĚĪ  
 MP56 ÄÖ RING ĚĪÚj ÖaçUØ Ä` »ÄÄ»WKUP ĚĪÚj »T

Pin	Description
1	+5V SB
2	NC
3	RING
4	GND

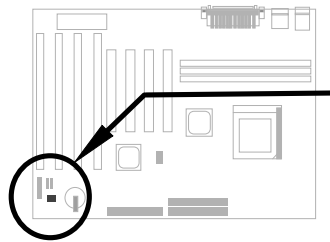


# İŞB ÅŠ0à

## 2.3.16 LAN Wake-up ĘİÚj

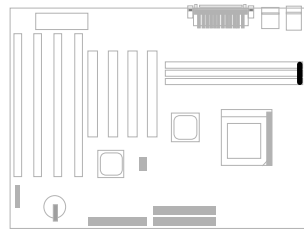
žŃžU0 Ä`ÁyÁÍLAN-WKUP ĘİÚj »R Ç€ÁéžŁLAN Wake-up  
žŃú»RžİĐŃŃwĚİ%pİÁÁóžŃúÁŃŃŃ Ń žuŃaŃ ŃŃÍ€B (Áf  
ADM)»T

<u>Pin</u>	<u>Description</u>
1	+5V SB
2	GND
3	LID



LAN-WKUP

## 2.4 ÅŠÒà;UÊ`Øêß



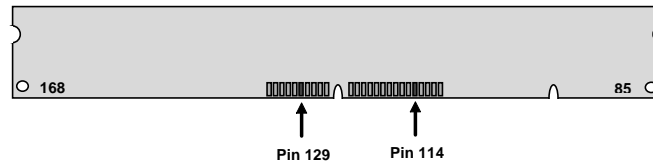
Í, Ð ;UØ Ä`ÀÍ3 È 168 pin ÅÖ DIMM Í»  
 Öë»R;Z;PÍÄ EDO (Extended Data Out)  
 DRAM Öa SDRAM (Synchronous  
 DRAM)»RÍæ;Y;Z;YÅŠÒà;256 MB»T

;Ö;UØ Ä`Äi;PÍÄÖDIMM Öi;I;Ä;f;f;ÄiÇ`»X

- I. ;f;f; Í ÇËÆ 1Mx64 (8MB)»S2Mx64 (16MB)»S4Mx64 (32MB)»S8Mx64 (64MB)»S16Mx64 (128MB)»VÄiÜ ÇËÆ 1Mx64x2 (16MB)»S2Mx64x2 (32MB)»S4Mx64x2 (64MB)»S8Mx64x2 (128MB)»T

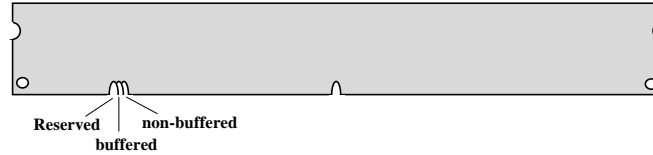


Í½ö: ÄÍÇi;Ä|;Z;YÜa;ÆiÈ` ÅÖ DIMM Ä Í ÇËÜöÆ Ü  
 ÇË -- Ä;Ä;DIMM ;ÄÇËÄÖ pin 114 Öa pin 129»RÄfÄXÄÍ  
 È;Ö-Ö,,Ö »RÍ, È DIMM ;ZÉúI\_Æ Ü ÇËÄÖ»VÄpÄyI\_Æ  
 Í ÇËÄÖ»T×eÈeÑi;fÇËÄÖÖeÖë»T



- II. Í;Än: ;QÉ Ä Öe;öÄf-12 Í, ÖöÄÄ»»RÍ, Ä ;öÄ+Ä Í;Än (clock cycle time) Ä 12ns»RÄi;YÄÖSDRAM Íæ;ÄÖ clock Ä 83MHz»TÜöÄÍ;f;QÖöe;öÄ ÄfÄa-67 Í, ÖöÄÄ»»RÄ ;öÄaÄSÖ ÈaDaÜ ÍæÄö;Ä 67MHz»T
- III. Buffered Öa non-buffered: ;Ö;UØ Ä`Äi;PÍÄnon-buffered DIMM»TÈ` ;Z;YÄa06 DIMM ;ÄÇËÄa;ÄÖÄ Ö~»RÄiÄaÄnon-buffered DIMM Öa buffered DIMM»T×eÈeÑi;fÖeÄi;ö»X

# İŞB AŞÖä



çëÄ Éä%ÄÖÄ Ö~%Äa»Rç^Äİ non-buffered DIMM ççYİ»%ÄUØ Ä`%ÄÄÖDIMM  
 İ»Öë»TÜ İ^ çöÄvçÄÇÉ%ÄÄÄ ÄÖDIMM İ%ÄSÖxÄ non-buffered ÄÖ%ÄWRÄöÇæ%ÄÄö  
 pİÉ`AsÜ ÜäÉäİæÄÜöÄÖ Ö ÄÈÈrÖüÈ÷İ^ N»»T

IV. 2-clock Öa 4-clock signals: Ü İ^ 2-clock Öa 4-clock ÄÖ DIMM İ%ççYçèÄsİ,  
 Ð çUØ Ä`%Ä»RÄ ÄÈ%ÄWİèYÇÄSÄÄİöNb»RÄöÇæ%ÄÄöPİÉ` İæÄÉéç4-clock ÄÖ  
 SDRAM»T



İ%ççö: ÇÈÜaÄüÈ` ÄÖ SDRAM Ä 2-clock ÜöÄ 4-clock  
 ÄÖ»RççYÄÈÄÈ pin 79 Öa pin 163»RÄfÄXAİÉçÖ-Ö,Ö İ\_  
 ÚÍÖİÄ 4-clock»WÄpÄyÄ\Ä 2-clock ÄÖ»T

V. ÄaÄ %Ö: İ, Ð çUØ Ä` ç^%ÄİÄÖeNäÄÖ64 bit wide (without parity) SDRAM.

BIOS çZöÈäÈÖİ È` ÖëB ÄÖEvD, %èÄÄ»R%ÄÖ-Äéçè Jumper İNÄS»Tİæ%ÄÖÈ` ÖëB Èv  
 D,Ä 256MB»T

**Total Memory Size = Size of DIMM1 + Size of DIMM2 + Size of DIMM3**

ÄMÈN%ççç\_ÄÖİÖ% İi%ççUØ Ä` ÉäçMemory buffer (ÄÈÖhÄöİçÄn»RÄpÈÜÈäÉü% Ö Èç  
 (driving capability)»Tİ, ÄéÈ, İyÖa SIMM/DIMM Èä»RDRAM IC ÖaçöBoÈ, %b%ÄÇÄÇÉ»T  
 çZÈ% BIOS İ|Ä|ÈÖİ çi çÜ×eÄÖIC Öaçö»RE` çİDNÄöÄ ÇfÖü»TÜİİ ÄÖ% Ä|ÄÈ»XDAÄéçè  
 IC Öa%öÄ 24 Ü ÄÖ SIMM»R%ç IC Öa%öÄ 16 Ü ÄÖ DIMM»T



PİÄZ: Ü İ^ INTEL TX İÖ% İyçç%ÄİÄ x4 SDRAM IC»RÄ ÄnÇçÖ È÷  
 YÜ (loading)»RÄöPİÉ` %ÄÇÉéçèİ, Öö SDRAM»T

## İŞB ÅŠÒà

»ÄÄ ÅTç; i ÅòPÍÄÖDIMM »ÄİİÄi »X

DIMM Data chip	ÄTÇË bit Öàçò	Í Ü ÇË	Chip Öà çò	DIMM »Ä çf	Æ ÄpÄòPÍ
1M by 16	1Mx64	x1	4	8MB	Yes
1M by 16	1Mx64	x2	8	16MB	Yes
2M by 8	2Mx64	x1	8	16MB	Yes
2M by 8	2Mx64	x2	16	32MB	Yes

DIMM Data chip	ÄTÇË bit Öà çò	Í Ü ÇË	Chip Öà çò	DIMM »Ä çf	Æ ÄpÄòPÍ
2M by 32	2Mx64	x1	2	16MB	Yes, but not tested.
2M by 32	2Mx64	x2	4	32MB	Yes, but not tested.
4M by 16	4Mx64	x1	4	32MB	Yes, but not tested.
4M by 16	4Mx64	x2	8	64MB	Yes, but not tested.
8M by 8	8Mx64	x1	8	64MB	Yes, but not tested.
8M by 8	8Mx64	x2	16	128MB	Yes, but not tested.

çY»ÄÄTç; i ÅòPÍÄÖçèÄÖ DRAM İİÄi »X

DIMM Data chip	ÄTÇË bit Öà çò	Í Ü ÇË	Chip Öà çò	DIMM »Ä çf	Æ ÄpÄòPÍ
4M by 4	4Mx64	x1	16	32MB	No
4M by 4	4Mx64	x2	32	64MB	No
16M by 4	16Mx64	x1	16	128MB	No
16M by 4	16Mx64	x2	32	256MB	No



PÍÄz: çèÄ İŞB »ÄÄÖÇÇÄ »RË' ç~ÉúÅŠÒà»QÄèÄüË 64M bit (Äf 2M by 32»S4M by 16 Äè 8M by 8) ÄÖ DIMM»T»QË Äi Ö»»RÍmÄy»ÄËvD,,ÄÖ DIMM Í½Ä Äéçè 64M bit ÄÖİÓ¼ »T

## İŞB AŞÖa

0x0] AOpen İ 0i0] AÖ EDO Öa SDRAM Àf%F »X

3434Y ÅE	Öİİi	ÅÖÖ	İ Ü ÇE	Chip Öàçò
8M/EDO	Micron	MT4LCM16E5TG6	x1	8
16M/EDO	Micron	MT4LC2M8E7DJ-6	x1	4
16M/EDO	Hitachi	51W17805BJ6	x1	8
32M/EDO	Hitachi	51W17405BLTS6	x1	16
64M/EDO	Hyndai	HY51V65804 TC-60	x1	8
8M/SDRAM	SEC	KM416511220AT-G12	x1	4
8M/SDRAM	TI	TMS626162DGE M-67	x1	4
8M/SDRAM	TI	TMS626162DGE-15	x1	4
16M/SDRAM	TI	TMS626162DGE-15	x2	8
16M/SDRAM	TI	TMS626812DGE-15	x1	8
16M/SDRAM	NEC	D4516821G5-A12-7JF	x1	8
16M/SDRAM	Toshiba	TC59S1608AFT-12A	x1	8
16M/SDRAM	TI	TMS626812DGE-12A	x1	8
16M/SDRAM	TI	TMS626812DGE-12A	x1	8
16M/SDRAM	LGS	GM72V16821BT10K	x1	8
32M/SDRAM	Toshiba	TC59S1608AFT-12A	x2	16
32M/SDRAM	NEC	D4516821G5-A10-7JF	x2	16
128M/SDRAM	NEC	D4564841G5-A10-9JF	x2	16
16M/SDRAM	IBM	0316169CT3B	x2	8
16M/SDRAM	Hitachi	HM5216165TT10	x1	8
16M/SDRAM	IBM	0316809CT4B	x1	8

# ÍP³/eÍÓ Award BIOS

¿ÓÍÓË\_Ó»Ã ÀfÀ ÍnŠÁİİeËëÖa»RË' ¿¿YÁé¿è AOfLash %¿Áýİ'À»ÃİÁ Ñİ¿UØ À`ÃØ  
BIOS»T



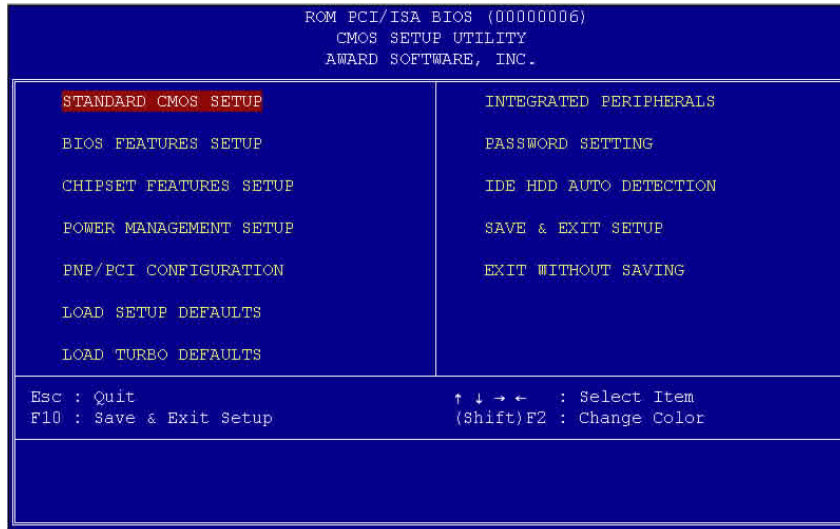
ÇÁÇÈ: ÀnÆËBIOS codeÑ"ÚYİóÁİİeÍ€İŠB ÆØİnÇfÇnÁ  
ÃİÁ Đz»RÁİ ¿Y¿İÍwËÄÃØ BIOS ÄÄ¿Ø¿zÉúÑ"Öa¿ÓÍÓ%Đİe  
ÄØ%ØËv (ÉdÁ`Æ Chipset SetupËëÖa) ÄÍÄaÈİÄ»T

## 3.1 Đz³/4 BIOS Setup ¿UÙ Í

BIOS Setup Æ³QÆ,ÀİÄ Flash ROM ÄØİ'À»»R¿¿Y¿èÃİÁ Á ÄİİeËëÖaÄYË\_³ÄÄİÄ  
128 byte ÄØ CMOS RAM %Ø»RÁé¿èÄaÄfÇÈĐz/4 BIOS Setup %³»R¿`ÇÈÄsĐ"Ø ÄuÄİ  
İèË À POST (Đ"Ø ÄóÄóİ Øİ) Èã»RÄ %fDEL Ä Úİ»RÁj ¿Đz/4 AWARD BIOS Setup  
¿UÙ Í »T



# AWARD BIOS



Î½ö:Î 0ö "Load Setup Defaults" çzð ¼(Ä†ìeÖŠç  
 ÍnĂŠĂŎÊeÖaÇa»WĂi Û 0ö "Load Turbo Defaults" Äy  
 çzÄeçèð ÁðĂŎÊeÖaÇa»RĂ çİĐNÆ ò ÛİÍ ÄŎÄ†ìeİi  
 Äi»T


ĂsİvÇÈ¼f¼ ÄÍ¼QÇiĂ ç`Ă »RĂzĐUE'ĂfĂ È\_¼eçİÊeİŎĂ Û Đİ¼r»RĂfĂ Á Á ÍnĂŠ»RçY  
 ¼eĂfĂ È,¼QÇiİvÇÈİŎĂ ç¼QÇiİvÇÈ»T

á â à ß »XĂbçè¼ ÄgŪp»RçzÈ\_¼eçİÊeİŎĂ È ÇnĂ ÄŎÛ Đİ¼r»T

  »XĂ Í, ÇiİiAi ŪpçzYĂ ßöBýçöÄŎYŦÄü»T

 »XĂ ÄŎŪpĂ çöÛ Đ"ÄvÄ†Üä»T

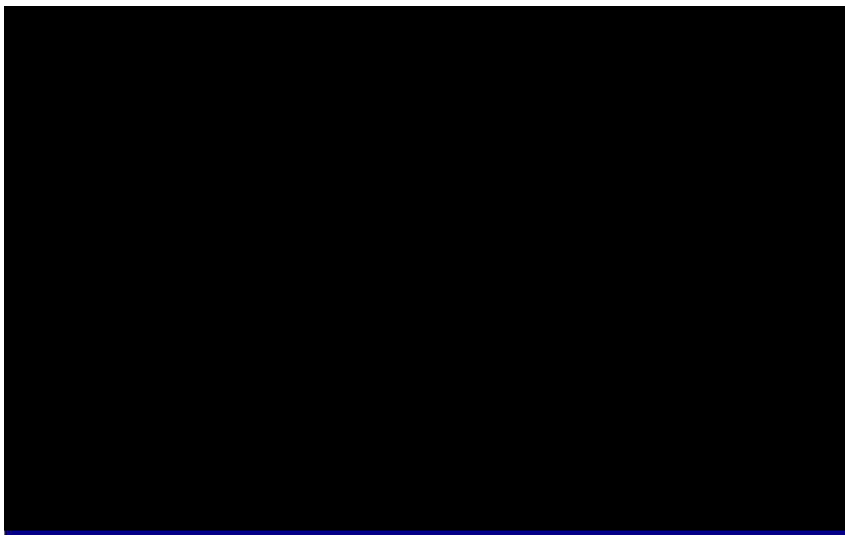
 »XĂ ÄŎŪpĂ çöÛ Đ"ÍnĂŠİvÇÈ»T

 »XĂ ÄŎŪpĂ çöÛ Ä ÄŎÄÄÄeĐ¼ÄŎÛ Í »T

Íæ¼fÇÈ¼QÄ ÄyÆ ó Äi Û ĐİçöÄŎÛ¼D»T

### 3.2 Standard CMOS Setup

Ù Øö "Standard CMOS Setup" ÍñŠİvÇË»RıçYÙ ØöÄİİeÄÖÊ çÖİñŠ»RÀfÙ %4%  
ÎÛ»SËäD»%eÖeÖeØ ÄÄÖRÄÖİñŠÇä»TÄéçèÄæçÁbçè% ÄgÛpË\_%eçİËeİØÄ È ÇñÁ ÄÖÙ  
Đİ%41»RÀRÄéç; [ ] Äè [ ] Ä ÛpİñŠÙ ĐİÄÖËeÖaÇä»T



#### Standard CMOS à Date

ÀfÄXË' ÑbÇeİñŠ% ÎÛ»RıçYÁbçè% ÄgÛpË\_%eçİËeİØÄDate ÈeÖaÍŠ»RÀRÄ %4 [ ]  
Äè [ ] ÍñŠçòÄvÄÖ% ÎÛ»T% ÎÛÄÖËeÖaË Ä»ÄË% »S% Ä^ Ä»»T

#### Standard CMOS à Time

ÀfÄXË' ÑbÇeİñŠËäD»»RıçYÁbçè% ÄgÛpË\_%eçİËeİØÄTIME ÈeÖaÍŠ»RÀRÄ %4 [ ]  
Äè [PGDN] ÍñŠçòÄvÄÖËäD»»TËäD»ÄÖËeÖaË Ä»ÄËËä»S%ÄÄ^ Ä »RÆ çY4 %fËä% Ä»Ä  
çö»T%QçÖİñŠÄËËäD»Ä^ % ÎÛ»RÄTÄÖÇÄÑ†D"Ø Ä\%ÄÖ÷ÄRÇÄÑ†İñŠ»T

## AWARD BIOS

Standard CMOS à Primary Master à Type  
 Standard CMOS à Primary Slave à Type  
 Standard CMOS à Secondary Master à Type  
 Standard CMOS à Secondary Slave à Type

Type	
Auto	ÀÓÙ ðÏçÍñŠÀÏèÀi %pÍÁÄÖ IDE ÝŠÖèÈèÖ»RÀfÈvð., (Size)»S
User	Ôè Æh Öà(Cylinder) »S Ôé Új Öà(Head) »S ÓŠ Öã Ú%(pre-
None	compensation) ÄÖËpÁ} Cylinder Ç»SÔéÚj ç ÈÁÈè(Landing
1	Zone) ÄÖ Cylinder Ç»SÔéÈÈÖà (Sector) Ýç»TN È·È_ÈèÖàÇà
2	ÍnÆ Auto È»RBIOS Ñ»AsÁÏèÈ À ð"Ø ÀóÁóÍ Öi (POST)
...	È»RÀóÈ»ÈÈÖÍ ÝŠÖi ÔéÔèØ ÄÖ Type»RÁÝÀs Standard BIOS
45	Setup %Ëÿçöçi Ái »TÇj ÈÖÍ %Á ÝŠÖèÄÖtype ÀèÑbÀóÀ ÍñŠ
	ÈèÖàÇà»R»èÍnÆUser»TÀfÁXÁÏèÁÿçÖÈÏíáíŠA»ÔéÔèØ »R»è
	È_Type ÍnÆ None»T
	IDE CDROM Í¼Æ ÀóÈ»ÈÈÖÍ ÄÖ»T



Í¼çö : È· çz Áb çè çU Ýv ÇÈÄÖ "IDE HDD Auto  
 Detection" Û ðÍÁi ÀóÈ»ÈÈÖÍ Ái ÁŠÖàÄÖ IDE ÝŠÖèÍh  
 È »T

Standard CMOS à Primary Master à Mode  
 Standard CMOS à Primary Slave à Mode  
 Standard CMOS à Secondary Master à Mode  
 Standard CMOS à Secondary Slave à Mode

Mode	
Auto	Âéçè Logical Block Address (LBA) Öi À»ÐáÈvð Èàç»pÍÁÐh
Normal	Ó] 528MB ÄÖÍŠÖè»TçòÁvçÁÍ %hÄÖDE ÝŠÖè»ÁÿÁÿÍà LBA
LBA	ÐáÈvÖi À»»RÁpÚ·À†Èvð., Á»ÐhÓ] 528MB»TÀfÁXÁéçèÄÖÍŠÖè»Š
Large	ÍbÈ À»»Æ LBA On »RÍ_ %ÉúçèLBA Off ÄÖ¼ À»Áí Èi È»T

# AWARD BIOS

## Standard CMOS à Drive A Standard CMOS à Drive B

<b>Drive A</b>
None
360KB 5.25"
1.2MB 5.25"
720KB 3.5"
1.44MB 3.5"
2.88MB 3.5"

Í, Çí Û ðĪ ççĕÁí Û ØóĪ€ŌĕÁŌŸ ÁÆR×ēĪŌĒā% ÅgŪpÀö Drive A Àĕ  
Drive B ĪS»RĀ [ ] Àĕ [ ] Û ØóŌaĪ€À»ŌĕØ ÆŌĪBĀŌĒĕŌaĪj  
ç»RĀpĪñŠÇāĀfçĀ»T

## Standard CMOS à Video

<b>Video</b>
EGA/VGA
CGA40
CGA80
Mono

ÀŌ Û ðĪ ççĪñŠ ĀĪ Āĕ çĕĕÀŌBŷ çŌ çu ĀÆŌR »R Ēĕ Ōa ŌŠ ĪñÇa ÆĒ  
VGA/EGA»TçĕĀ çŌĀVĀŌÇĪ%ŸŌ,Ō%ĀæqĀ!ĀŌĪhĒ ÆĒ/GA»RĀŌŪ  
ðĪĪi çXĀdĀĪ%ĒŌ çĕĪS»T

## Standard CMOS à Halt On

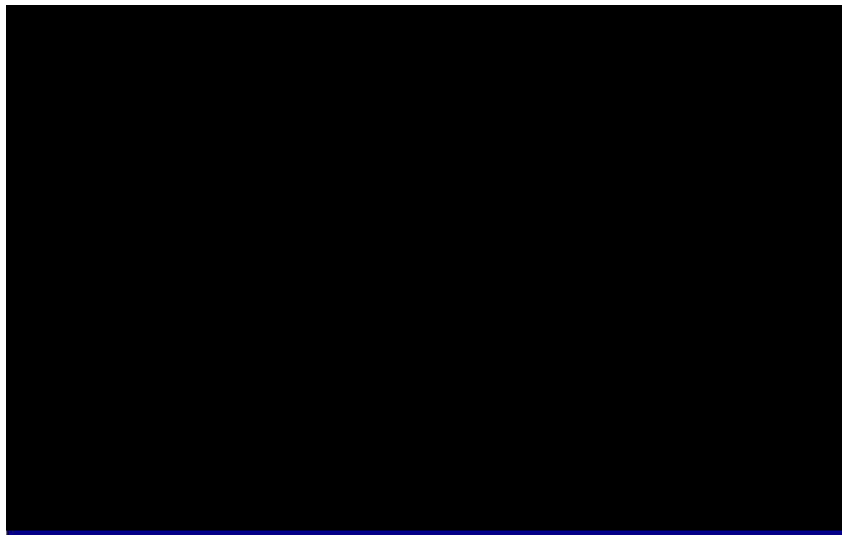
<b>Halt On</b>
No Errors
All Errors
All, But Keyboard
All, But Diskette
All, But Disk/Key

ÀŌŪ ðĪ ççĒĒĀ ĀĪĒĒĒ Ā ĀŌĀŌĪ Ōi (POST) Ēā»R ĀfĒŌĪ Ā Û Ō•  
Æ ĀpÇĕĒĒ% ŌSĀQ»TĒĕŌaŌŠĪñÇaĒĒĒAll Errors»RĀ çŌĀĪĒĒçĕĒĒŌ  
Ī Ā Û Ō•ĀĀf»RĀj ÑĒĒ% ŌSĀQ»T

# AWARD BIOS

## 3.3 BIOS Features Setup

ÀfÄXÀsçUÙ Í %@Ù Øö"BIOS Features Setup" ÐÏçð»RÁj Ñ"ÀsÙÝÓ %41Býç:öÀf%F ÌvÇÈ»X



### BIOS Features à Virus Warning

<b>Virus Warning</b>	ÀÓÙ ÐÏççÌnÁŠÓ,,ò/ÉwE.À0Ä%gñú»RÁ`BQİŠ0èÄ0Ð"Ø ÈéÆ, (Boot Sector) %é%4ÍÈÄ (Partition Table) %4Ä ÉwE.ÀZÈq.TÀfÈ_Èè0àÍn
Enabled	ÆÈ»QEnable »RÄ çöó,,ò%AsD"Ø ÓJİ' %4»RÄfÁÍ0 Èà0x%4İŠ0èD"Ø
Disabled	ÈéÆ,»RÄİèAj ÑÈÈ% ÓSÁQ»RÄYÑ"ÀsÙÝÓ %41ç:ì' çY%F Ä0PÍÁZÈè00»T
	ÀÓÈä»R×èçèÈ×Æ.Í'À»Ápç:ì È÷YUÄìÀs»T

**! WARNING !**  
Disk Boot Sector is to be modified  
Type "Y" to accept write, or "N" to abort write  
Award Software, Inc.

# AWARD BIOS

## BIOS Features à External Cache

<b>External Cache</b>	ÀÒÙ ÐĬ ĭZĬ nĀŠĀĬ ĩĕĀĕ ĭĕ ĬP%XD ĭĀđĀ Ē` ØĕB ( ĭđĀvĀĒPBRAM
Enabled	ĀđĀ Ē` ØĕB )»R ĭY ĭĬĀđÓ„ ð'ĀŌĒ Ā ĒĬĬ%TĀ Ē ĬnĀŠNĬ ŌTĀĬĩĕ
Disabled	ĀŌĬĬĀn»RĀĬ ĭYĀđĬĒ' Ē_ĒĕŌĀĬnĒĒ Enable»RĒ'ĀUĀĬĬĒĬ, ĭç%ŶĬ

## BIOS Features à Power-On Self-Test

<b>Quick Power-on Self-test</b>	ĀŌĬĬ ĭđ ĭZĬ nĀŠĀĬ ĩĕĒ ð ŌĬ ĬĬ ĀĀĬ ŌĬ ÐĬ ĭđ »R ĭY ĭĬĀđĀđĀŌĬ ŌĬ
Enable	(POST) ĀŌĬĬ' ĀĀ»TĒĒŌĀŌŠĬ ĬĬĀĒĒ Enable»T
Disabled	

## BIOS Features à Boot Sequence

<b>Boot Sequence</b>	ÀÒÙ ÐĬ ĭZĀ ĀŠĀĬ ĩĕĒ ð ĒĀĀŌNĬ Ĭ ĬĀĀ»TĬ ŠŌĕĀŌŶĕĀ` xĬ (ID) ĬĬ
A,C,SCSI	%Ĭ ĀĬ ĭđ »X
C,A,SCSI	C: Primary master
C,CDROM,A	D: Primary slave
CDROM,C,A	E: Secondary master
D,A,SCSI	F: Secondary slave
E,A,SCSI	LS: LS120 drive
F,A,SCSI	ZIP: IOMEGA ZIP drive
SCSI,A,C	
SCSI,C,A	
C only	
LS/ZIP,C	

## BIOS Features à Swap Floppy Drive

<b>Swap Floppy Drive</b>	ÀÒÙ ÐĬ ĭZ ĭY%ŌĬĀĬĕĀ»ŌĕŌĕŌ ĀŌĀ Ō~»TĀĬ ĀĬ»RĀĬĀü ĭĬĕĀ»ŌĕŌĕ
Enabled	Ō (A»RB) »RĒ' ĭZ ĭYĀ ĀŠĬP%Q ĭĬĕĀ»ŌĕŌĕŌ B»RĬP%X ĭĬĕĀ»ŌĕŌĕ
Disabled	Ō A»T

# AWARD BIOS

## BIOS Features à Boot-up Floppy Seek

<b>Boot-up Floppy Seek</b>	È_ÀÓÈèÒàÍnÆ Enable»RBIOS N"ÀsD"Ø ÈaÌØÈaÍ€À»Ôé0èØ ÀÔ
Enabled	ÔéÚj ÈÍN{Í ^ (Seek) ÀÔÈaÁQ»TÈèÒaÓŠÍnÇaÆ Disabled , N"Í%Ó]
Disabled	Í, Çí Çnù»T

## BIOS Features à Boot-up NumLock Status

<b>Boot-up NumLock Status</b>	ÀÓÙ ðÍ Çí nŠÛp×] %4nÀ00aA..Ûi ÇcÛpÀéçè0iÀ»»TÈ_ÈèÒaÇaÍnÆ
On	On»RÀ ÇöçB ÓaA..Ûi ÇcÛpÛúÆ0aA..Û %4AÆ0R»TÀfAXÍnÆOff»R
Off	ÀyÀsD"Ø ÀúDàÈúÀéçèÏy0èÈÈÀ Çnù»TÈèÒaÓŠÍnÇaÆ On»T

## BIOS Features à Boot-up System Speed

<b>Boot-up System Speed</b>	È ÇçYÙ ØóÀñÈÀÔÈ À ÍñÆ High Æ Low»TÈèÒaÓŠÍnÇa
High	Æ High»T
Low	

## BIOS Features à Typematic Rate Setting

<b>Typematic Rate Setting</b>	ÀÓÙ ðÍ Çí nŠÀèÀ È Ûp×] Òi ÚÚÇÀ×à0gÚ0À0Çnù»TÈ_ÀÓÈèÒa
Enabled	ÍnÆ Enabled»RÀñÈèÁj ÇzÈÏÀ Ûp×] Òi ÚÚÍbÇÀ×à0gÚ0À0Èa
Disabled	ÁQ»T

## BIOS Features à Typematic Rate

<b>Typematic Rate</b>	ÀÓÙ ðÍ Çí nŠÇÀ×à0gÚ0Ûp×] ÀÓÍñÆ RÈèÒaÇaÆ6»S»S10»S
6	12»S15»S20»S24»S30 Íç»TÀñÈèÓŠÍnÇaÆÀTÆ 30 ÇíÀ..%Ó»T
8	
10	
12	
15	
20	
24	
30	

# AWARD BIOS

## BIOS Features à Typematic Delay

<b>Typematic Delay</b>	ÀÒÙ ÐĬĴĴèĀīĒĒĀ Ñ Ūþ×]ĪbÇĀ×a0gŪŌĒ»RĀ.ŹðByĴôĀsŪÝŎ
250	%ĤĀŌŌĒ»Ēþ»RĀĪ250»R250»R500»R750 Ā^ 1000 ms»TŌŠ
500	ĪrÇāĒĒ 250 ms »T
750	
1000	

## BIOS Features à Security Option

<b>Security Option</b>	ÀŌÐĬĴôĴĴĪŃSĀĪĪèĒ\×i »RŪñĀ\Ĵ] %ŸĴŪŌxĒŪB%»SĀĪŌi ĀôĀéĴèĒ'
Setup	ĀŌŌ.Ō%»TĀfĀXĪĪŃĒ System»RĀ ĴôĀTĀŌÇĀŃĪĒĒĒĀĪĪĒĒĒ»RĪ½
System	ŃÇĒĀUŪ %ĴĒ\×i »TĴĴĴ •»RĪZ% BIOS Setup Ī'Ā»ĒĒ»R%ŃÇĒĒ ĀUŪ %ĴĒ\×i »TĀfĀXĪĪŃĒ Setup»RĪŃĀŃĀSĪZ% BIOS Setup Ī' Ā»ĒĒ»RÇĒĀUŪ %ĴĴĒ\×i »TĀfÇĒĀ È Ē\×i ĴŃŪ»R×èŪ ŌöĴUŪ Ī ĀŌ"Password Setting" ÐĪĴô»R%ÇĒŪ %ĴĴ Ā ò ĒĀ»RĀ %f <Enter> ŪþĀĴ Ĵ»T

## BIOS Features à PCI/VGA Palette Snoop

<b>PCI/VGA Palette Snoop</b>	ÀŌŪ ÐĬĴĴÇĒĀU PCI VGA ĴuĀŌ×ĪĀü×] (Palette Snooping) Īb
Enabled	ĀĤĀ ĒĀĀ Ā ĀŠŪc»R%ĀoŪĪ Ā ĀYŌŌĴYŪñĀ\Āþ×Þ»T ĀfĀXĒ'Ās
Disabled	PCI Ūi ĴcŌè%ĤĀSĪ»Āü% ĀaŌā×ĪĀü×] Ā Ā"ĀŌŪi ĴcĴĀĪ Āf»X MPEGĴuĀèŌ%ŌĪĒĒĒŌĴu»RĴzĒ_Ū ÐĪĪŃĒ Enabled»RŌSĀŌŪi Ĵc ĴuĀþ×Þ»T

## BIOS Features à OS Select for DRAM > 64MB

<b>OS Select for DRAM &gt; 64MB</b>	ĀfĀXĒ'ĀéĴè OS/2 ĀQŃ•ĀĪĪè»RĀÝĴSĒ`ŌèB ĒvD, Ðh Ō]
OS/2	64MB»RĴzĒ_ĒĒŌāÇāĪŃĒ OS/2»RĀþĀy×èŪ Non-OS/2»T
Non-OS/2	



# AWARD BIOS

## BIOS Features à Video BIOS Shadow

<b>Video BIOS Shadow</b>	Ài Ûñ VGA BIOS Shadow Æ È ÆÿÿöÿuÄÖBIOS Ò ÈàÀ ÄÄ
Enabled	ÀsDRAM È` ØèB %R;ÿLÁðÄÿÈÄÖÈ À ÈPÿ%RÄnÈ DRAM
Disabled	ÄÖÄfÄ ÍfÄñ% ROM ÚóÄð»TÈèÖäÍnÄSÇaÆ Enabled»T

- BIOS Features à C800-CBFF Shadow
- BIOS Features à CC00-CFFF Shadow
- BIOS Features à D000-D3FF Shadow
- BIOS Features à D400-D7FF Shadow
- BIOS Features à D800-DBFF Shadow
- BIOS Features à DC00-DFFF Shadow

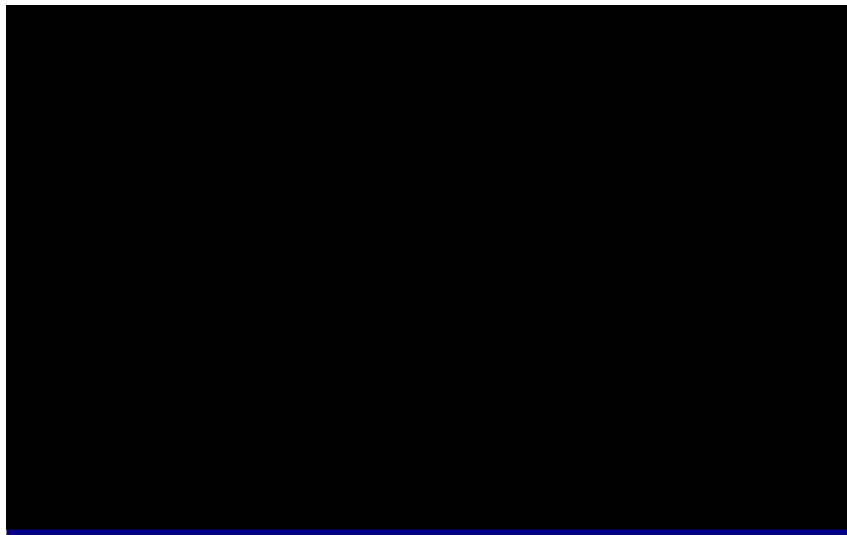
<b>C800-CBFF Shadow</b>	Í, ÄáÀ Á"Æ È` ØèB Ä` ÈuÍÖÜi ÿcÿuÄéÿèÄÖ»TÄfÄXÙ Øö
Enabled	Enabled»RÄÿÈñÈ_ÿi ÿcÿuÄÖ ROM Code »äÖf%Qÿ Ä ÿU
Disabled	È` ØèB (DRAM) ÈèÈ %RÄÖÄöÍ_ÖóÆShadow»RÿÿÖWÄ Ò
	ÄðÄÖÍSÿ' ÍfÄñ»T Çj È' %Ä^ Ñ»ÿi ÿcÿ ROM Code ÄÖÄ Ä"Ö
	Èà»RÿÿÈ_ÈèÖäÍ'ÄnÈ Enabled»R% Ò ÈúÄ` ÝiÖ Æ^ Ä ÄiÄÍÄÖ
	ROM Code, Ä È Ð` È` ØèB »T



ÄqÑ\_: F000 Ä^ E000 à Á"Æ È^Ä Ä` ÈuÍÖ BIOS Code Ö Æ%Äÿè»T

### 3.4 Chipset Features Setup

"Chipset Features Setup"  $\text{Æ}\zeta\text{U}\theta$   $\text{Ä}^{\text{`}}\text{ÄÖ}\text{Í}\text{Ó}\% \text{Ì}\text{;}\text{Æ}\text{Ý}$   $\zeta\text{ñ}\text{ú}\text{Í}\text{n}\text{Ä}\text{Š}\text{»}\text{R}\text{Í}$ ,  $\text{Ä}\text{á}\zeta\text{ñ}\text{ú}\text{Í}$ ,  $\text{È}\text{q}\text{Ö}\text{a}\text{Ó}$ ,  $\text{Ò}\% \text{Ä}\text{Ö}\text{È}$   $\text{À}$   $\text{È}\text{P}\text{È}\text{ú}\text{Ä}\text{Í}\text{Ý}$   $\text{»}\text{T}$



$\text{Ä}\text{q}\text{Ñ}$ :  $\text{Ä}\text{s}\text{Á}$   $\text{B}\text{ö}\zeta$   $\text{À}$   $\text{Í}\text{n}\text{Ä}\text{Š}\text{Ä}\text{v}\text{»}\text{R}\text{×}\text{é}\text{×}\text{e}\text{Ä}\text{Š}\text{È}$   $\text{Æ}$   $\text{Ä}\text{p}\text{Ó}$   $\text{Í}$ ,  $\text{Ä}\text{á}$   
 $\text{Đ}\text{Í}$   $\zeta\text{ò}\text{Ä}\text{Ö}\text{Í}\text{n}\text{Ä}\text{Š}\text{Á}\text{Ó}\zeta$   $\text{Û}\text{R}\text{Ö}\text{è}\text{»}\text{R}\text{Ä}\text{p}\text{Ä}\text{y}\%4\text{Ø}\text{R}\text{Ñ}$   $\text{Ä}\text{Ö}\text{Í}\text{n}\text{Ä}\text{Š}\text{È}\% \text{Ä}\text{Í}\text{Ä}\text{I}$   
 $\text{Í}\% \text{Ä}\text{I}\text{è}\text{Ä}\text{Ö}\text{È}$   $\text{À}$   $\text{Í}\text{‡}\text{Ä}\text{ñ}\text{»}\text{R}\% \text{e}\text{Ç}\text{a}\text{Ñ}$   $\text{“}\text{Ö}\% \text{B}\text{e}\text{Ä}\text{‡}\text{I}\text{è}\text{Ä}\text{Ö}\text{Ý}\text{Ç}\text{Ä}\text{Š}\text{Ä}\text{»}\text{T}$

# AWARD BIOS

## Chipset Features à Auto Configuration

<b>Auto Configuration</b>	ÍnŠÀ0Ù Ðİ»RÀİÈÑÁa06 CPU ÄÔ Type Ä^Timing Äi ÇÄ
Enabled	Ñ†×i0y DRAM Ä^ Cache ÄÔÇa»TÄfÄXÑbÇεÀö%ÍnŠ
Disabled	DRAM Timing»R×ê¿ Ä È À0ĐİÍnŠ»T

## Chipset Features à DRAM Timing

<b>DRAM Timing</b>	À0Ù Ðİ¿zÍnŠ DRAM timing ÄÊ 60ns Äè 70ns»T
60 ns	
70 ns	



PÍÁz:ÊeÖa0ŠÍnÇaÄÊ60ns»R¿zB Ê`0eB Ú È, ÍaÄè  
 ÄÔÈ À ÈPÄX»TÀ Ñ†%Q¿\_Í0%4 İiÄ0Í†Än0 Ä0»R70ns  
 SIMM ¿^Ä0PÍ¿èÄ 60MHz ÄÔCPU»RÄfÄXÄè¿èÄs  
 66MHz ÄÔ CPU ¿zÉúÑ“ÄéÄ†Èè1½¿ç%4ÄÇÄSÄ0È»  
 Äè»T

## Chipset Features à DRAM Leadoff Timing

<b>DRAM Leadoff Timing</b>	Äi Üñ Leadoff Ä ÄÔÆ burst read/write ÄÔİP%QÇimemory cycle ÄÔÈäD»»R¿Yclock Ä0ÖäD„Çf0ü»TÄa0 %41»RÄ0Ù ÐİÐä
11/7/3/4	ÉúÈÈÄ page miss read/write leadoff timing»RÄ^RAS
10/6/3/3	precharge %è RAS to CAS delay ÄÔÈäD»»T0ŠÍnÇaÄÊ
11/7/4/4	10/6/3/3»RÄpÑ ÄÊ10-x-x-x DRAM page miss read %è
10/6/4/3	6-x-x-x DRAM page miss write»RÄíÄÍ 3 clock ÄÔ RAS precharge %è 3 clock ÄÔ RAS to CAS delay»T

# AWARD BIOS

## Chipset Features à DRAM Read Burst (EDO/FP)

<p><b>DRAM Read Burst (EDO/FP)</b></p> <p>x444/x444</p> <p>x333/x444</p> <p>x222/x333</p>	<p>Read Burst ÀÒÑ_ÀpÆ CPU BÄÄ Ò ÈaÈa»R¿^Èv¿i %QÇiÀ Á"ÈeòÓ»RÀ DRAM Èò0ó0ŠŠÄÖÄ Á"ÀgCPU Èv¿i 4 ÇiÍ† p ÄÔÈ`0eB Ò Èa»TÓŠÍr¿aÆx222/x333»RÆ Á ÌD»SÍP»R %eÌP 4 ÇiÈ`0eB Ò ÈaÖ÷Èä 2 clock (EDO) Àè 3 clock (FPM)»RØR¿eÄ Í†ÀnÆ 60ns EDO Àè FPM (Fast Page Mode) ÄÖDRAM»Tx ÄÖÇaÑ"ÚYÍö DRAM Lead-off timing ÍnŠÁiÌÄ»RÒ ÁðÄÖDRAM ¿^Ö÷Ò Ý^ÄÖEaD»»T</p>
---	---

## Chipset Features à DRAM Write Burst Timing

<p><b>DRAM Write Burst Timing</b></p> <p>x444</p> <p>x333</p> <p>x222</p>	<p>Write Burst ÄÒÑ_ÀpÆ CPU Èò0ó0ŠŠÄÖÄ Á"Öx¿i4 ÇiÍ† p ÄÔÈ`0eB Ò Èa»RÀ ¿^Èv¿i ÌP»QÇiÀ Á"ÍÖDRAM»T ÄÓ ĐÍ¿òÍnŠÍP»SÍP»R%eÌP4ÄÖDáÈvÖ ÈaÖ÷ÇEÄÖ clock Öa»R EDO Á^ FPM DRAM ÄdÄÍÈËÌÄ»T x ÄÖÇaÑ"ÚYÍö DRAM Lead-off timing ÄÖÍnŠÁiÌÄ»RÒ ÁðÄÖDRAM ¿^Ö÷Ò Ý^ÄÖ Í¿Ä÷EaD»»T</p>
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## Chipset Features à Fast EDO Lead Off

<p><b>Fast EDO Lead Off</b></p> <p>Enabled</p> <p>Disabled</p>	<p>ÄÖÜ ĐÍ¿¿YÍnŠÖ ÄðÄÖ EDO read timing»R¿¿Íj Ý^ 1 Çi clock»TÄfÄXÄŠÖa»W¿ Ä FPM DRAM»R¿ÌDÑÈ_ÈeÖaÇÄIn Æ Disabled»T</p>
--	--

## Chipset Features à Refresh RAS# Assertion

<p><b>Refresh RAS# Assertion</b></p> <p>5 Clks</p> <p>4 Clks</p>	<p>ÄÖÜ ĐÍ¿¿ÈÄ refresh ÈäÄÖ RAS clock Öa»T</p>
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# AWARD BIOS

## Chipset Features à DRAM Page Idle Timer

<b>DRAM Page Idle Timer</b> 2 Clks 4 Clks 6 Clks 8 Clks	ÀÓÙ ÐĬ;ZĬŃŠ CPU idle Áû»RDRAM page window ĭİĐŇ Ĭ;Ă=Ĭi Ći clock %Y ĬÆ»T
---	--

## Chipset Features à DRAM Enhance Paging

<b>DRAM Enhance Paging</b> Enabled Disabled	ÍŃŠAÓÙ ÐĬ;ŃŃ»R;ZĂé TX ĬÓ% ÉdĂŠĂŌ% Ä ŌĂ;ZÉúŌ Á DRAM page window ĭİĐ»T
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## Chipset Features à SDRAM(CAS Lat/RAS-to-CAS)

<b>SDRAM(CAS Lat/RAS-to-CAS)</b> 2/2 3/3	ÀÓÙ ÐĬ;ZĬŃŠ SDRAM CAS Latency Á^RAS Ó CAS ĀŌĬ;Ă=ĚăĐ»TĬ, ĀáĬŃŠÇă;ZŌ%Be SDRAM ĀŌĚ À ĀĀĚP»R ÓŠĬŋÇăÆ 2 clocks»RĂfĂXĂŠŌăĂú»BDRAMĀĬ 3/4ÆĚvĀŌ Ě»Ăè»R×ēĚ_2/2 Á ĀÆ 3/3»T
--	---

## Chipset Features à SDRAM Speculative Read

<b>SDRAM Speculative Read</b> Enabled Disabled	ÀÓÙ ÐĬ;ZĬ %Ō SDRAM BĂĂ Leadoff Timing ĀŌĬ;Ă=Ěă Đ»»TSDRAM;ZĚĬĂ Ōa CPUĚăĚúĀaĀS»R;YĚĬŌĚăĐ»%ĤĀŌ ĀĬŪ »R;YĬĚĂĚ`ŌeB ĀŌĀĬ ĒPI%»TĀfĂXĂĬ%QÇĭ;Y%ĤĀŌ DIMM ĀŠŌăĀsĀĬĚ%Ĥ»R;ĬĐŇĚ_ĚĚŌaÇăĬŃÆ Disabled»T
--	---

## Chipset Features à System BIOS Cacheable

<b>System BIOS Cacheable</b> Enabled Disabled	ÀÓÙ ÐĬ;ZĬ ĀĬĚ BIOS Ā×ĚĬĚ,,ĀđĀ Ē`ŌeB Ēi Ēă»R;ĬĬĬĬ ĬĚĀŌĚ À ĬĬĬ»TĀ Ē ĀŌĬŃŠĀyĀĬĚ BIOS ŃĚ,, RAM %3/4 Ēi Ēă»TŌŠĬŋÇăÆ Enabled»T
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# AWARD BIOS

## Chipset Features à Video BIOS Cacheable

<b>Video BIOS Cacheable</b>	ÀÓÙ ÐÏ¸ ÉÙÁÏ BIOS À×ËÏÈ., ÁðÀ È` Øèß Èi Èà»R¸ÍÏÏÁÏ ÌèÁÒÈ À ÍÏÀ»TÀ È ÀÓÏÀÑÁÏÖ%ÓÏ BIOS ÑÈ., RAM %¸Èi Èà»TÓÑÏÇÀÏÈ Disabled»T
Enabled	
Disabled	

## Chipset Features à 8 Bit I/O Recovery Time

8 Bit I/O Recovery Time	ÁÏ%QÁÀò ÜÜÁÒ/O ÍÓ% »RÀSÈ À ÁÓ%QÇ1/O ÁC¸` ÁÙ»RÒÇÈ%QÇ1ÍPÇ ÈàD»»R%ÉÙÁRÐ•P È A %F%QÇO ÁC¸` »T¸È Á ¸ðÁVÁÒ CPU Á^ÍÓ% ÌiÍÁÏ_/O ÁÓÏSÏ`ÍÏÀ¸_LÁð»RÁé È, Í, ÁáÜÜÁÁÒ ISA ÏñÁØÇÈ¸LÁðÍPÇ ÈàD»»TÁÓÙ ÐÏ¸È`Á ÁÑÑ ISA ¸uÈÈ 8-bit Èà»R/O ÁC¸` ÀÓÏÍÓÁÏÈÈÁiØÇÈ ÁÓÍPÇ ÈàD»»TÁfÁXÈ`Í, Ì`ÁiÁÑÓaÁÒ16-bit ISA ¸uÁÍ%ÆÈ ÈVÁÒÈ»Áè»R¸¸ÌÍÒÁÏÁ I/O ÍPÇ ÈàD»»TBIOS ÓÑÏÇÀÏÈ 4 ISA clocks»TÁfÁXÈ`ÈèØaÇáÏñÈNA Èà»RÍÓ% ÌiÑ`ÁoÈà Û %¸ 3.5 ÁÒÁÏÈÈÈàÈù»T
1	
2	
3	
4	
5	
6	
7	
8	
NA	

## Chipset Features à 16 Bit I/O Recovery Time

16 Bit I/O Recovery Time	ÀÓÙ ÐÏ¸¸ÍÑÑ ISA ¸uÈÈ 16-bit Èà»R/O ÁC¸` ÀÓÏÍÓÁÏÈÈÁiØÇÈÁÓÍPÇ ÈàD»»TÁfÁXÈ`Í, Ì`ÁiÁÑÓaÁÒ16-bit ISA ¸uÁÍ%ÆÈÈÈVÁÒÈ»Áè»R¸¸ÌÍÒÁÏÁ I/O ÍPÇ ÈàD»»TBIOS ÓÑÏÇÀÏÈ 1 ISA clocks»TÁfÁXÈ`ÈèØaÇáÏñÈNA Èà»RÍÓ% ÌiÑ`ÁoÈà Û %¸ 3.5 ÁÒÁÏÈÈÈàÈù»T
1	
2	
3	
4	
NA	

## Chipset Features à Memory Hole At 15M-16M

<b>Memory Hole At 15M-16M</b>	ÀÓÙ ÐÏ¸¸Á`ÉÙÁÏÈ`Øèß ÈèÈ ÍÓÁ ÁÑÁÒ ISA ¸uÁé¸è»R¸YÙñ Á`È`Øèß Á×P»TÍÓ% Ìi¸È., ÁÓÈÈÈ ÈÌÁÁ×ÈÏ¸È ISA bus ÐaÙ ÓJ ÁiÁÒÈ ÈaÁ^Øè×i »TÍ., ÈP RÁÓÈÈÈ È Á`ÉÙÍÓ ¸u Ó Á`Áé¸è»T
Enabled	
Disabled	

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## Chipset Features à PCI Passive Release

<b>PCI Passive Release</b>	ÀÓÙ ÐÏ ç¸ È´ ÈÈÀ PIIx4 ÎÓ% ÌÏ (Intel PCI 0 ÈÏ ISA) ÄÔ
Enabled	ÍbÈàÐàÖÖ ç¸ ãú»TÀÓ ç¸ ãúE ÍbÀé ç¸ èÀsÀÏ ÈÓ[À ISA ç¸ ÜñÈà
Disabled	ÆÈ ½ ç¸ ÄÏ Û »TÀfAXÈ´ ÄÔISA ç¸ uÄÍ %/Æ ÈvÄÔÈ»Áè»R ç¸ ç¸ YÓÛ
	ÒÏ ç¸ yÍ ãSÁeÂ È »T

## Chipset Features à PCI Delayed Transaction

<b>PCI Delayed Transaction</b>	ÀÓÙ ÐÏ ç¸ È´ ÈÈÀ PIIx4 ÎÓ% ÌÏ (Intel PCI 0 ÈÏ ISA) ÄÔ
Enabled	ÄÏ Û ç¸ Ä ç¸ ãú»T ç¸ èÄ PCI ÄÔÈ ÈàÐàÛ Ñ% ISA bus Äð»R
Disabled	ÀfAXÈ´ ÄÔISA ç¸ uÄÍ %/Æ ÈvÄÔÈ»Áè»R ç¸ ç¸ YÍ ãSÄÓ ç¸ ãúß
	PCI ÄÔÈàÛ ò ÈàÄÏ Û »T

## Chipset Features à Mem. Drive Str. (MA/RAS)

<b>Mem. Drive Str. (MA/RAS)</b>	ÀÓÙ ÐÏ ç¸ È´ ÈÈÀ ç¸ ÈèB À Á"Á ^ ÈeÓÓÛ ç¸ i ÄÔÍ ðÄñ»TÁóÇæÄðÍ
10mA/10mA	È´ ç¸ Áé ç¸ èð %fÄÔÖàÇà»R% ò ÈvÁ B È´ èèB ò %»R% ç¸ ç¸ zÓŠ
10mA/16mA	ÄÔÈ´ èèB ÒàÄ†ÓÓ»ò ÁeÑÒÆÈÔÈ»ÁeÍ, ç¸ ç¸ »T
16mA/10mA	
16mA/16mA	

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## 3.5 Power Management Setup

Power Management Setup ȝȝ È ĪŃŠĀİİēĀ0ȔȔ,,0Ȕİ' ĨŃŭ»TĀfĀXĀsȝUÜ Í ȝȔŭ  
 0ö "Power Management Setup" ĐİȝȔ»RĀj NĀsÜY0 ȝȔŃȝȝȔöĀfȝfİvÇÈ»X



### Power Management à Power Management

**Power Management**  
 Max Saving  
 Mix Saving  
 User Defined  
 Disabled

Ā0Ü Đİȝȝ È ĪŃŠȔȔȔ,,0Ȕİ' Ā0ĀfĐİÈē0ā»TĀfĀXÇēĀ È ȔȔ  
 0,,0Ȕİ' ĨŃŭ»R×ēĒ\_Ēē0āÇāĪnĒĒ Disable»TĀfĀXĪn User  
 Defined ȝȝȝȔȔĀ Ü 0ȔȔȔȔȔ,,0Ȕİ' Ā0Èē0āÇā»T

Mode	Doze	Standby	Suspend	HDD Power Down
Min Saving	1 hour	1 hour	1 hour	15 min
Max Saving	1 min	1 min	1 min	1 min



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## Power Management à PM Controlled by APM

<b>PM Controlled by APM</b>	ÀfÄXÙ 0ö"Max Saving"»RĪ_¿¿YB Äĭè%pĪÄDz¿Ó„Ñ×0ø
Yes	Ī' (APM) ¿ñú»R¿lĒ{Æó„0øĪ' ¿ñú»TÄiÄþ»XĒĒ% CPU %Ŧ
No	Ī»ĒÄĒŦÓSÁQ»T

## Power Management à Video Off After

<b>Video Off After</b>	À0Ù ĐĪ¿¿ĪnÄSBy¿ø00Ñ"àsÀ 0øÆó„0iÀ»%fÝ ĪÆŸÓ »T
N/A	
Doze	
Standby	
Suspend	

## Power Management à Doze Mode

<b>Doze Mode</b>	À0Ù ĐĪ¿¿ È' ĪnÄSÄĭlèDz¿ŦøèE%0iÀ»Ä0ĒÄD»»TÀsÀ00iÀ»
Disabled	%f»CPU ÄŦÓSÁQÈÄĒŦBøŦ»RĒ' ¿¿YÄ ÄŠThrottle Duty
1 Min	Cycle" ÄŦŦhĪ%T¿èÄ ÄĭèÆ ÀsĪ„0„ÄÆŦR%»»RÄi¿YĒŦĪ Ä
2 Min	¿ Ä ÈÄÁQÈÄ»RĪ'Ä¿ùÄj Ä ĪpÄ ¿ÜĒqÄÆŦR%f»TÄĭèÆ ŸÄ¿è
4 Min	ŦÄĪ IRQ ÈèŦŦÄiĒŦĪ Æ»ÈÄ»T
8 Min	
12 Min	
20 Min	
30 Min	
40 Min	
1 Hour	

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## Power Management à Standby Mode

<b>Standby Mode</b>	ÀÓÙ ÐĬçŽ È ĨŃŠĀĬĒĐ¼ĬĀ÷ŌìÀ»ÄŌÈĒĐ»TÀsÀŌŌìÀ»
Disabled	¼ƒ»RŃÈĬĒ CPU ÄŌŌSÁQÈĒÈuBŏŌT»RĬŠŌeŌaÈÈBĀĀ ÈĒÁQ»R
1 Min	ÙÝŌ Ý ĬĒĬçŽŃú»TçĒĀ ĀĬĬĒĒ ĀsĬ„Ō„ÄĀŌR¼¼»RĀĬçYÈŌĬ
2 Min	Ā ç Ā ÈĒÁQÈĒ»RĬ¼ŃçúĀĴ Ā ĬpĀ çÜÈqÄĀŌR¼ƒ»TĀĬĬĒĒ ŪĀ
4 Min	çĒĒĀĬ ĬRQ ÈĒŌŌĀĬÈŌĬ Ē»ÈĒ»T
8 Min	
12 Min	
20 Min	
30 Min	
40 Min	
1 Hour	

## Power Management à Suspend Mode

<b>Suspend Mode</b>	ÀÓÙ ÐĬçŽ È ĨŃŠĀĬĒĐ¼ŌĀÈÈŌìÀ»ÄŌÈĒĐ»TŌĀÈÈŌìÀ»
Disabled	ÄŌĬŃŠĀĬ Power On Suspend Āè Suspend to Hard
1 Min	Drive ĬçŌìÀ»»T
2 Min	
4 Min	
8 Min	
12 Min	
20 Min	
30 Min	
40 Min	
1 Hour	

## Power Management à HDD Power Down

<b>HDD Power Down</b>	Ń ĀĬĬĒĐ¼¼ŏ„ÄĀŌRÈĒ»RÀÓÙ ÐĬçŽ È Ā ĀŠ ĬDE ĬŠŌeÈÈ
Disabled	¼ ŌSÁQÄŌÈĒĐ»»TçŌŪ ÐĬŌ÷ÈĬĀĬ ĀpçĀĬçĀ÷ŌìÀ»Ā^ŌĀÈÈŌìÀ»
1 Min	ÄŌĬŃŠÇĀĀĬĀŠ»T
.....	
15 Min	

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## Power Management à Modem Wake Up

<p><b>Modem Wake Up</b>          Disabled          Enabled</p>	<p>Í'Ó] AOpen ÄÖEdÈ ×^ò ÍŕÇf (È^ Ábçí×è%RÍ.Đ çUØ          Ä` ççYÄöÈäÈÖÍ ÖàØØØ ÄÖÈeÖÖ»RÄYççðxçè ATX Soft          Power ÄöÈäD"Ø »RÍ, ĐİçŕŕúÄUËçØRÀi çèÄi Öi ÚÜDáÉ~Ø Öa          İÄÜ Ø »T ÖaĐaİè Green PC suspend mode %4ÄaÄÖÈ` »R          ÄŕİèççYÉ^çÛY Ø (ÄaÛp% Ä»È Úaŕŕó,,Œ×ÄeÚÍØÖÄÖÇŒÈÈ          È ÄpÈÈ% ÓSÜç) »Tç• Èİ Ä»Äè%ÖÈİ Ä»ÖaØçç ( AOpen          MP56/F56) Í½ççY%pİÄ modem ring-on ÄÖçŕŕú»R%4Ø]          ÄöÇæÄöPİÈ'ØÄççÉúÈPçè MP56/F56»RÄŕÈ MP56/F56 Äİ          ÉdÈ ÄÖÖ,,ò ÍŕÇfççYÖaççUØ Ä` ÄÓÈ ÄÖŒŒŒ»RŒ ÄŕİèY Ø          Èä»R %4Ø÷ÇÈÄ çèYçç•ÄÖÖ,,Œ×»T</p>
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## Power Management à LAN Wake Up

<p><b>LAN Wake Up</b>          Enabled          Disabled</p>	<p>Í, ÇiÛ ĐİçèÄi Èi çèÄèY ÍÈ LAN Wake Up çŕŕú»T</p>
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## Power Management à Suspend Mode Option

<p><b>Suspend Mode Option</b>          Power On Suspend          Suspend to Disk</p>	<p>çÖÄŕİèİ½Äè%FÄT%XØò suspend Öi Ä»»RÄèÈ' È Ä ØöÖ,,ØØ          İ' çŕŕú»TŒ ÄŕİèĐZ%4 <b>Power On Suspend</b> ØöÖ,,Öi Ä»          Èä»RĐaİèÄÖ Green PC ŒBoÄÄÖaÈä%4 ÄÄÖR»RCPU Èä          ÈuÈÈ% ÓSÜç»RÄi ÄİÄÖİŒà%Œİ½ ÍŒT%4Ø] ÄŕİèŒ'Ä` Ä İ,          Ö,,ÄÄÖR»RçYÄ\ÖaØØØ »SÛp×]»SÄèŒaÓÄÈÖÍ Ä ÈÈÈä»Rçç          çYÈÄ%ŕÄ İpÄ çÛÈçÖi Ä»%4»Tççç•»RÖäİ İRQ ÄÖÈÈä%Œ          çççYß ÄŕİèÖaÈÈÖi Ä»Ä ÄoçÛÈçÖi Ä»»T <b>Suspend to          Hard Drive</b> ççYÄsÖaÈäY Ø Äv»RÈ ÄŕİèÄÄÖR»RÈ` Øeß          Ä^ ÚYÓ Ö%ÖİİçÛçÄçsİSÖè%4»RŒ Ö,,Œ×ÇÄŒĐ"Èi Èä»RÄŕİè          İ_Œ'Ä ÄoÄ È' Ç ç %4 ÄQ ÄÖÄÈÖR %4»T È' çİ Ö÷ Äé çè          AOZVHDD %ççèİ' Ä»Äi Ä` ÈuİSÖèÄBD»T</p>
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## Power Management à Throttle Duty Cycle

<b>Throttle Duty Cycle</b>	Clock Throttling
12.5 %	RE_CPU 66Mhz
25.0 %	30ns
37.5 %	STPCLK
50.0 %	RCPU 66M
62.5 %	RCPU 66M
75.0 %	RCPU 66M
87.5 %	RCPU 66M

## Power Management à VGA Activity Monitor

<b>VGA Activity Monitor</b>	VGA
Enabled	Enabled
Disabled	Disabled

## Power Management à Power Button Override

<b>Power Button Override</b>	ACPI
Disabled	Disabled
Enabled	Enabled

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## Power Management à RTC WakeUp Timer

<b>RTC WakeUp Timer</b>	RTC WakeUp Timer
Disabled	Disabled
Wake Up	WakeUp Date (of Month)
Power Off	WakeUp Time (hh:mm:ss)

## Power Management à WakeUp Date (of Month)

<b>Date (of Month)</b>	RTC WakeUp Timer
<b>Alarm</b>	Alarm
0	0
1	1
2	2
.....	.....
30	30
31	31

## Power Management à Wake Up Time (hh:mm:ss)

<b>Time (hh:mm:ss)</b>	RTC WakeUp Timer
<b>Alarm</b>	Alarm
07:00:00	07:00:00
... : ... : ...	... : ... : ...

## Power Management à IRQ 8 Clock Event

<b>IRQ 8 Clock Event</b>	IRQ 8 Clock Event
Enabled	Enabled
Disabled	Disabled

# AWARD BIOS

## Power Management à IRQ [3-7,9-15],NMI

<b>IRQ [3-7,9-15],NMI</b>	ÀÏËÀsÀó,ÒiÀ»Èà»R;çÜà;èÀÓÙ ÐÏÈÕÏ IRQ Í,Ò Á^
Enabled	NMI %4pÆ ÁpÀÍ; À ÆÈà»TÈ_ÀÓÙ ÐÏÏÆ Enabled»R
Disabled	ÀfÈ,,Í,Ò %8ÈÕÏ Á ; À ÆÈà»RÁj ÑÍ Ù ÀÏË»RÁYB ÀÏË À Ào;ÛÈqöiÀ»»T

## Power Management à Primary IDE 0

## Power Management à Primary IDE 1

## Power Management à Secondary IDE 0

## Power Management à Secondary IDE 1

## Power Management à Floppy Disk

## Power Management à Serial Port

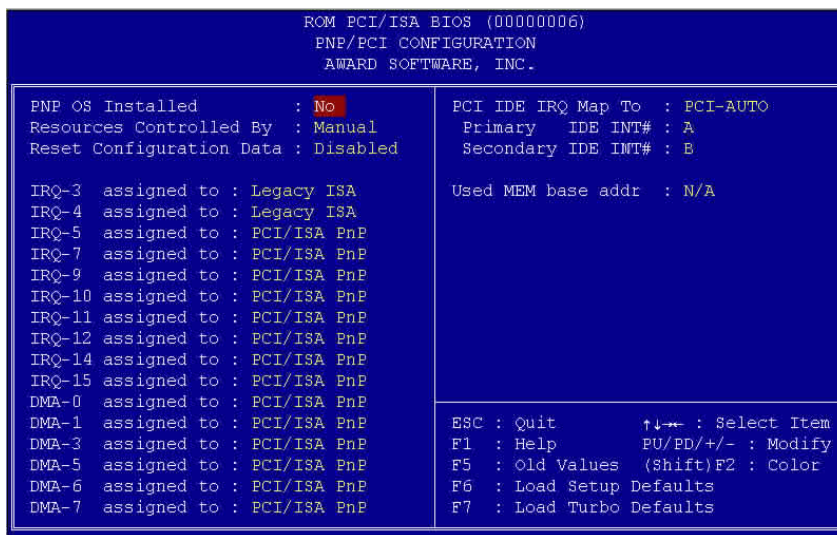
## Power Management à Parallel Port

<b>Primary IDE 0</b>	Í,ÁáÙ ÐÏ;çÍñŠÁèÀ È ÍñàÈÕÏ ;ñú»TÑ ÀÏËÀs IDEÍñ
Enabled	Í»RÍÈ0è0 »RÁYÁTÈ »RÁáÁTÈ ÀsÀó,,ÁÆÖR%fÄÖÆÈàÈ»Àè»T
Disabled	ÀfÁXÍ,ÁáÍñáÍbÈÕÏ Á ÁÍBÁ/ÖxÀè I/O ÐáÙ ÁÖÈàÁQ»RÍ_Ñ“ È,,ÒaÈÈÖiÀ»À Ào;ÛÈqöiÀ»»T

# AWARD BIOS

## 3.6 PNP/PCI Configuration Setup

PNP/PCI Configuration Setup  
 ROM PCI/ISA BIOS (00000006)  
 PNP/PCI CONFIGURATION  
 AWARD SOFTWARE, INC.



### PNP/PCI Configuration à PnP OS Installed

<b>PnP OS Installed</b>
Yes
No

Í,Èq,RÂîèÀsÊ À POST Èã»RÑÈ\_ÌBÀi ÚYÍ»Áj ¿(PnP)  
 ÄÖÍñáí „,ÄØ BIOS»TÀfÄXÈ' Äé¿èÄýÁÍ PnP ¿ñúÄÖÁQÑ•Ä†  
 Ìè (Äf Windows 95)»RÍ\_¿¿YÈ\_Í, Çi Û DÍÍñÈYes»BIOS  
 Í\_ÑÍñSÚYÍ»Áj ¿èÄÖ¿ñúÁí Èi ÈäÍñá»RÄf VGA/IDE Äè  
 SCSI Í¿Ûi ¿C¿u»T

# AWARD BIOS

## PNP/PCI Configuration à Resources Controlled By

<b>Resources Controlled by</b> Auto Manual	È_ÀÒÙ ÐĪĪnĒ Manual»R;B Âé;èÄaĒĒ ISA Ā^PCI ĪnĪà %ŪĀ`Ā ĀŠĀiŌ=ĀŌRQ Ā^DAM»TĀfĀXĪĪĒ Auto»RĪ_ŅĒi ÈāĶÈĀĪnĀŠ;ĵĵ»T
--	---

## PNP/PCI Configuration à Reset Configuration Data

<b>Reset Configuration Data</b> Enabled Disabled	ĀfĀXĀi Ā ĀŠĀŌ IRQ ĀeĀĪĒèÇĀŅ†ĒŌtĀnĪ, ĵÇĀ»PĀŌÈ» Āe»RĪ_ĵĒ_ÀŌÙ ÐĪĪnĒ Enabled»RB ĀĪĒèÇĀŅ†ĒŌtĀYĀ ĀŠŅ†ĀŌ IRQ»T
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- PNP/PCI Configuration à IRQ3 (COM2)
- PNP/PCI Configuration à IRQ4 (COM1)
- PNP/PCI Configuration à IRQ5 (Network/Sound or Others)
- PNP/PCI Configuration à IRQ7 (Printer or Others)
- PNP/PCI Configuration à IRQ9 (Video or Others)
- PNP/PCI Configuration à IRQ10 (SCSI or Others)
- PNP/PCI Configuration à IRQ11 (SCSI or Others)
- PNP/PCI Configuration à IRQ12 (PS/2 Mouse)
- PNP/PCI Configuration à IRQ14 (IDE1)
- PNP/PCI Configuration à IRQ15 (IDE2)

<b>IRQ 3</b> Legacy ISA PCI/ISA PnP	ĀfĀXĒ`ĀiĀŠŌaĀŌISA ĵuĀdĀĪ PnP ĵĵ»RĪ_Ō=ÇĒĀ ĀŠIRQ Āi`%PĪĀ;ĀĀŌ;ĵĵ»TĪ, ĀāŪ ÐĪ;B È`ĀaeĀĀ ĀŠ IRQ ĪŌ Legacy ISA ĵuĀ^PCI/ISA PnP ĵuĀé;è»TŅ È`Ā ĀŠĒ; %Q IRQ ĒĒ Legacy ISA Èā, ĀĪĒĒĪ,,ĀŌ PnP BIOS È_ĀiĪn ĀŌIRQ Ā`ĒuĪŌ%ŠĀŠŌaĀŌISA ĵuĀé;è»TÈĒŌaŌŠĪnÇaĒĒ PCI/ISA PnP»R-eĀqŅ_ĀĪĀaPCI ĵu (Ō ŪŪĀĒĀŌPCIĵuĒĵ •) ĀY%Ō=ÇĒĒè IRQ»RĪ_ĵĒ`ĒuĪŌISA ĵuĀé;è»T
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# AWARD BIOS

- PNP/PCI Configuration à DMA 0
- PNP/PCI Configuration à DMA 1
- PNP/PCI Configuration à DMA 3
- PNP/PCI Configuration à DMA 5
- PNP/PCI Configuration à DMA 6
- PNP/PCI Configuration à DMA 7

<p><b>DMA 0</b> Legacy ISA PCI/ISA PnP</p>	<p>ÀfÀXÈ' ÀiÀŠÒaÀŌISA ¿uAdÀÍ PnP ¿mú»RÍ_¿ÌDÑÀ ÀŠDMA Í,,ÓUÁi¿PÌÀ¿ÀŌ¿mú»TÍ, ÁaÛ ð¿¿B È' ÁæÁaÁ ÀŠ DMA Í,, ÓUÍ¿Legacy ISA ¿uÁ^ PCI/ISA PnP ¿uÁé¿è»TÑ È'Á ÀŠ¿¿QDMA Í,,ÓUÁ¿Legacy ISA Èã»RÀ¿ÈÑ¿,ÀŌ PnP BIOS È_ ÀŌ DMA Í,,ÓUÁ` ÈuÍŌÁiÀŠÒaÀŌISA ¿uÁé¿è»TÈèŌaŌS¿r¿a¿E PCI/ISA PnP»R×èÁqÑ_ÁÍÁaPCI ¿uÁÝ¿¿Ō-¿EÁé¿è DMA Í,, ÓU»RÍ_¿¿Á` ÈuÍŌISA ¿uÁé¿è»T</p>
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## PNP/PCI Configuration à PCI IDE IRQ Map To

<p><b>PCI IDE IRQ Map To</b> ISA PCI-Slot1 PCI-Slot2 PCI-Slot3 PCI-Slot4 PCI-Auto</p>	<p>ÁÍ¿QÁaŌ ÜÜÁŌPCI IDE Üi ¿c¿u¿¿¿¿PÌ¿PnP ¿mú»TÍ, Áa ¿uŌ-¿EÁŠŌaÁsÁ ÀSAŌÜi ¿cŌè¿¿¿R¿¿ ÈuÍBIOS¿ÁÑ¿ŌŌt PnPŌ Ñ»»TÁŌ¿mú»ŌÍñ` Ü ŌŌ PCI Í»ŌèÍŌ PCI IDE Üi ¿c ¿uÁé¿è»TÍnÁŠ Auto Ñ`aŌÈaŌŌt¿SÁŠŌaÀŌ PCI -IDE I Üi ¿c¿u»T</p>
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## PNP/PCI Configuration à Primary IDE INT# PNP/PCI Configuration à Secondary IDE INT#

<p><b>Primary IDE INT#</b> A B C D</p>	<p>Í, Áu¿¿¿¿ Ü ð¿¿ÌDÑÈ¿ "PCI IDE IRQ Map To" ð¿¿ŌÁé¿è»T È' ¿¿YÁ ÀŠ IDE ¿¿¿¿¿¿PÍŌ PCI IDE Üi ¿c¿uÁŌprimary Á^ secondary Í,,ÓUÁé¿è»TÁ¿¿Q¿PCI Í»ŌèÍ`Á¿¿¿¿¿ PCI ¿¿¿ ¿¿¿¿¿¿bÁ ÀŠ »TÈ' ¿ÌDÑ¿ ÍnÁŠ "PCI IDE IRQ Map To" Ài Áé¿èÀŌ¿»Ōè»RÀRÁaÀŌÁ ÀŠPCI¿¿¿¿¿¿PÍŌÁiÀŠÒaÀŌÜi ¿c¿uÁé ¿è»T</p>
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## AWARD BIOS

PCI Slot	Location 1 (pin A6)	Location 2 (pin B7)	Location 3 (pin A7)	Location 4 (pin B8)
Slot 1	INTA	INTB	INTC	INTD
Slot 2	INTB	INTC	INTD	INTA
Slot 3	INTC	INTD	INTA	INTB
Slot 4	INTD	INTA	INTB	INTC
Slot 5 (if any)	INTD	INTA	INTB	INTC

### PNP/PCI Configuration à Used MEM Base Addr

Used MEM base addr	ÀÓÙ ÑÏ ÌÐÑËÏÀi "Used MEM Length" ÑÏ ðÀé;è»TÀfAX È'Ài ÀŠ0aÀ0 ISA ;uAdAÍ PnP ;mú»RÍ_ÏÐÑÀ ÁŠÈ` ØeB ÈvÐ„Ái %pIÄ;AA0;mú»RÁi ÀÓÙ ÑÏÏy;ZÁ ÁŠÍbÁ` ÉuÀ0È` Øe B ÄBD»Ð"Ä)Ä Á"»T
N/A	
C800	
CC00	
D000	
D400	
D800	
DC00	

### PNP/PCI Configuration à Used MEM Length

Used MEM Length	ÀfAXÈ'Ài ÀŠ0aÀ0ISA ;uAdAÍ PnP ;mú»RÍ_ÏÐÑÀ ÁŠÈ` ØeB ÈvÐ„Ái %pIÄ;AA0;mú»TAÓÙ ÑÏ;ZÁ ÁŠÁi 0-ç€È` ØeB ÈvÐ„»RÁYÍ„ÄØ PnP BIOS È_È` ØeB ÄBD»Ä` ÉuÍÓÁi ÀŠ0a ISA ;uÀé;è»T
8K	
16K	
32K	
64K	

# AWARD BIOS

## 3.7 Load Setup Defaults

ÀÓÙ ðí çž, BIOS ROM ¼ð ¼Íæài ØRÄÖÍñŠÇà»T¼QÉ ÁéçèÄæ×éAbçèÀÓÙ ðÍð ¼ÓŠ Íñçà»RÍ, ÁáÓŠÍñçãñ'Ö¼BeAi ÁÍÄÖ Setup ðí çð»RÈ¼WöeÑãÄÖ CMOS ÍñŠ»TÀfAXÈ' ÄÖÄñÈèÀŠðað ÈÄÈvD, ÄÖÈ` ØeB »RÀì Üì çcÖe¼m¼»Ô»Üì ççç»RÁóçæðoPÍÈ' ÁéçèÄÖðÍ Ìñ Š»T

ÀÓÙ ðÍÄÝ¼¼E ÍæÄŠç ÄÖÄñÈèÍñŠ»RÀfAXÄñÈì, çç¼YÇÁSÄÖÄÄf»RÈ' ççYçè¼iÈÄÄÖ ¼ À»As "BIOS Features Setup" Ä^"Chipset Features Setup" Ü ðÍ¼ÍñŠÖ ÖTÄ^ ð YÇÁSÄÖÍñŠ»T

## 3.8 Load Turbo Defaults

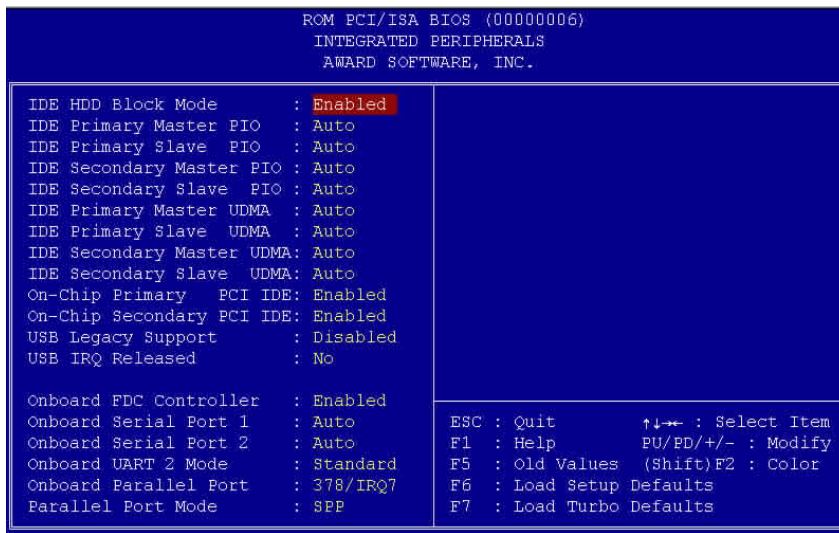
ÀÓÙ ðí çð ¼ÄfÄ BIOS ROM ¼ð ÈÄÈPì¼ÄÖÖŠÍñçà»TÍ, Ááð ¼ÄÖÖŠÍñçãñ'Ö¼BeAi ÁÍÄÖ Setup ðí çð»RÈ¼WöeÑãÄÖ CMOS ÍñŠçYç»TEÄÈPì¼ÄÖÍñŠçáö ÄñÈèÄíÄçç Èú¼¼E ÍæÄèÄÖÍñŠçà»RÀfAXÈ' ÄÖÈ` ØeB ÈvD, ¼¼¼»R¼ÄdÁÍÀŠðæÄöAyÜì ççç»RÍ\_çç çYÄì Ö' ÄÖðÍ ÌñŠ»T

È'¼ççYçè¼iÈÄÄÖ¼ À»As "BIOS Features Setup" Ä^"Chipset Features Setup" Ü ðÍ¼ÍñŠÈèÖaÇà»Rß ÄñÈèÜ È, Á ÀèÄÖÈ À ÈPì¼T¼¼Ö¼È' Ççç ÜRðèÄíÄÍÄÖÙ ðí çñú»R ÀmÈÈÄíñÍñŠçàÄæÍÖ¼ ÌíÄ^ ÜÍçè×uÍ ¼¼À»Rçç¼¼ÈÄ 3% Ä 10% ÄÖÈ À ÈPì¼»T

# AWARD BIOS

## 3.9 Integrated Peripherals

ÀfÄXÀsçUÙ Í %&Ù Øø “Integrated Peripherals” ÐÌçò»RÁj Ñ”ÀsÜÝÓ %ÀBýçöÀf%FÏv ÇÈ»X



### Integrated Peripherals à IDE HDD Block Mode

<b>IDE HDD Block Mode</b>	ÀØÐÌçòçZÏÑŠÏŠÔèçYÀyÔèÈé%À»ÐàÈvØ Èà»RÁÝçzÈ È¼ÁT ÇíÔèÔèÀÔ%ÄÏÍSÌ`ÈäÐ»»T¼Í»ç ÀÕ IDE ÝŠÔèÍ¼z¼pÍÁÁÓ ÐÌçñú»RÈ¼¼WØ ÀÇÈÙçi ÀÕÏŠÔèçZÈuÀdÁÍÏçfAÓÓðDaÙ Øi À»»T
Enabled	
Disabled	

# AWARD BIOS

- Integrated Peripherals à IDE Primary Master PIO
- Integrated Peripherals à IDE Primary Slave PIO
- Integrated Peripherals à IDE Secondary Master PIO
- Integrated Peripherals à IDE Secondary Slave PIO

<b>IDE Primary Master PIO</b>	À0Ù ÐĲzĲnĂŠĂŠ0àÀs IDE Í†Ěİ00%4nĂ0IDE İŠ0êzYÀ 0ø
Auto	PIO 0iÀ»ÁiĐaÙ 0 Èa»TPIO 0iÀ»zĂ ĄŠİŠ0èĂ00 ÈaĐaÙ
Mode 1	Í†Ĳ%RĂiĂf mode 0 Ă00 ÈaĐaÙ İ%ĤÈ 3.3MB/s»Rmode 1
Mode 2	ĤÈ 5.2MB/s»Rmode 2 ĤÈ 8.3MB/s»Rmode 3 ĤÈ 11.1MB/s
Mode 3	Ài mode 4 ĤÈ 16.6MB/s»TÈè0à0ŠİÇaĤÈ Auto »RĂfĂXĂ0
Mode 4	ÍnĂŠNĂèİŠ0è%4ŲÇ»RzZçYÈ_ĐaÙ İ%eY%uiÈä% À»ÇĂN†xİ



ĂqN̄ : xèĚ\_Ĕ' Ă0İP%Qç<IDEİŠ0èÍ†ĚİÀsPrimary  
IDE Ă0master Í„0U%4»T

- Integrated Peripherals à IDE Primary Master UDMA
- Integrated Peripherals à IDE Primary Slave UDMA
- Integrated Peripherals à IDE Secondary Master UDMA
- Integrated Peripherals à IDE Secondary Slave UDMA

<b>IDE Primary Master UDMA</b>	ĂfĂXĂŠ0àÀsIDE Í†Ěİ00%4nĂ0IDE İŠ0èĂÍ%pİĂUDMA 0i
Auto	À»»RzZĚ_Èè0àİnĤÈ Auto»RzYÈi ÈaUltra DMA/33 ÈĂİĐa
Disabled	Û 0iÀ»»T

- Integrated Peripherals à On-Chip Primary PCI IDE
- Integrated Peripherals à On-Chip Secondary PCI IDE

<b>On-Chip Primary PCI IDE</b>	À0Ù ÐĲzĲnĂŠĂèĂ È Í†ĚİÀs primary IDE Í†Ěİ00%4nĂ0
Enabled	IDE ÍnĂ»»T
Disabled	

# AWARD BIOS

## Integrated Peripherals à USB Legacy Support

<b>USB Legacy Support</b>	ÀÒÙ ÐǃçłŃŠÀÈ È USB Ũp×]ÀØBi Èàǃ'À»TÀfÀXŃbÇÈ Àéçè USB Ũp×]»R%AdÀdÀÍØRÀi ÀØBi Èàǃ'À»»RçĒ_ÈèÒàǃn ÆÈEnabled»TÀÒŨp×]Bi Èàǃ'À»%ÔÀòÀsBIOS %Ô»RçĒi ÚÚ ĐàǃÈŨp×]Àçç` »RÀŸçSÀsĐ"Ø È À POST ǃ' ÁáÈàÈi Èà USB Ũp×]çŃú»TÈèÒàóŠÍŃçàÆ Disabled»T
Enabled	
Disabled	



ÀqŃ\_: ×è%4ÇÈÀÈÀéçèUSBÍŃàÀ^USBĐàǃÈŨp  
×]»TÀfÀXÁQŃ•ÁǃǃÈ%ŠÀSÒaUSBBiÈàǃ'À»»R×èÀ È  
"USB Legacy Support" çŃú»T

## Integrated Peripherals à USB IRQ Released

<b>USB IRQ Released</b>	USB ÍŃàÀÏ INTD# Òa PCI slot4 ÆbÀa»TÀfÀXÀslot4 %ĥ ÀŠÒaPCI çu»RÀŸÇÈÀéçèINTD# È»R×èÈ_ÈèÒàǃnÆÈYes»R Áj ŃÁ È USB ÍŃàÀiÀ çèÀÏ INTD# (%ŦŨpÀ Á")»T
Yes	
No	



ÀqŃ\_: È' ççYÈ\_ PCI VGA çuÀŠÒàÀs slot4»RÀnÆçÀÁŸ  
%ŦŃ"À çè PCI ÀØ%ŦŨpÀ Á"»T

## Integrated Peripherals à Onboard FDC Controller

<b>Onboard FDC Controller</b>	ÀÒÙ ÐǃçłŃŠÍ€À»ØéØèØ ÀØçŃú»TÀfÀXŃbÀéçèç•ÈĪÀ»ÀÏ ÈÈÀ çu»R×èÈ_Ũ ÐǃÍŃnÆDisabled»TÈèÒàÓŠÍŃçàÆ Enabled»RçĒ ÒéØèØ çÛÈçÓSÁQ»T
Enabled	
Disabled	

# AWARD BIOS

## Integrated Peripherals à Onboard Serial Port 1 Integrated Peripherals à Onboard Serial Port 2

<b>Onboard Serial Port 1</b>	ÀÓÙ ÑÌ;ZÁ ĀŠ;UØ Ä`%41ÄÖÀ ÀTÍ†ËÏØÓÀ Á"Ä^%4Ïp»TÓŠÍn
Auto	ÇâÆ Auto»T
3F8/IRQ4	
2F8/IRQ3	
3E8/IRQ4	
2E8/IRQ3	
Disabled	



ÄqÑ\_ : ÄfÄXË' ÄÍÄé;èØ ò ;u»R×e×eÄŠ%4ÏpÀ Á"Öa  
Äp;ÄÄÖÍnÍÄÄY%4Æ×P»T

## Integrated Peripherals à Onboard UART 2 Mode

<b>Onboard UART 2 Mode</b>	ÀÓÙ ÑÌ;Z;YÄ ĀŠÀ ÀTÍ†ËÏË (serial port2) ÄÖÖiÀ»T%4Ö]
Standard	Ç€; ÍnŠ "Onboard UART 2" ÄÖ;ñú»T
HPSIR	
ASKIR	

- **Standard** - ÍnŠ serial port 2 ÄÖÖÄQÆ;ÜËqÖiÀ»TÀÓÙ ÑÌ;nE ÊeÖaÓŠÍn Çâ»T
- **HPSIR** - ÄfÄXÄsÓ,,Ø%ÄÖ ÍrDA Í†ËÏØÓ%41%ŠÄŠÖa%WE ;•×^ËÏÄØÖ(ÍrDA)»RÍ\_ ;Z;YÄé;èÀÓÙ ÑÌ»RÍ, ÖÖÍnŠ;ZDaËVÀ ÀTËeËÄÓW115K ÄZÉd»T
- **ASKIR** - ÄfÄXÄsÓ,,Ø%ÄÖ ÍrDA Í†ËÏØÓ%41%ŠÄŠÖa%WE ;•×^ËÏÄØÖ(ÍrDA)»RÍ\_ ;Z;YÄé;èÀÓÙ ÑÌ»RÍ, ÖÖÍnŠ;ZDaËVÀ ÀTËeËÄÓW19.2K ÄZÉd»T

# AWARD BIOS

## Integrated Peripherals à Onboard Parallel Port

<b>Onboard Parallel Port</b>
3BC/IRQ7
378/IRQ7
278/IRQ7
Disabled

ÀÓÙ ÑÌ;ZÈÈÀ ;UØ Ä` %hÄÖÄYÄTÈ À Á"%e%4Up%0ÇÈ»T



ÄqÑ\_: ÄfÄXÈ' Äe;èÄÖ I/O ;u%nÄ ÄÍ%0ÇiÄYÄTÈ »R  
 ×è×eÄSÄe;èÄÖÄ Ä"Öa IRQ %4N"Öa0 Ä` %hÄÖÄYÄT  
 È Äb×P»T

## Integrated Peripherals à Parallel Port Mode

<b>Parallel Port Mode</b>
Normal
SPP
EPP 1.7 + SPP
EPP 1.9 + SPP
ECP
EPP 1.7 + ECP
EPP 1.9 + ECP

ÄÖÑÌ;ò;ZB È' Ä ÄSÄYÄTÈ ;YÄ Öò00ÄQÖi À»Äi ÐäÜ Ö  
 Èa»TÈè0a0SÍrÇaÈ Normal, %ÄÌ\_Ä SPP (Stand Parallel  
 Port) Öi À»RÄÈ IBM AT Ä^ PS/2 ÄÈvÖi À»R;Z%ÖÍÄYÄT  
 È ÄsÍ Äg Öi À»%f ;Y ;ÜÈqÍÄÄn00ÄQ»EPP (Enhanced  
 Parallel Port) Öi À»R%ÖÍÄYÄTÈ ÄsÜ Äg Öi À»%f ;YÍæ%ÍÍ  
 Än00ÄQ»ECP (Extended Parallel Port) Öi À»R% ÍæÄÄÍÍ  
 ÄnÄ ÄðÄÖÜ ÄgÄYÄTÈ 00ÄQ»RÄ ÈXMA Ä^ RLE (Run  
 Length Encoded) Ü¼Äj Ä^ ÖeÜ¼Äj Ä0% Ä»Äi ÐäÜ Ö Èa»T  
 EPP1.7 Ä^ EPP1.9 Ä Ä` %ÄÄÄÖÍ,,ÈeÄ ÄS»T

## Integrated Peripherals à ECP Mode Use DMA

<b>ECP Mode Use DMA</b>
3
1

ÀÓÙ ÑÌ;ZB È' Ä ÄS ECP Öi À»ÄÖÄYÄTÈ Äi Äe;èÄÖ DMA  
 Í,,ÖU»TÈè0a0SÍrÇaÈ3»T



# AWARD BIOS

## 3.10 Password Setting

È\×i ÍñŠ¿zñÁ\¿l¿Y¿00×ÈÜB%»SÀi0iÀóÀé¿èÈ'À00,,0%»TÀfÁXÍÍñŠÀÈÈ\×i »RÀíÈèÑ'ÀsÀTA0B"0 ÀèDz%¿ BIOS%¿¿èÍ'À»Èà»R¿i Í' %QÇiÍ¿¿öÌB00»RÇÈÀUÈ'Û %¿¿Û×eÀ0È\×i »T

ÍñŠÈ\×i »X

1. ÀsÍ¿¿öÌB00%¿»RÛp%¿Ía¿y8 ÇiÀ..¿0À0È\×i »RÈ'Ài Ûp%¿À0À..¿0ÀsÛY0 %¿¿¿¿Ñ¿¿i Í'Àa00»T
2. Ûp%¿È\×i Àú ×eÀ Enter Ûp»T
3. ÈÍÍó%¿dÑ¿¿i Í'Í¿¿öÌB00»R×eÀRÛp%¿QÀ0È\×i »R¿Y×e0'È\×i À0¿Û×eÀa»Enter Ûp»RÁj Ñ'À×ÈÍÀoÀ ¿UÍvÇÈ»T

ÀfÁXÇÈÀ È %¿ÍñŠÀ0ÈÈ\×i »R×eÀs¿i Í'Û %¿È\×i À0Í¿¿öÌB00Àú»RÀ×ÈÍÀEnter Ûp»R ÍvÇÈ%¿¿Í\_Ñ¿¿i Í' %QÇiÈÈÀÁzDUÈ'È\×i %SÍbÀ È »T

## 3.11 IDE HDD Auto Detection

À0¿nÈú¿¿¿YÀóÈaÈ0Î IDE ÍŠ0eÀ0ÀÆ0R»RÁYÈ\_È0Î Á À0Èè0aÇaĐaÂ "Standard CMOS Setup" À0 "Hard Disk" Û ĐÍ%¿»TÁÍÁa IDE ÍŠ0e¿¿pÍÁAyÍiÀ0Èè0aÍñŠ»RÁf ÁXÈ'À0ÍŠ0e%¿0R¿¿eÍ, ÁaÀóÈaÈ0Î Á À0Èè0aÇa»R×eÛ N %¿¿ÇÈÀe¿¿¿Ça»RÁYDz%¿ "Standard CMOS Setup" Û ĐÍ%¿Ûp%¿¿Û×eÀ0Èè0aÇa»T

## 3.12 Save & Exit Setup

À0Û ĐÍÑ'ÀsÈ'Û Đ' Setup %¿¿¿èÍ'À»Áv»RÀóÈaÛ<À†ÁiÀÍÀ0 CMOS Ça»T

# AWARD BIOS

## 3.13 Exit without Saving

Ü Ð" Setup »RÀ »RÀ Ü<À†Á Á Ó]ÄÖ CMOS Çà»TÀfÄXÈ' ÇÈÜ<À†Ñ†ÄÖÍÑŠ Çà»R×è»ÇÈÄéèÄÖÜ ÐÌ»T

## 3.14 NCR SCSI BIOS and Drivers

NCR 53C810 SCSI BIOS »QÖäÉçÈAsÆàÄÖÄÈ' È` ØèB ÍÓ% »RÑ ÄÄÄÈ BIOS Äéè»TÇÈÄéèÄ' »hÄÖNCR BIOS»È' çÌDNç ÀsÄÈè»RÄSÖà»Q%NCR 53C810 SCSI ÈÈÄ çu»T

ÄiÄIÄSÖaÄ ÄÈè»ÄÖ SCSI Íñà»RÍ'»E Ò-ÇÈÍÈB Bi ÈäI' À»»NCR SCSI BIOS çZÄ× ÈIÄs DOS »f »pIÄ SCSI ÍŠÀ»ÖèÖèØ »RWindows »E OS/2»T»YçZçYÄbçè NCR 53C810 SCSI ÈÈÄ çuÄiÄ ÄÖÍÈÀ»ÖèÖèØ Bi ÈäI' À»»RçYDOS È À»»E SCO UNIX È À»ÄiÄéçèÍÈÀ»ÖèÖèØ »TIDOS È À»ÄÖBi ÈäI' À»»ÄÄ SCSI Íñà»RÈ çZçYçèÄsDOS»R Windows NT»Novell NetWare »E OS/2»TÄi SCO UNIX È À»ÄÖBi ÈäI' À»»ÄÄ SCSI Íñà»RççèÄ SCO UNIX»TÍ, ÄäBi ÈäI' À»» çèÄ×ÈI BIOS Äi »pIÄÄÖÈÈÜöÈÄ»T

ÇÈÄéèèBi ÈäI' À»»RÈ' çÌDNÈ\_Í, ÄäI' À»ÄSÖaÄ ÄÈÈÍŠÀ»ÖèÖèØ »RÄYçSÈ\_ÄçIÄ È' ÄÖÄÈÈÍÑŠÜä»TÄöÄ òrÌiÄSÖà»Ä|»R×èÆÍ, ÄäBi ÈäI' À»ÄiÄ ÄÖ README ÜäÈñ »ÄÖÜ»Ä »T

## 3.15 BIOS Ü\_Ü Ì' À»

çYÄÖÄÖçUØ Ä` Í»E ÈBIOS Ä Às»QÖöÖöÈÈPROM ÄÖÈ` ØèB »RÑ Ò-ÇÈÄ Ñ†BIOS ÄÖÈaÇi»RçÌDNÄéèÄ EPROM Ü\_Ü ØÖ»RÄi çY»QÈ ÄéèÄÄÄYÍ]Ä|ÄöÄ Á ÑBIOS»T ÄiÑ†»Qç\_ÄÖçUØ Ä` »SÍ»ÖçÄ çFlash ROM ÄiÜ<À† BIOS»RÄpÜ\_ÜZAsÄ ÄéèÄÄç`ÇÈ Í' Ó]çÄYÍ' À»»RÄçZÄöÄ Á Ñ†Ñ†ÄÄÄÖ BIOS»RÄUÈççÄ` Ä»T

Ä Ñ† BIOS ÄÖçöÄÖAsÄ Í'ÄèÑ†ÄÖçUØ»RÄè»pIÄ»QÄäçÇÈ»hÑ†ÈÜçi ÄÖÍŠB »TÈ' çZÄé çè BIOS Ü\_Ü Í' À»ÄiÄ Ñ† BIOS ÄÖÄÄçÖ»RÇÈÄ È, Í»Ñ†ÄÖ BIOS ÜäÈñöaÜ\_Ü Í' À»»R ×èÆÄÜÈ' ÄÖÖxÖaÈi»RÄèÄä»çZçYçèÄçÄÄÖ ÈÖ (<http://www.aopen.com.tw>) »f ò (download)»TÜ\_Ü Äv×è×eÄŠÈ' ÄiÄ È, ÄÖBIOS ÜäÈñÆ çÜ×eÄÖÄÄçÖ»R»QÈ ÄiÖ»»R È' çZçYÈ, ÜäÈñÄhÖöÄiÄaÜp»TÄiÄp»Xçj ÜäÄh»P5TR110.BIN»RÌ\_ç\_Ä Í, ÄAP5T çU Ø Ä` ÄÖBIOS»RÄpÄÄçÖÈ 1.10»T

## AWARD BIOS

Áô ÇæÀQ Î½Äë ¼WÄü Çí ¼ Äý Í' À» »XCHECKSUM.EXE ¾e AOpen Ù\_Ù Í' À»  
AOFLASH.EXE»TÄéç¾ Ä|×eËëÄi çY¾f ÄÖÄSà[»X

[CHECKSUM.EXE]

Í, Çí ¼Ä ÄýÍ' À» ççYÜËË' ×eÖ' ¼f ð ÄÖ BIOS ÚäËñ chechsum Æ ÁpçÙ×e»T

1. ×eË À

C:> CHECKSUM Biosfile.bin

Biosfile.bin Á ÄÖÆ BIOS ÚäËñÄÖÄhÖó(Äf AP5TR110.BIN)»T

2. Í' À»ÑBýçö "Checksum is ssss"»T

3. ×e¾ ð Ç ¾ÄXÄsAOpen Ö ÉÖÄë BBS ¾ÄÄÖchecksum "sss"»RÆÆÆÆ ÁpçÙ×e»T  
ÄfÄX¾çÙ×eÄÖö»R×e¾Ë À Ù\_Ù ÄÖËäÄQ»RÄÝÇÄÑ†¾f ð ¾QÄÖ»T

[AOFLASH.EXE]

Ë À CHECKSUM Í] Ö•Äü»RÄ\ççYÄéçèAOFLASH.EXE ÄíÙ\_Ù Ñ†ÄÄÄÖ BIOS ¾W»T  
Í, ÇíÙ\_Ù Í' À»Ñç ÚäËñUÖ Ä` ¾e Super/Ultra I/O IC ÄÖÄÄÖ»RçY×eÄ BIOS ÚäËñÆ  
çÙ×eÄÖ»T×eÄqñ\_»XÜ\_Ù ÄÖÄÄÄü»RÇBBIOS È\_Ñ†bÜëÖñÖ»T

1. çè A ÖéÖèçY DOS Ð"Ø ¾ Ð"Ø »RÄÝçS×e¾Ë À Äf ÖöË` ÖeB ÖöÍ' Í' À» (Äf  
HIMEM»SEMM386»SQEMM386, ...)»T

2. ×eË À

C:> AOFLASH Biosfile.bin

Biosfile.bin Á ÄÖÆ BIOS ÚäËñÄÖÄhÖó(Äf AP5TR110.BIN)»T

3. Äsð ¾Ñ†ÄÖ BIOS ÚäËñÄü»RÍ' À»ÑË÷Ë' Æ ÁpçËË\_ÜÜÄÄÄÖ BIOS Ä†Ä Öéöè¾¾»R×e  
Ù Öö "Y" È\_ÄpÄ†Æ "BIOS.OLD"»T

4. Ú\_Ä†ÜÜÄÄ BIOS ÄÖÄÄü»R×eÄ ¾f"Y" Ð"Ä}ÐzÄ Ù\_Ù »T

5. ÄsÙ\_Ù ÖÍÍ' ¾¾»RÜÝÖ Ñ" Býçö¾QÄ "FLASHING" ÄÖËeÄÄ (Ù\_Ù ¾¾)»RÄÖËä¾uÖf¾¾  
ççY Ø »T

6. Äs "FLASHING" ÈeÈÄÈ ç½Äü»R×eÝ ÍÄÖ,,Ñ×ÄÝÇÄÑ†Ð"Ø »T

7. Ð"Ø ÄüÄ ¾f "DEL" ÜpÐ¾¾ BIOS Setup ÝvÇË»T

8. ÇÄÑ†Ü ÄŠ "BIOS SETUP DEFAULT" Ù ÐÍ»RË\_Ä†èÍÄŠÄsÍæÝÇÄSÄÖÄÄÖR»WÄë  
ÄæË' ¾ççY×iÖyÄÄÇ ç ÄÖÍÄŠÇä»T

9. Ù Öö "Save & Exit"»RÄ ÄÖÍ\_¾çççÄÄËi »Z

## AWARD BIOS



ÞÍ Áz: ×ê ¼¼Ç€Às Û\_ Û Ó] Í' ¼¼ (Î\_Æ Ñ ÛÝÓ ¼¼By çö  
"FLASHING" Èä) Ý Ø »TÀfAXÁdÁÍÛ\_Û ÁÓÁÁÍ\_Ý Ø »RÁ‡  
ÏèÈ\_Ï|Á|ÇÁÑ†Èì Èä»RÈ: Î\_çÌĐÑÁ ÎÁ BIOS Flash ROM  
¼¼T



Î½çö: È' ¼nçzçYÁæÎqÀaÖáÄÖÝ' Áá»RÈ\_ÛÜÄÄÄÖ BIOS  
"BIOS.OLD" ÖxÁo»T

# Ä Ü C Jumper ÍnÄŠÄ

## ÍnÄŠ CPU Ó,Ú½

CPU	Type	S4	S5	S6	S7	S8	Vcore
INTEL P54C	Single Voltage	OFF	ON	ON	ON	OFF	3.45V
INTEL MMX P55C	Dual Voltage	OFF	OFF	OFF	ON	OFF	2.8V
AMD K5	Single Voltage	ON	ON	ON	ON	OFF	3.52V
AMD K6-166/200	Dual Voltage	ON	OFF	OFF	ON	OFF	2.9V
AMD K6-233	Dual Voltage	OFF	OFF	ON	ON	OFF	3.2V
AMD K6-266/300	Dual Voltage	OFF	ON	OFF	OFF	OFF	2.2V
Cyrix 6x86	Single Voltage	ON	ON	ON	ON	OFF	3.52V
Cyrix 6x86L	Dual Voltage	OFF	OFF	OFF	ON	OFF	2.8V
Cyrix M2	Dual Voltage	ON	OFF	OFF	ON	OFF	2.9V
IDT C6	Single Voltage	ON	ON	ON	ON	OFF	3.52V
		ON	OFF	ON	ON	OFF	3.3V



**ÞÍÁz:** AfAXE' Áežè Intel PP/MT-233 Àe AMD K6-200/233 xèÁežè ð %  
 ÄO CPU ÇNEEAY×eÖ' ÁpÇNÆE (air flow) ÖxÓ]YÇÚÄIÖ % »TAfAXE' ÍJÄ|  
 ÌBAi Í. Áa CPU ÄOÏIÖ Ö-ÄU»RÄIÈzÉúÑ"Í, ¿ç%ÄÇÄŠI' Ð»TAs AOpen  
 ÄOÖ ÈÖ%hÄIÄT¿i%QAaÖxI òiÓ]ÄOÇNÈE»RÇJ È' NbÜRÖeÁ ÀyÍ, % ÇEÄOÖ  
 È»RBSÄ Í(ÍiÄoÇaÄOÖ ÈÖ (<http://www.aopen.com.tw>)»T



**Í½ö:** Í Ó,Ú½CPUÄO I/OÓ,Ú½Vcpuio (CPU I/O Voltage) Í¿Ä Èð%ÄÓ,  
 Ú½Vcore»RÄ Æ Ó Ä Ü Ó,Ú½CPU Äf PP/MT MMX (P55C)»RAMD K6  
 Àe Cyrix 6x86L/M2»RVcpuio Öa VcoreÄY%ÄEÄa»RVcpuio%eÄiÍ¿Ä Vio  
 (PBSRAM%eChipset Voltage)»T¿Ö¿UÖ Ä`ÄÍÉdÈ ×^ò ¿z¿YÄoÈaÈÖI Í  
 Ó,Ú½ÄeÜ Ó,Ú½CPU»T

# Jumper ÍnĂŠĂ

## Ù Øö CPU ÚhÌ%

S1	S2	S3	CPU ÇÛÚh¼	JP4	JP5	JP6	CPU ç•Úh
OFF	OFF	OFF	1.5x (3.5x)	2-3	1-2	1-2	60MHz
ON	OFF	OFF	2x	1-2	1-2	1-2	66MHz
ON	ON	OFF	2.5x (1.75x)	1-2	2-3	1-2	75MHz
OFF	ON	OFF	3x	2-3	1-2	2-3	83.3MHz
ON	OFF	ON	4x				
ON	ON	ON	4.5x				
OFF	ON	ON	5x				



×éĂqÑ: Intel PP/MT MMX 233MHzĂéçè1.5x ĂŌÍnĂŠĂiÑ ÁQ 3.5x ÇÛÚh çè»RÁÍ AMD PR166Ăéçè 2.5x ĂŌÍnĂŠĂiÑ ÁQ 1.75x ÇÛÚhçè»T



ÞÍÁz: INTEL TX ÍŌ¼ İiĐa¼pÍĂĂ 60/66MHz CPU ç•Úh»R 75/83.3MHz ĂŌÍnĂŠĂjÁ`ÉuĂé»ŌÍ»Í Ōi çè»RÍnĂŠĂĂ75/83.3MHz Đhçi TX ÍŌ¼ İi¼pÍĂ ĂŌÍhÈ »RçzÉúÑ»Þj ÇĂÑ}ÈqÈ`ĂŌĂ†İè»T



ÞÍÁz: Cyrix 6x86 P200+ Ăéçè75MHzç•Úh»RÁTçi ÁpÍnĂŠçèĂŌĂsĂRÈĂ Cyrix P200+ĂŌĂéçèĂ»R×éĂqÑ\_ÍnĂŠĂĂ75MHz»RçzÉúÑ»Þj ÇĂÑ}ÈqÈ`ĂŌ Ă†İè»T



ÞÍÁz: Ū Í^ Cyrix MX-PR200 çzçYÍnĂÈ 75MHz x 2»RCyrix MX-PR233 çzçYÍnĂÈ 83.3MHz x 2»R Ă ×éĂqÑ\_ 75/83.3MHz ÍnĂŠ»Đhçi TX ÍŌ¼ İi¼pÍĂĂŌÍhÈ »RçzÉúÑ»Ñ}ÈqĂ†İè»T

INTEL Pentium	ŌÍ»ÚhÌ%	ÇÛÚh¼	ç•Úh	S1	S2	S3	JP4 & JP5 & JP6
P54C 90	90MHz =	1.5x	60MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
P54C 100	100MHz =	1.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2
P54C 120	120MHz =	2x	60MHz	ON	OFF	OFF	2-3 & 1-2 & 1-2
P54C 133	133MHz =	2x	66MHz	ON	OFF	OFF	1-2 & 1-2 & 1-2
P54C 150	150MHz =	2.5x	60MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
P54C 166	166MHz =	2.5x	66MHz	ON	ON	OFF	1-2 & 1-2 & 1-2
P54C 200	200MHz =	3x	66MHz	OFF	ON	OFF	1-2 & 1-2 & 1-2

## Jumper ÍnÃŠÄ

INTEL Pentium MMX	ÍnÃŠÄ%	ÇÛÜh ¼	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
PP/MT 150	150MHz =	2.5x	60MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
PP/MT 166	166MHz =	2.5x	66MHz	ON	ON	OFF	1-2 & 1-2 & 1-2
PP/MT 200	200MHz =	3x	66MHz	OFF	ON	OFF	1-2 & 1-2 & 1-2
PP/MT 233	233MHz =	3.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2

Cyrix 6x86 & 6x86L	ÍnÃŠÄ%	ÇÛÜh ¼	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
P150+	120MHz =	2x	60MHz	ON	OFF	OFF	2-3 & 1-2 & 1-2
P166+	133MHz =	2x	66MHz	ON	OFF	OFF	1-2 & 1-2 & 1-2
P200+	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 1-2

Cyrix M2	ÍnÃŠÄ%	ÇÛÜh ¼	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
MX-PR166	150MHz =	2.5x	60MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
MX-PR200	166MHz =	2.5x	66MHz	ON	ON	OFF	1-2 & 1-2 & 1-2
	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 1-2
MX-PR233	200MHz =	3x	66MHz	OFF	ON	OFF	1-2 & 1-2 & 1-2
	166MHz =	2x	83.3MHz	ON	OFF	OFF	2-3 & 1-2 & 2-3
MX-PR266	233MHz =	3.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2

AMD K5	ÍnÃŠÄ%	ÇÛÜh ¼	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
PR90	90MHz =	1.5x	60MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
PR100	100MHz =	1.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2
PR120	90MHz =	1.5x	60MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
PR133	100MHz =	1.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2
PR166	116MHz =	1.75x	66MHz	ON	ON	OFF	1-2 & 1-2 & 1-2

AMD K6	ÍnÃŠÄ%	ÇÛÜh ¼	ç•Üh	S1	S2	S3	JP4 & JP5 & JP6
PR2-166	166MHz =	2.5x	66MHz	ON	ON	OFF	1-2 & 1-2 & 1-2
PR2-200	200MHz =	3x	66MHz	OFF	ON	OFF	1-2 & 1-2 & 1-2
PR2-233	233MHz =	3.5x	66MHz	OFF	OFF	OFF	1-2 & 1-2 & 1-2
PR2-266	266MHz =	4x	66MHz	ON	OFF	ON	1-2 & 1-2 & 1-2
PR2-300	300MHz =	4.5x	66MHz	ON	ON	ON	1-2 & 1-2 & 1-2

## Jumper İnÅŠÄ

IDT C6	%Œı»Ūhİ%	ÇŪŪh ¼	ç•Ūh	S1	S2	S3	JP4 & JP5 & JP6
C6-150	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 1-2
C6-180	180MHz =	3x	60MHz	OFF	ON	OFF	2-3 & 1-2 & 1-2
C6-200	200MHz =	3x	66MHz	OFF	ON	OFF	1-2 & 1-2 & 1-2

## İ^Ê½CMOS

<b>JP14</b>	<b>Clear CMOS</b>
1-2	Normal operation (default)
2-3	Clear CMOS



# Ä Ü B ÜÏÃ ÅXÕóÈàÊ½

òf%QÈ' Ó[Ä È:ÝU»R%F ÀTÏ' Áá¿z;YUÊÁf È' àóÁóUaI »RÀfAXÌP%QDÏÏ] ÈP×eËÏíóòrìP%X  
DÏ»T



Ï½ ö: AÏÏmÿAÏ¿eÄÖÖ ÈàÀsÁóÇæÄÖÖ ÇD%Ö»RÀf jumper  
ÍnÄŞÇa»RÍæÑ†ÄÖ BIOS %eBi ÊäÏ' À»»RÈqA½Æ÷YUI¿¿¿»T  
×eÍÇÍiÁóÇæÄÖÖ ÈÖ»RÈ:È:È ÁpÀÏÈ' Ö÷ÇÈÄÖÏÄÈñ»RÁóÇæ  
ÄÖÖ Á"Æ »X

Taiwan <http://www.aopen.com.tw>

USA <http://www.aopen-usa.com>  
<http://www.aopenusa.com>

Europe <http://www.aopen.nl>



ÇÁÇÈ: ÀsÏ^ÂUÖxØaÊíÄ Áf%ÁÁv»R×e×eÄŞÈ' %ŞÖiÓ]¼ÇÀT  
ÅXÕóÈaÊ½' Áá»RÄYÖx%ÇÖiÏiÄÖÈ÷YUIÇÇ' »R¿nÆ¿UØ Ä`  
ÄÄÖ»SBIOS ÄÄ¿ÖÏ¿¿»TÏÇÇ' ÀrÑfÖiÏi»RÁóÇæÍSI' %eÖë  
Ä^ÄÖÏ†ÄñÑfÁð»RÄöPÍÈ' ¿è email Àè FAX»RÖ,,ÖöÑÖÍ,,Ö  
Ï]ÈPÏ%ÇSÄ Ä ×^»RÈ' ¿¿¿YÁb¿èÄ Ü ÄÖÈ÷ÝU%eÚÍÄ  
(Technical Problem Report Form)»T

## ÜÏÃ ÅXÕóÈàÊ½

### ÛÝÓ ¼BýçöK

- ×eÚáÅ Jumper Å ÁpçÛ×eRñÁpÅCPU ÅÄÓ»RÍ /Ü Ó,,Ñ× (P54C/MMX)»RCPU ÚhÍ%çÇÚÚh¼ Í%»T
- ×eÚáÅÓ,,Ñ×Èà×^ Å ÁpËÍ%çÁeÌØÀ (CPU ÇÑÈÈÅ ÁpçÛÈqÓSÚú)»T
- çUØ Ä`ÀÍÍ]¼çÛÈqí^Ò Ì`ÐY(Ó,,Ñ×ÇÑÈÈÅ ÁpçÛÈq)»T
- ×eÌØÈ!ÁiÁÍ%ÐÇÈçu%çÍç/ÌŠÓeÈà×^»Rç^Òà¼BýçöççYÛÌ%çÈ÷YU»T
- ÀfÅ PCI Býçöççu»RÁ ÎÁpçÀPCI Î»ÓeÀeÅ BýçöççuÒiÒi»T
- È`ØeB (SIMM/DIMM) Å ÁpÅŠÒàçÛ×e»RÁ ÎÁÈ`ØeB Î»ÓeÀeÁpç]È`ØeB »T
- ÚáÅÌŠÓeÈà×^ Pin 1 ¼ ÅgÅ ÁpçÛ×e»T

### ÀÍÛÝÓ »RÀ "Ñ "ÀsÌP%QÇiÏvÇÈ»RÍ|Ä|Ðz¼[BIOS ÍnÁŠ:

- ÚáÅÛp×]Å ÁpËÍPÌ¼Á"»R×e¼ÛÎÁNum Lock ÛpÅÅ LED Å ÁpçÛÈqÛZÚ»T
- ÚáÅ Turbo Switch Å ÁpPÚÁ (Release)»R×e¼BÅŠ"Ø ÁvÁççè Turbo Switch»T (Pentium çY¼hØ Óð%ŠÍTurbo çñú»RTurbo Switch ÍbÑ ÁÁ Suspend Switch çè»T)

### ÀóÈä Reboot»RÇÁÛeÐ"Ø :

- È\_CMOS Ì^È»BIOS ÑBÁÁ ÓŠÍçä (default)»RÈ\_ÁÏeÍnÁŠÁÁçYÇÁŠÁÄR»T
- Û Íq "ÛÝÓ ¼Býçö:" ÄÓÚáÅ¼ Å»ç[ÌíÚáÅ»T

### ÀÍÛÝÓ »RÀ Í|Ä|Ð"Ø :

- ÌŠÓeÍ|Ä|Ð"Ø »RÚáÅBIOS ÁÓÍnÁŠÅ ÁpÅLBA (Í,,ÈqèvD,,¼Á 540MB) È À»»T
- È\_BIOS ÍnÈÓŠÍçä (Setup Default)»T
- ÍçÓeÐ"Ø Å ÁpçÛÈqRÀfÅXçÛÈqRççúÅ ÍŠÓeÈà×^ÀeÌŠÓeçÓÄÇ»T

### ÌŠÓeØ Í|Ä|ÈÏÎ ÁÁçm(HDD Controller Fail»Rcan't detect HDD):

- ÚáÅÌŠÓe¼Master/Slaver ÍnÁŠÅ ÁpçÛ×e»T
- ÚáÅÌŠÓeÈà×^ÀeÁ ÎÁpçÁÌŠÓeÒiÒi»T

## ÜÏÃ ÅXÕóËàÊ½

Í€0é/ Ña0Á/ Å]Ä Ø ¾¼ÛËqÄeÍ]Ä|¾¼ÁQ:

- a. ÚáÆuÍ€0é/Å ÅT/ÅÝÅTËä×^Æ ÁpçÛ×e»T
- b. Ð"Ó„Ñ×ËäÍ€0é0éÚj Æ ÁpËäÁQ»RÁ ÎÁÁpçÛËÍ€0éÑa0Á/Å]Ä Ø òiòi»T

Ð"Ø ÈäÛp×]Í]ËäÁQÄè BIOS ßýçö Keyboard Controller Error:

- a. ÚáÆuÛp×] LED Û` (Numeric Lock) Æ ÁpÃ ÑÛçÛËq»T
- b. ÚáÆuçUØ Ä`Ä`ÚZÎÑ(Fuse) Æ ÁpÛ\_Ûp(ÄéçéÓ„Û ÚáÆuÆ ÁpÍ^Ø »RÁ`ÚZÎÑÀ ò~ÀsÛp×]Î»ËËËá»RÍ„ËqËË0 Äü0éçöÆ F1, 3A/125V»T

Í]Ä|Ú<À† BIOS Setup ÄèÓ„ÀÚÁdÓ„ (COMS data lost, Battery Low):

- a. ÚáÆuÓ„ÀÚÆ ÁpÁdÓ„ (ÁTÄ 2.5V)»T
- b. ÚáÆu Clear CMOS Jumper Æ ÁpçÛ×e»T

## ÜÏÃ ÅXÕóËàÊ½

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<b>Technical Problem Report Form</b>	
<p>Ï¼Å • Model Name:</p> <p>Åá00 Serial Number:</p>	
<p>ÛfÏ0%Å <b>Contact:</b></p>	<p>Name: _____</p> <p>TEL: _____ FAX: _____</p> <p>Email: _____</p>
<p>Ê÷ÝUÏ(Ç <b>Error Symptom:</b></p>	
<p>Å‡ÏèÏÏÔR (×è0Ï Ç ÅÅ00%ÅË½) ) <b>System Configuration:</b> (Please list model name and version.)</p>	<p>OS: _____ BIOS: _____</p> <p>CPU: _____ SIMM: _____</p> <p>HDD: _____ CDROM: _____</p> <p>VGA: _____ Sound: _____</p> <p>Modem: _____ Others: _____</p>

# Ä Ü A ÊqÂ½Ê÷ÝUDÊÖë

Q: ÄfÄ Êé%Í BIOS ÄÄ¿Ö?

A: AOpen ¿UØ Ä` ¿UØ Ä` ÄÖ BIOS ÄÄ¿ÖÄ Ä Ð"Ø Êä POST (Power-On Self Test) Ä Ä »RÍ„ÊqÑ¿Y R Ä.Ð"Új »X

AP53/AX53 R3.80 Oct.22.1996

↖ BIOS revision

Q: ÄfÄ Êé%Í¿UØ Ä` ÄÖÄ¿Ö?

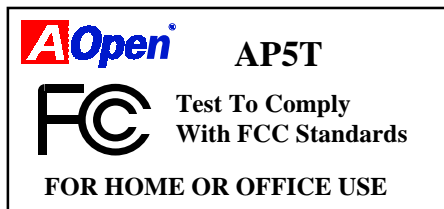
A: AOpen ¿UØ Ä` ÄÖÄ¿Ö¿Ö¿Ö PCB %Ä»RÍ„ÊqÑÄÍ%QÇ¿¿iÄü¿•ÊöÄY¿SÄ Ä PCI Í» ÖëÄ Ä »RÄf%ÄÄ¿ö»AP5T ÄÊÍÄ•ÄÖÄÐÖ»RÄi Rev 3.4 ÄyÄ ¿öÄÄ¿Ö¿\_ÖÖ»T

AP5T revision 3.4

AP5T MB  
Rev 3.4

Q: %ÊÖ Ä FCC DoC (Declaration of Conformity)»Y

A: DoC Ä %QÖöÑÄÖFCC ÍhÈ Ö`ÝiÖëÑä»RÑ†ÖëÑÄÍhÄÖIY Ö†Í¿ (Äf¿UØ Ä`) Äs¿i xé DoC ÖëÍÖ ( Logo ) Êä»R¿ÍÐÑIÖE%Ø ÍüÄÖÖ(Ü »RÄpÍ ÖiÍh»uÄE7 CFR 15.31»T ¿UØ Ä` %ÄDoC Í Öi% ÐäÍè FCC Í ÖiÄ ¿LÄ¿Y »RÄfÄX¿UØ Ä` Í„Ö]DoC Í Öi»RÍ\_ ¿\_Ä ¿UØ Ä` ÄÖEMI Ü ÊxÄUÊqÄT»RÄi ¿YÉ' ¿¿Y¿è¿ Ä Ä × ÄÖÖ Íü(Äj Ä`Æ ¿èÉäAQÄÖ Ø Íü¿ ¿z)»TÄö ðAOpen N†%Q¿\_ÄÖ¿UØ Ä` Í½¿Í„(D)OC Í Öi»R%Ä ÖéÄj ÄÖDoC Öë ÍÖÄÖÖ¿Ö»X



## ÈqÀ¹Ê÷ÝUDEÈë

### Q: ÈÛ È Bus Master IDE (DMA Mode)»Y

A: ÐàÌèÀÒ PIO (Programmable I/O)IDE Õ÷Ç€ CPU À ÁfÀÍÝ IDE ¿ Í»ÀÒÈ À ÈàÁQ»R  
 ¿nRÌ¿Á÷0 È ÈàÁQÀÒÁÒÀ»TÀÈÌ »CPUÀÒ»ÁQÇ¿Ù»Bus Master IDE òaò~¿Ä×  
 ÈÌÀ¹À È`ÙÈ ò Èè»R»ÁÒ÷Òx¿èCPU»R¿S¿ZÁé CPU ÓSÁQÁ^È`ÙÈß ÒÈDE Òaò~Ð»  
 ÀÒÈ ÈàÐàÈVÀaÈàÐÀ »T»Á] Bus Master IDE Õ÷Ç€ Bus Master IDE Bi ÈàÌ¹À»Á^  
 Bus Master IDE ÌSÒèÁÌ»ÍÁ% ¿¿ÙÈÈàÁQ»T

### Q: ÈÛ È Ultra DMA/33»Y

A: Í, È »QÒòÑ¹ÀÒÍhÈ »R¿òÀÒÁÁ ÌDE ÌSÒè»ÁÐàÙ Ì%»RÐàÌè»ÁPIO Mode ÐàÁé¿è  
 IDE ÈÈÀ ÁYÒÓ»Á¿¹×¿Rising edge) Ái ÐàÙ ò Èà»DMA/33 ¿ZàÈàÁé¿è»¹×¿¹^ »f »¿  
 (Falling edge) »RÀnÀÒÈ ÈèÐàÙ Ì»E PIO Mode 4 Àè DMA Mode 2 ÀÒÁüÇÙ»R  
 (16.6MB/S x 2 = 33MB/S) »T  
 »fÀ ÀT¿i IDE PIO Á^ DMA Mode»ÁÐàÙ Ì%»RÀn IDE ÐñÀÈàÈ 16 bit»RÀÈÀ¹ÒÐà  
 Û È 2 byte»T

Mode	Clock per 33MHz PCI	Clock count	Cycle time	Data Transfer rate
PIO mode 0	30ns	20	600ns	(1/600ns) x 2byte = 3.3MB/s
PIO mode 1	30ns	13	383ns	(1/383ns) x 2byte = 5.2MB/s
PIO mode 2	30ns	8	240ns	(1/240ns) x 2byte = 8.3MB/s
PIO mode 3	30ns	6	180ns	(1/180ns) x 2byte = 11.1MB/s
PIO mode 4	30ns	4	120ns	(1/120ns) x 2byte = 16.6MB/s
DMA mode 0	30ns	16	480ns	(1/480ns) x 2byte = 4.16MB/s
DMA mode 1	30ns	5	150ns	(1/150ns) x 2byte = 13.3MB/s
DMA mode 2	30ns	4	120ns	(1/120ns) x 2byte = 16.6MB/s
DMA/33	30ns	4	120ns	(1/120ns) x 2byte x2 = 33MB/s

## ĚqĀ1Ě÷YUDĚ0ë

**Q: Ultra DMA/33 ĀŌĪ†ĀnĀfĀ ?Ě ĀpŌ÷ÇĚĒĒ Ēi ĚĀĪ' Ā» (Driver)?**

A: DMA/33 Ō÷ÇĚĒĒ ĀŌĪ ĚĀĪ' Ā»(Driver)»RĚ' ĵĵYĵè Intel ĀŌ PIIX4 Driver ĀĚŃ†ĀĀ Win95 Memphis»RĵŏĀvĪ Ōi ŌĴĀŌĎ„ĪĴŠŌĚĵ ĀĪQuantum Fireball ST1.6A»RĀĪĪ Ōi ŌaŌŏĀf»X

Model	OS/Driver	Mode	Winbench97 Disk Winmark (Business)	Winbench97 Disk Winmark (High End)
Quantum Fireball 1.2G	Windows 95 OSR2	PIO mode 4	717	2150
Quantum Fireball 1.2G	Windows 95 OSR2 + INTEL PIIX4 driver	DMA mode 2	822	3050
Quantum ST1.6A	Windows 95 OSR2	PIO mode 4	853	2630
Quantum ST1.6A	Windows 95 OSR2 + INTEL PIIX4 driver	DMA/33	1040	4020

**Q: ĚŌ Ě ACPI (Advanced Configuration & Power Interface) Ā^ OnNow»Y**

A: ACPI Ě 1997(PC97)ĀŌ%QŌŏŃ†ĀŌŌ„Ń×ŌŏĪ' ĪhĚ »RĀĪĵŏĀŌĀsĀ Ďz%QĀSŌxĵĚĀQŃ•ĀĪĪĚ (OS)ĀĪ ŌqŏŌ„Ń×ĀĪ %ĴĪ' ŌĴ ĎĀĪĚ Green PC BIOS»RĚŌWĀ ĀŌĵŏĀŌChipset ĀĚ Ultra I/O ĪŌ% Ō÷ĪĀĚŌĚŃĀ%ŌĴĒĒ (Standard Register Interface) ĪŌĀQŃ•ĀĪĪĚ (ĀfWin98)»R ĀY;ZĀĀQŃ•ĀĪĪĚĪ ūhY ĪĀ^ Ā Īp%ĀĀĪŌ% Ō„Ń×%Āĵĵŏŏ»RĪ, ŃbĀĪĚ ĀĪŪZŌĪŪYĪ»Āĵ ĵĚ PnP %Ā%ŌĴĒĒ (Register Interface)»T

ACPI ĪhĀŠĀĚĵĚĪĪĚ,Ā»Ō„Ń×Ā ŪĪMomentary Soft Power Switch) ĀĪĚĚĀ ĵĚŌ„Ń×ĀĚ Āf%Ā%ŌĪĀ»RĀnŌĵĪĎĀsATX Form Factor ĚĪĪi Momentary Soft Power SwitchĀŌ ĀĚĵĚ%Ĵ%ĚŪŌ ByĀĪĪĒPĀX»ACPI ĪĚĀ)%ŏ%QĒ Ō„Ō%ĀĚĵĚĀĀŌĪ»ĵ ĵĚŪĚ ĵĚĵŪĀ»Ō„ Ō%Ō(Notebook) ĀĪĀĪĀ ĀĪĀĪĀŌŌŏŃb”OnNow”»TĪ, ĵĵŪŪŌĪĪĚĚĀ%ĪĀŏĀ %Ī%QĀŌY Ō ĀvĀŌ%ĀQĪvĴĒ»RĀĪ%ĵĵĚĚĀŪĀ ĚĀĎĪĵĀ÷Ě„Ď”Ō ĚĪĚĀ(Bootup)»RĎz%Ī Win95»RĪ^ ĀŪĎz %Ī Winword»T





## Eğilimler Üzerine

**Q: Acer ADM (Advanced Desktop Manager)**

A: Acer İntel LDCM ile ADM 2.0 ve 3.0 arasındaki farklar aşağıdaki gibidir. Intel LDCM 3.0, ADM 2.0'ye göre daha fazla özellik sunar. Özellikle CPU ve bellek kullanımını gerçek zamanlı olarak izleme ve yönetim özellikleri ile farklıdır.

Features	ADM 2.0	LDCM 3.0
VGA card	No limitation	Only ATI
Network card	No limitation	Only Intel
Support DMI BIOS 2.0	Yes	Yes
Support Win95	Yes	Yes
Support Win NT	No (will be supported on ADM 2.1)	Yes
Real-Time CPU/Memory Utilization Monitoring	Yes	No
Multi-Machine Monitoring on One Screen	Yes	No
Remote Management Protocol	Standard SNMP protocol	Intel proprietary RAP protocol
Standard SNMP Trap	Yes (so that can work with standard software such as HP Open View)	No
Remote File Transfer	No	Yes