

MX58 Plus

U0 Ä`Âéè¾üf

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MX58 Plus

MX58 Plus

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ÍÓÒqÑÁÇ€

İP%QÍ011ÑÁal

%ĐİēĀİēİhÈ %ēÉdÈ ĵmú»T

İP%KÍ011İŠB ĀŠ0á

İŠB ĀŠ0áĀ0ĀY 0 Èà»RĵmĀ Jumper Ā^ ĒİÚj (Connector) Ā0Ā 0~»RĀŠ0áĒ` 0ēB 0÷Āq
Ñ_Ā0Āđİ»T

İP%ēÍ011AWARD BIOS

AWARD BIOS Ā0ĀY 0 Èà»RĀf Ēē0áİnĀŠÇáĀ0Ñ_0,,»RĵY%ēÛ_Û İ'Ā»Ā0ĵēĀ|»T

Ā Û 1A11ĒqĀ'Ē÷YUĐĒ0ē

ĀéĵēĒēĒq0[Ā Ā0Āı_Ē÷YU»T

Ā Û 1B 1ÜĪ ĀX0óĒēĒ½

ĵmĀĀ Āf Ē'0ēĀ^ Ē÷YUĀ00 Èa0aĀoPİ»T

Ā Û 1C Jumper1İnĀŠĀ

ĀiĀİ Jumper Ā0ĀTĀ »T

Óé;öÖ»Ã

¿Y%Æ Æ ¿Ö%ü¿f Èq;èÃÖÖé¿öÖ»Ã »X



×èÄqÑ_
Àa%Q¿UYU%ÁÆÝ Ö»Ã »T



ÞÍÁz
%4Ñ ØøÁQÈã»R¿zÉúØãÇaÀ^ÚZÁúÄX»T



×è%¿%ü
ÓŠ¿ ÄØ×uÈ÷ÝUÍ, ¿ÇÄÖ% Ä | »T



ÇÀÇ€
Î½Ü È' ØøÁQÇÁÜZ»T



Î½ö
Î½ÈÁ%¿ ÁQÈÞÌ%ÄÖØøÁQÈÈ«»T

çòÙ

ÌP%QÍÓ ÑAal

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À Ù C JUMPER ÍnÃŠĂ

ÑÁàl

1.1 ÍhÈ

¿UØ Á`ÁÁ»	ATX
¿UØ Á`%ó%	245 mm x 245 mm
CPU	Intel Pentium P54C, PP/MT (P55C)»RAMD K5/ K6/K6-II»RCyrix 6x86/M2 Óa IDT C6»T
¿UÊ`Øeß	FPM (Fast Page Mode) Æè EDO (Extended Data Output) 72-pin SIMM x2»RÓaSDRAM 168-pin x2»T ÍaÊÁ¿ò 256MB»T
L2 Cache	%ÓÀò 512KB pipelined-burst cache
ÍÓ% Ìi	SIS 5598 PCIsset
Ûi¿cÖè	ISA x2 Óa PCI x3
À ÀTÈ	2 Çí UART 16C550 ÆÈVÁÓ RS-232 À ÀTÈ »R¿ÁÍ%Q Çí UART ¿pÍÁÆ ¿·×`Öi Ìi»T
¿ÇÀ È	1 Çí¿pÍÁ SPP/ECP/EPP %eÖòÑaÁÓÁYATÈ
Floppy %DÇÈ	1Çí ÍÉÀ»ÖeÖèØ Í†ÈÏÚ¿ »R¿Áé¿è 720 KB»Rl.44MB Æè2.88MB È À»ÁÓ 3.5 ÀeÖeÖèØ »R%è60KB»Rl.2MB È À»ÁÓ5.25 ÀeÖeÖèØ »T
IDE %DÇÈ	2 Çí IDE Channel ¿Í†ÈÏ 4 Çí IDE òaò~(ÍŠÖèÆè CDROM)»R%pÍÁPIO mode 4»SBus master»RÆèUltra DMA/33 Ì¿ĐaÛ Öi À»»T
USB %DÇÈ	2 Çí USB Í†ÈÏÚ¿ »RBIOS ¿Á† USB Bi ÈaÍ`À»¿òi ÚÚ ĐaÍèÁÓ AT Àè PS/2 Ûp×]»T
PS/2 ÑaÓÁ	%ÓÀò Mini-Din PS/2 ÑaÓÁÍ†ÈÏÚ¿ »T
Ûp×] %DÇÈ	%ÓÀò Mini-Din PS/2 Ûp×] Í†ÈÏÚ¿ »T
RTC ÓaÓ„ÁÚ	RTC À Á ÍÓ% Ìi %Ó»RÆè¿èCR-2032 Ø¿ Ó„ÁÚ»T
BIOS	AWARD Plug-and-Play, 2M bit Flash ROM BIOS»T %pÍÁÁyÓÖÁ†ÁÓÁ¿ò»R¿mR%è%¿»T

ĪP³XÍÓ ĪŠB ÀŠÒà

¿ŌÍŌË_¿YĪqÁaŌ¿DzĀŌ% À»»RŌ»Ā ÀfÀ ÀŠŌàË'ĀŌĀ†Īè»R×è×eŌ ĀaÑĪĪ,ĀáĀSa[ĀĪĀŠ Ōà»T



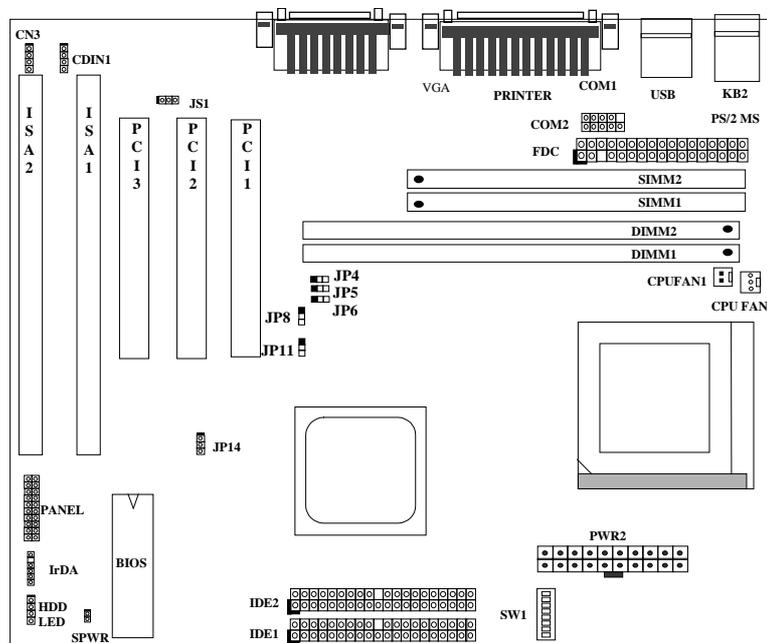
×è%ƒ%ā: ESD (Electrostatic Discharge) ĀËŪcŌ,,Ā Ō,,%ĀÑ_»R¿èĀ Ū€B Ō,,Ō (IC) ĀŌËvĀ Ā Ā ŪcŌ,,Ña ŪĪĀŌŌ%Be»RĀnĀŌÑ"ĀeÑ]ĪSĪ' ŌŌ»RŌeŌeŌ »RŪi ¿c ¿u%eĀp¿]ĀŌŌ†¿ Ā Ā ĐaÈq»TĀË%WŌŠĀŌŪcŌ,,Ā Ō,, ĀĪÑ}ŸrĪŌ% »R×èŪ ÀË%ƒĀTĀŌŌŠĀŌËŌÆZ»X

1. ÈĪĀŪË' %ŠÑĪĪĀÀ€Ç€Đ"Ā}ĀŠŌàŌ†¿ »RĀpĀy%āŌf %ƒÇË_Ō†¿ ĀŌĀŌŪcŌ,,¿nŌà%Ā ¿i»T
2. ĀsË' ĀŠŌàŌ†¿ Èā»RĪæÀ€Ër%āĪĪËĪĀr×^ĀŌ%āĪ Ū »R%Ī»¿ ĀŌŌ,,%ŌŌ†¿ Ā ĪĪĀĪĀs× »TĀfĀXĀdĀĪ %āĪ »R×èĀé¿è¿ Ā ¿z¿YĀŌ% ŪcŌ,,ĀŌĪŪ¿_Ā•»RĀĪ ŌaĀ†ĪèŌ†¿ %e¿UŌ Ā'ĪĪĪ»T

İŞB AŞÖà

2.1 Jumper A^EİÜj (Connector) ÄÖÀ ò~

¿Y¼Æ¿UØ Ä`¼Jumper A^ EİÜj (connector) ÄÖÊ:ò~ Öé»X



İŞB ÅŞÒà

Jumpers:

SW1:	CPU Èð%aó,,Ú%õaÇÙÚh
JP4,JP5,JP6:	CPU ç•Í»ÚhÌ%o
JP14:	Ì^Ê%CMOS
JP11:	VGA Ð"Ý
JS1:	ÇÏÈPçuÐ"Ý

Í†ËÏÚj:

PS2:	PS/2 ÑaÓÁËÏÚj
KB:	PS/2 Ûp×]ËÏÚj
COM1:	COM1 ËÏÚj
COM2:	COM2 ËÏÚj
PRINTER:	À]Ä Ø ËÏÚj
PWR2:	ATX Ó,,Ñ×ËÏÚj
USB:	USB ËÏÚj
FDC:	Floppy ËÏÚj
IDE1:	ÌP%QÌi IDE Í†ËÏÚj
IDE2:	ÌP%XÌi IDE Í†ËÏÚj
VGA:	VGA ËÏÚj
CPUFAN1:	CPU ÇÑÈËÏ†ËÏÚj
CDUFAN2:	CPU ÇÑÈËÏ†ËÏÚj
IrDA:	IrDA (Æ ç•×^ÐaÙ) Í†ËÏÚj
HDD LED:	HDD LED ËÏÚj
PANEL:	Åv% ÇËÄ` Å ÛpÓaÙ` ÓÓÍ†ËÏÚj
SPWR:	ATX Soft-Power Switch Í†ËÏÚj
CDIN1:	CDROM ÇÏÑ××^ËÏÚj
CN3:	Mono in (Pin 1-2) Óa Mic out (Pin 3-4)

İŞB ÅŠ0à

2.2 Jumpers

Åi Ûñ Jumper İ_Æ Ñ ÅéçèÄaÇÈÈÄ çUØ Ä`Æ ÄpÈiÈäÄéÝ İÆËj ðİçñúÈä»RçİDN×iØy
ÅÖÀ ò~»Dumper İ,,ÈqÆ %QÀèÄyÇiðUÜÄÖÐ ×À¼ Ð İ»As%QÈäÄ ÄüÅÖÈäÈŠ¼r»RÄi×i
ØyÅÖ¼ Ä»Æ È_Ð ×ÄİfÖñ ÑáÇÈASÖ-ÅÖÖ"À (pin) ÅÄÄ×İ»ÄtAj ç»TçÖİ¼Ä•çi ÖtÈäÅÖ
Jumper Ä»İnÄsİæÈqçèÄèİæÄè¼aÅÖÄÖR»RÄs×iØyÄv×è×eÖ' È' ççç %WÖèÄpÑ_Ö,,»T
Äs Ö ÖðÅÖçUØ Ä`¼r »Rİ,,ÈqÑ"Äİ çİ ÄüÅÖİä×`ÖèçöÄ İP%QÖð(pin1)Ä Ä »RÑ
ÄóÇæÖ»Äü Jumper İnÄs 1-2ÅÖÀ ò~Èä»RÑ_ÄpÆ Ä È_Ð ×Ä Öñ¼ Ð)İ»Äs
pin1 Ä^ pin2 ÅÖÀ ò~¼r »R È_Äp İ† Èİİ^ ò)Äs %Q Èp »T Äf ÅX Äó ÇæÖ»Äü
Jumper Open Èä»R Ñ_ÄpÆ Ä È_Ð ×Ä¼ Ð İØÐ" »WÑ ÄóÇæÖ»ÄüJumper
Short Èä»RÑ_ÄpÆ Ä È_Ð ×Ä¼ Ð İ»¼r »RÄèÄpİ^ ò »T



Open



Short

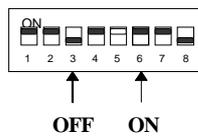


Jumper set at 1-2



Jumper set at 2-3

È¼¼WÖäİèÄÖ Jumper ¼Äç•»Rİ, Ð çUØ Ä`¼r ¼r Åéçè¼WÖ ÖÑÐ"Ý (DIP Switch) **SW1**
ÄİİnÄS CPU Èð¼üÖ,,Ü½ (Vcore) ÖaÇÜÜh»R×èÈèÖñÖÄüÅÖÖèÖèÄi ÈİİnÄS»TÄsçö¼üçf
¼¼»Rçj Äİİ¼Ä Ä ÖÑÐ"Ý ÅÖON/OFF»Rİ¼Æ ÅéçèÄfÄa¼f ÖèÄÖÄ çö¼ Ä»T

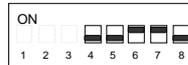
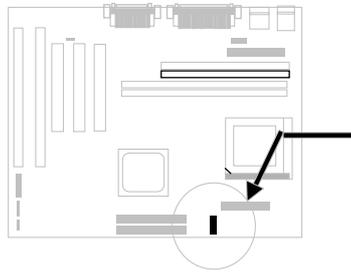


İŞB ÅŠòà

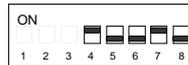
2.2.1 İnÅŠ CPU 0,,Ú½

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 çèÁi İnÅŠ CPU Èð%ú0,,Ú½ (Vcore) ŐaÇÜŪh»R ÀSDIP %4ıÀQÁİ 8 Ū %ŪİÁÁ»Đ*Ý »RÅŠòàÀ€ CPU %ÁÁú»R×èçèİM-8 İiĐ*Ý ÁiÁ ÅŠ Vcore»TçŪUŪ Ä`ÀQ%pİÁ2 İiŪ,, Ú½İnÅŠ»RÁŪŪyÄŪÄ AT×èÈèŪİP2-7ÇĐ»T



3.2V
K6-233



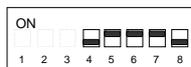
2.9V
K6-166/200 or M2



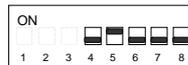
3.52V
6x86 or K5



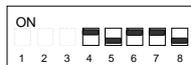
2.8V
P55C (MMX)



3.45V
P54C



2.2V
K6-266/300 or K6-II



3.3V
IDT C6

İŞB AŞÖà

»f Ä DaÀTzi çòÁVçÄÇÈ»h çZÄÖCPU İnÄŞ% Ä»R Ó ÖòÄÖİnÄŞÇà çZÉúNÖaÑ†ÄÖ CPU ÄÍÄáçì »RİnÄŞÈà×èÈäçİÈè0ñ' CPU ÄÖÖ»Ä %çç »T

CPU	Type	Vcore	S4	S5	S6	S7	S8
INTEL P54C	Í Ó,Ú½	3.45V	OFF	ON	ON	ON	OFF
INTEL P55C	Ü Ó,Ú½	2.8V	OFF	OFF	OFF	ON	OFF
AMD K5	Í Ó,Ú½	3.52V	ON	ON	ON	ON	OFF
AMD K6-166/200	Ü Ó,Ú½	2.9V	ON	OFF	OFF	ON	OFF
AMD K6-233	Ü Ó,Ú½	3.2V	OFF	OFF	ON	ON	OFF
AMD K6-266/300	Ü Ó,Ú½	2.2V	OFF	ON	OFF	OFF	OFF
AMD K6-II	Ü Ó,Ú½	2.2V	OFF	ON	OFF	OFF	OFF
Cyrix 6x86	Í Ó,Ú½	3.52V	ON	ON	ON	ON	OFF
Cyrix 6x86L	Ü Ó,Ú½	2.8V	OFF	OFF	OFF	ON	OFF
Cyrix M2	Ü Ó,Ú½	2.9V	ON	OFF	OFF	ON	OFF
IDT C6	Í Ó,Ú½	3.52V 3.3V	ON ON	ON OFF	ON ON	ON ON	OFF OFF



ÞÍÁz: ÄfÄXÈ' Äéçè Intel PP/MT-233 Äè AMD K6 Ä†ÄTÍSÌ' ÖÖ»R ×èÄéçèð »ÄÖ CPU ÇÑÈÈ»TÄfÄXÌJÄ|İBÄiÍ, Äá CPU ÄÖİİÖ Ö- ÄU»RÄ†İèçZÉúN'İ, çç»ÄÇÄŞÄÖİ' ðY»TÄİÝ Ä CPU ÇÑÈÈ»RÄSÄó ÇæÄÖ web ÈÖ (<http://www.aopen.com.tw>) »hÄÍÄTçì ÄöÝ ÄÖÖ Èè»T



İ½ö: Í Ó,Ú½ CPUÄÖ I/OÓ,Ú½ Vcpuio (CPU I/O Voltage) İçÄ Èð»hÓ, Ú½ Vcore»RÄ Æ Ó Ä Ü Ó, Ú½ CPU Äf PP/MT MMX (P55C)»SAMd K6 Äè Cyrix 6x86L/M2»RVcpuio Öa Vcore ÄÝ½½ ÄöÄa»RVcpuio »éÄí İçÄ Vio (PBSRAM »è Chipset Voltage)»T çÖçUØ Ä`ÄÍÉðÈ ×^ð çzçYÄöÈäÈÖİ İ Ó, Ú½ÄèÜ Ó, Ú½CPU»T

İ½ö: İ, ð çUØ Ä`Äéçè»W5 İi»ÜİÄD"Ý ÄiÄ ÄŞ Vcore»RÄì çYÜq ÄQçZÄÍ 32 ÖòİnÄŞÇà»RÄ†ÄR»W1.3V Ä 3.5V »ÄD»ÄÖÄiÄÍÓ, Ú½»R ÄéçYÄüÄQÉB CPU ÈäÈ`Ä ÄýÖ`Ää»T

İŞB ÅŠ0à

İ, D çU0 Å` ççY%pİÅ 1.3V Å 3.5V %ÅD»Å0 CPU Èð%ñ0,,Ú%»RAs CPU ÄQÉBÈáÍaÁy
 Ö~Åã»TçY%f Å Ai ÅÍ0,,Ú¼ÇaÄ0ÍnÅŠ¼ Å»»X

Vcore	S4	S5	S6	S7	S8
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
2.1V	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

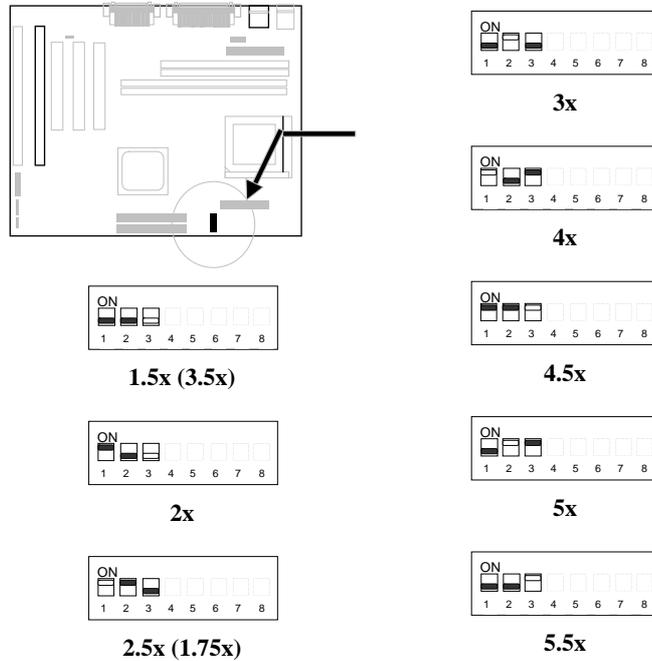
2.2.2 Ü Øö CPU Úhİ%

S1	S2	S3	CPU Frequency Ratio	SW1 ¼hÄÖİP1-3 İy¼ÖTÄD” Ý Æ çèÁí ÍnÄŞ ÇÜÚh (CPU Ratio) çèÄÖ»T
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	
OFF	OFF	ON	5.5x	



Ä İ : Intel PP/MT MMX 233MHz Äéçè 1.5x ÄÖİnÄŞÄiÑ ÄQ 3.5x ÇÜ
Úhçè»RÄí AMD PR166 Äéçè 2.5x ÄÖİnÄŞÄiÑ ÄQ 1.75x ÇÜÚhçè»T

CPU ¼Öİ»Úhİ% = ÇÜÚh (Ratio) * ç•İ»Úhİ% (External bus clock)

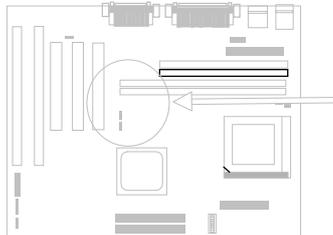


İŞB ÅŠÒà

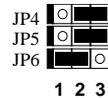
JP4	JP5	JP6	CPU External Clock
2-3	2-3	1-2	50MHz
2-3	2-3	2-3	55MHz
1-2	2-3	1-2	60MHz
2-3	1-2	1-2	66MHz
1-2	2-3	2-3	75MHz
2-3	1-2	2-3	83MHz

JP4, JP5 Òa JP6 çèÀiÛ Â CPU ç•Úh(bus clock)»SAGP Clock Òa PCI Clock»T

JP4, JP5 Òa JP6 çèÀiÛ Â CPU ç•Úh(bus clock)»T

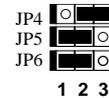


JP4 & JP5 & JP6



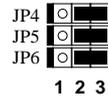
50MHz

JP4 & JP5 & JP6



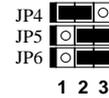
66MHz

JP4 & JP5 & JP6



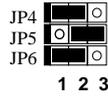
55MHz

JP4 & JP5 & JP6



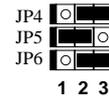
75MHz

JP4 & JP5 & JP6



60MHz

JP4 & JP5 & JP6



83MHz



ÞÍÁz: SIS 5598 ÍÓ% İiÍaÉÁçz%pÍÁ 75 MHz CPU ç•Úh»R 83MHz çUÇÈÆ %ÓÍ»Í Òi ÈaÁéçèÄÓ»RçèÄ ÅÓInÅŠ%ŠÒxDh çi ÍÓ% İi ÅÓÍhÈ »RçzÉúN“ ÍÇÁÁÂ†İè%4YÇ»R×è%ç%uÁé çè»T



×è%ç%u: %fÄ DàATçiçòÁvçÁÇÈ%h%ŠMÉ „ÄÓ CPU»RÀn%4Áp ÁÍN† CPU ÈÚçi»RçÛ×eÅÓInÅŠ×èÈèAi CPU Ò†ÈiÍ%4èÅÓÍh È »T

İŞB AŞÖä

INTEL Pentium	CPU Core Frequency	Ratio	External Bus Clock	S1	S2	S3	JP4 & JP5 & JP6
P54C 75	75MHz =	1.5x	50MHz	OFF	OFF	OFF	2-3 & 2-3 & 1-2
P54C 90	90MHz =	1.5x	60MHz	OFF	OFF	OFF	1-2 & 2-3 & 1-2
P54C 100	100MHz =	1.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
P54C 120	120MHz =	2x	60MHz	ON	OFF	OFF	1-2 & 2-3 & 1-2
P54C 133	133MHz =	2x	66MHz	ON	OFF	OFF	2-3 & 1-2 & 1-2
P54C 150	150MHz =	2.5x	60MHz	ON	ON	OFF	1-2 & 2-3 & 1-2
P54C 166	166MHz =	2.5x	66MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
P54C 200	200MHz =	3x	66MHz	OFF	ON	OFF	2-3 & 1-2 & 1-2

INTEL Pentium MMX	CPU Core Frequency	Ratio	External Bus Clock	S1	S2	S3	JP4 & JP5 & JP6
PP/MT 150	150MHz =	2.5x	60MHz	ON	ON	OFF	1-2 & 2-3 & 1-2
PP/MT 166	166MHz =	2.5x	66MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
PP/MT 200	200MHz =	3x	66MHz	OFF	ON	OFF	2-3 & 1-2 & 1-2
PP/MT 233	233MHz =	3.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2

Cyrix 6x86 & 6x86L	CPU Core Frequency	Ratio	External Bus Clock	S1	S2	S3	JP4 & JP5 & JP6
P120+	100MHz =	2x	50MHz	ON	OFF	OFF	2-3 & 2-3 & 1-2
P133+	110MHz =	2x	55MHz	ON	OFF	OFF	2-3 & 2-3 & 2-3
P150+	120MHz =	2x	60MHz	ON	OFF	OFF	1-2 & 2-3 & 1-2
P166+	133MHz =	2x	66MHz	ON	OFF	OFF	2-3 & 1-2 & 1-2
P200+	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 2-3

Cyrix M2	CPU Core Frequency	Ratio	External Bus Clock	S1	S2	S3	JP4 & JP5 & JP6
MX-PR166	150MHz =	2.5x	60MHz	ON	ON	OFF	1-2 & 2-3 & 1-2
MX-PR200	166MHz =	2.5x	66MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 2-3
MX-PR233	200MHz =	3x	66MHz	OFF	ON	OFF	2-3 & 1-2 & 1-2
	166MHz =	2x	83MHz	ON	OFF	OFF	2-3 & 1-2 & 2-3
MX-PR266	233MHz =	3.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
MX-PR300	225MHz =	3x	75MHz	OFF	ON	OFF	1-2 & 2-3 & 2-3
	233MHz =	3.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
	240MHz	4x	60MHz	ON	OFF	ON	1-2 & 2-3 & 1-2

İŞB ÅŠ0à

AMD K5	CPU Core Frequency	Ratio	External Bus Clock	S1	S2	S3	JP4 & JP5 & JP6
PR75	75MHz=	1.5x	50MHz	OFF	OFF	OFF	2-3 & 2-3 & 1-2
PR90	90MHz =	1.5x	60MHz	OFF	OFF	OFF	1-2 & 2-3 & 1-2
PR100	100MHz =	1.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
PR120	90MHz =	1.5x	60MHz	OFF	OFF	OFF	1-2 & 2-3 & 1-2
PR133	100MHz =	1.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
PR166	116MHz =	1.75x	66MHz	ON	ON	OFF	2-3 & 1-2 & 1-2

AMD K6	CPU Core Frequency	Ratio	External Bus Clock	S1	S2	S3	JP4 & JP5 & JP6
PR2-166	166MHz =	2.5x	66MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
PR2-200	200MHz =	3x	66MHz	OFF	ON	OFF	2-3 & 1-2 & 1-2
PR2-233	233MHz =	3.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
PR2-266	266MHz=	4x	66MHz	ON	OFF	ON	2-3 & 1-2 & 1-2
PR2-300	300MHz=	4.5x	66MHz	ON	ON	ON	2-3 & 1-2 & 1-2

IDT C6	CPU Core Frequency	Ratio	External Bus Clock	S1	S2	S3	JP4 & JP5 & JP6
C6-150	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 2-3
C6-180	180MHz =	3x	60MHz	OFF	ON	OFF	1-2 & 2-3 & 1-2
C6-200	200MHz =	3x	66MHz	OFF	ON	OFF	2-3 & 1-2 & 1-2



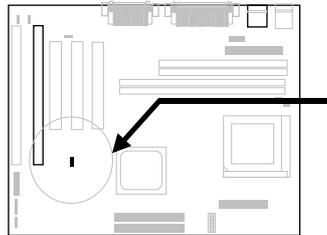
»èÄqÑ: Cyrix 6x86/M2 Å^ AMD K5 CPU Åéçè P-rating ÅQÆËa
 Intel P54C İ†Åñ% ò ÈäÅÖÈèÀi Å Öe»RÅp»ÖÍ»Úhİ%ÅÝ%ÅİÅi ÖèçöÀs
 ç•ÅÖP-rating»TÅi Åf»RCyrix P166+ Åp»ÖÚhÆÈ133MHz À ÈPÉúE İç
 Å P54C 166MHz»RÅi AMD PR133Åp»ÖÚhÆÈ100MHz À ÈPÉúE İç
 Å P54C 133MHz»T

İŞB AŞÖà

2.2.3 İ^Ê½CMOS

JP14 İ^Ê½CMOS	
1-2	Normal operation (default)
2-3	Clear CMOS

ÀfAXÈ' ÁeÈ` Ái İmŞAÖÀİİeÈ\`xi Èà»RçİĐÑç
 È_ÀÓI[~fv.1İmÊIC>D»Rİ^È!ÁYÇÁİnT^`d
 ÄÖİmŞÇaÄû»R%ÉuÇÄÑ†Đ"Ø »T



JP14



Normal Operation (default)

JP14



Clear CMOS

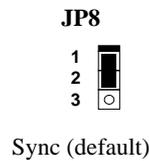
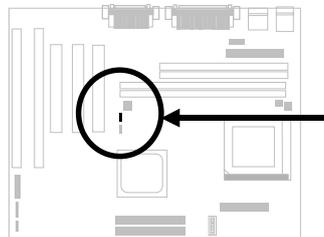
İ^Ê½CMOS ÄÖİ' ÁáÄf%ç:

1. xêxeÅŞÖ,,Ò¼ÄÖÖ,,Ñx%ŞY ÈÖ»T
2. È,, PWR2 ÈİÚj %hÈ_ ATX Ó,,Ñx^ÄøÈÖ»T
3. ÄøØ Jumper ÈİĐ~ÓéÁpçi JP14 Äi ÄsÄÖÄ Ò~»T
4. È_D xÄİfÖç(¼ Đ)Ä %f Äi»RÄ È^ Ä2-3 Ò"Ä %ç»T
5. %QÑ"ÄúÈäD»Äú»RÄ %f Đ xÄİfÖçÄÑ†È^ ÄoÄ 1-2 Ò"Ä %ç»RÄ İpçÜÈqØoÁQÄÈ ÖR»T
6. ÇÄÑ†çİĐ"Ó,,Ò¼Ö,,Ñx»T
7. ÀfAXÑbÇEİmŞÑ†ÄÖÄİİeÈ\`xi »RçzAsÄİİeÈi ÈäÈä»RÄ %f [DEL] Å ÜpDz% BIOS Setup İ' Ä»%ç»RÄRÇÄÑ†İmŞÑ†È\`xi »T

2.2.4 İnÅŠ PCI Clock

JP8	İnÅŠ PCI Clock
1-2	Sync (default)
2-3	Async

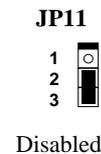
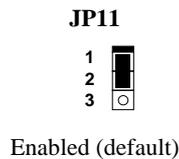
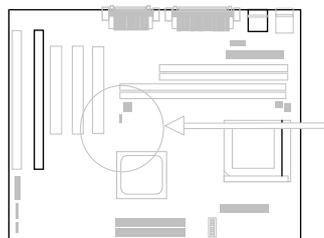
JP8 İz İè Àí İnÅŠ PCI clock »T ÖŞ İncâ Æ Åa ÅS (sync)»R İ_Å PCI clock Å` Å Ås CPU İ•Úh ÅÖ%Q İs (Åi Åf»RÇj CPU İ•Úh Æ 66MHz»RÅy PCI clock Æ 33MHz) »T İ^ Åi »PCI clock ÅÖ İh È İæ ÈÅ Æ 33 MHz»R Æ%W Æn\ İÇ ÅÅ İè È%Y Ç»RÇj CPU İ•Úh İn Æ 75/83 MHz Èã»R Åð İ È` È_ PCI clock İn ÈÅ U Åa ÅS (Async)»T



2.2.5 VGA Đ"Ý

JP11	VGA Đ"Ý
1-2	Enabled (default)
2-3	Disabled

Çj È' %½ Ñb Åé İè %Ö Åð ÅÖ VGA »R İz İY È_ ÅÖ jumper İn Æ Disabled»T



»e Åq Ñ_ : ÅÖ%Ö Åð ÅÖ VGA Ñ" Åé İè Å İþ İè İU È` Øeß »R È' İz İY È., BIOS Setup %¼ İn ÅŞ Ç È%U Èþ İÖ İ ÅÅ Ö È` Øeß %¼ %f »T ÅÖ İ•»R Åf ÅX È' İ` Å İ ÅŠ Òà %Q È DIMM»R İ ĐÑ Òà Ås DIMM1 İ»Ö è»T Åa Öa År»R Çj İ` Å İ ÅŠ Òà İ %p SIMM»R %n İ ĐÑ Òà Ås SIMM1»T

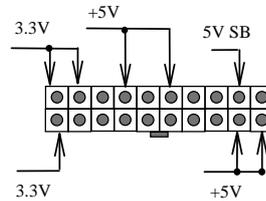
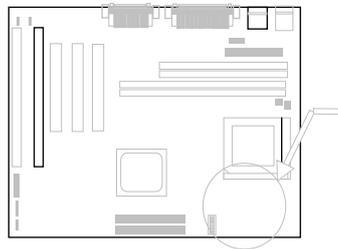
2.3 İ†ËİÚj

2.3.1 Ó„Ñ×İ†Ëİ×^

ATX Ó„Ñ×İ†ËİÚj ÅéçèÀf¼ Å020-pin İ†ËİÚj »R×è×eÅŞË·İ»¼Ä0¼ ÅgÆ çÛ×eÄ0»T



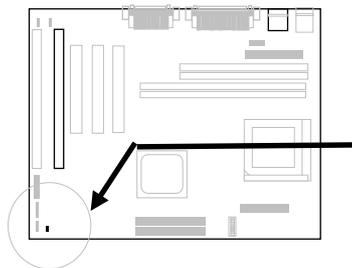
×è¼f¼: Åsİ†ËİÅeÄ0E¼Ó„Ñ×İ†Ëİ×^¼Ä¼»R×èç Ý İ†ËİeÓ„Ñ×»T



PWR2

2.3.2 ATX Soft-Power Switch ËİÚj

ATX soft-power switch İ†ËİÚj Å 2-pin Ä0»T×èç È„ ATX 0 İuÄ0¼¼ ÇËÁ`¼¼Ápçi ÖèçöÅE “power switch” Ä0 4-pin İ†Ëİ×^»Rİ^ Åuİ†ËİçU0 Å`¼¼Ä0 Soft-power switch İ†ËİÚj (ÖèçöÅE SPWR)»T

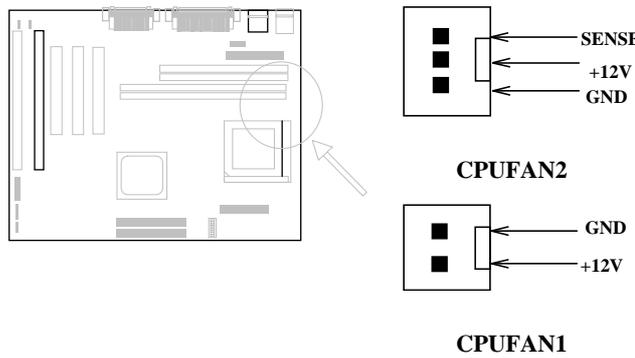


SPWR

İŞB ÅŞ0à

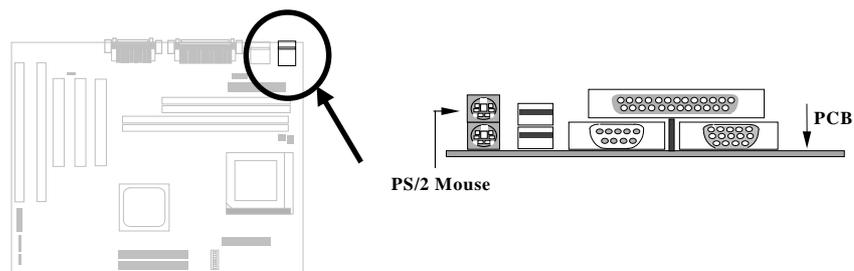
2.3.3 ÇÑÈÈ

CPU ÇÑÈÈçzçYÈİÀs 2-pin ÅÔ CPUFAN1 Åe 3-pin ÅÔ CPUFAN2 ÈİÜj ¼h»TxèÄq Ñ_»Rç^ÅÍ 3-pin ÈİÜj ¼pİAÇÑÈÈ0àÈÈçmú»RÀnÈÈÍ, 0òÈİÜj ÅÍAy¼W¼QÇi SENSE Èİ 0»»T



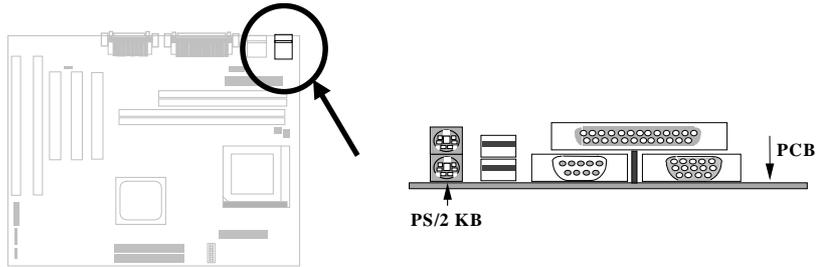
2.3.4 PS/2 ÑàÓÀ

×èÍ†Èİ PS/2İÑàÓÀÀ 0èçöèÈİPS2 MSİÅÔÈİÜj ¼h»T



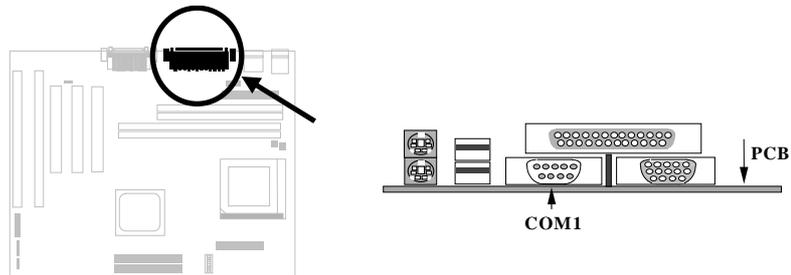
2.3.5 Úþ×]

×éÈ_ PS/2 Úþ×] ÈÏÀ Òè¿öÆ KB ÅÔÍ†ÈÏÚj %41»T



2.3.6 À ÀTÊ (COM1)

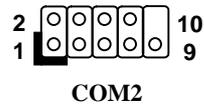
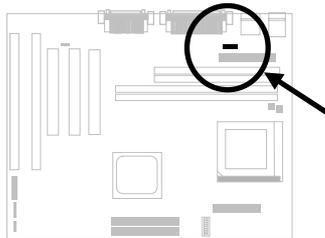
Åü% ÇÈÀ` %41ÅÍ%ÇÇiÒè¿öÆ COM1 ÅÔ 9-pin D-Æ ÈÏÚj »R¿¿èÅÍ†ÈÏÀ ÀTÊ ÑàÓÀ (serial mouse) ÅèÆ Òà000 »T



İŞB ÅŠÒà

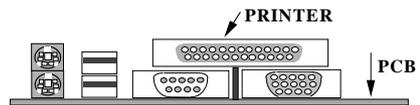
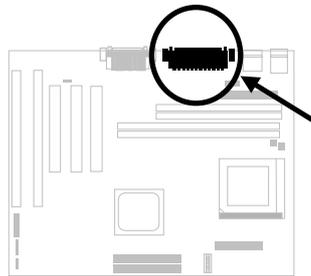
2.3.6 À ÀTÊ (COM2)

Ë_ 10-pin ÄÖËäx^ËÏÄ COM2»T



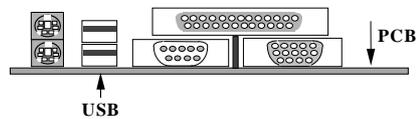
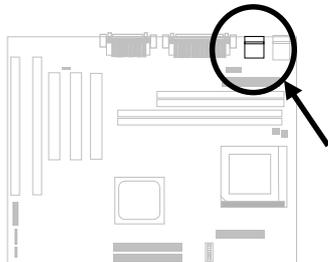
2.3.7 À]Ä Ø

¿UØ Ä` Äü% ÇËÄ` %41ÁÍ%QÇiÖë¿Ø PRINTER ÄØ 25-pin D-ÄËÏÛj »R¿èÁiÀŠÎ»À]Ä Ø »T



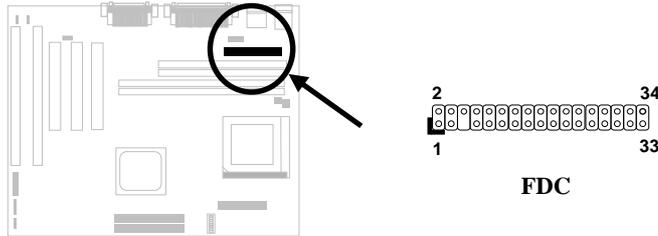
2.3.8 USB ØàØ~

Ë_ USB ØàØ~Í†ËÏÄ USB ËÏÛj »RÍ, Ø ¿UØ Ä` %41ÁÍÄüÇUSB ËÏÛj »RÖë¿öÆ USB»T



2.3.9 İ€ÒèØ

Às¿UØ Ä` %hÄÍ%QÇiÖè¿öMDC ÄÖ 34-pin ÈIÚj »R¿z¿eÄÍÍ†ÈIÄü¿¿İ€ÒèØ »T

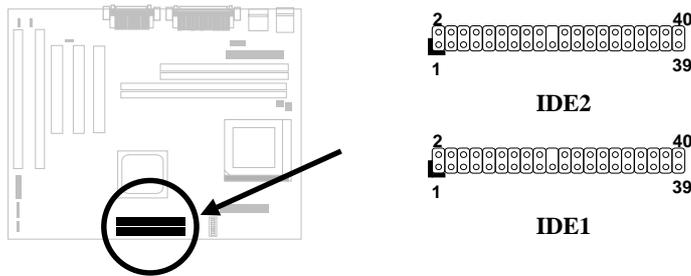


2.3.10 IDE İŞÖèØ Õa CDROM

Às¿UØ Ä` %h»RÈIÄÍÄüÇiÖè¿öMIDE1 Ä^ IDE2 ÄÖ 40-pin ÈaÈS»R¿z¿MÄ` Í†ÈIÄüÇi IDE ÒàÒ~»RÍæÄy¿zÍ†ÈI¿¿Çi IDE ÒàÒ~»R%QÉ IDE1 %dÖóÆ¿UI„ÖU (primary channel)»RIDE2 %dÖóÆÄÖÍ„ÖU (secondary channel)»T

Í†ÈIÄ ¿ %QÍ„ÖUÄÖİP%Q¿¿ÒàÒ~¿İĐNÍInM master mode»WİP%X¿¿ÒàÒ~¿İĐNÍInM slave mode»T¿ %QÇiÒàÒ~Ä»¿zÆİŞÖèØ Äè¿ ÖèØ »T

×èÈ_È' İP%Q¿¿ÒàÒ~ÍnM master mode ÄYÈIÄ IDE1»RİP%X¿¿ÒàÒ~ÍnM slave mode ÄaÖäÈIÄ IDE1»TÄfÄXÈ' ÄİİP%e¿¿èİP¿¿¿»R×èÄæÄäÈIÄÄ IDE2 ÄÖ master %è slave mode»T

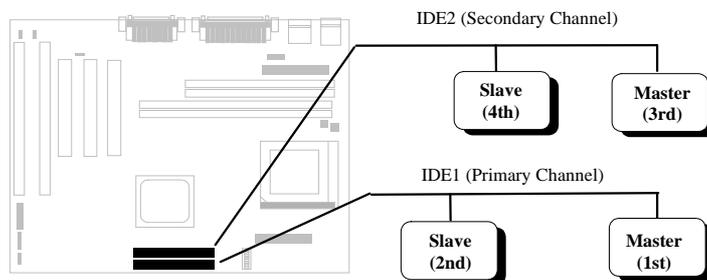


İŞB ÅŠ0à



×è¼f¾: IDE İhÈ Å0PİÈà×^İæÄ ¾¼zDhÓ] 46 ¾¼
¾Í (18Ç0Àe)»RçYÁ\Ò ÈàĐaÜ ¾¼Ä”»T

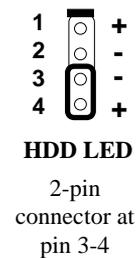
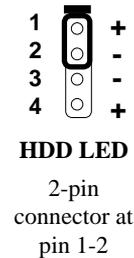
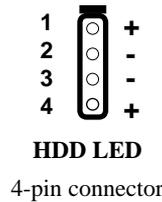
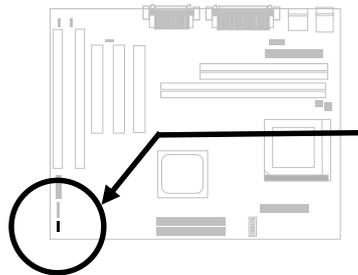
×è¼f¾: ÅÈÓVÄ İæÄèÅÖAYÖÖÁ•× »RÈà×^İaÖÑÖ÷ÄÖ
ÒàÖ-İæÄÈİnÄÄ master mode»RÄYÄæNi ¾ÇÖéÅ0PİÄÖ
ĐĐÄáÅŠ0àÑ†ÒàÖ~»T



2.3.11 Hard Disk LED

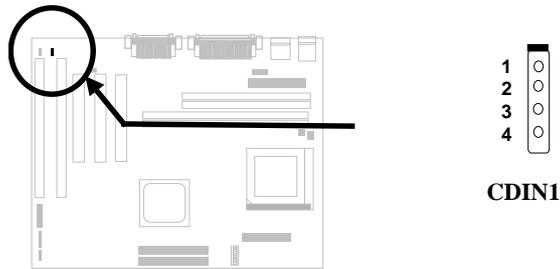
İŞ0è LED Å çöü` Öeç0ÄÄ HDD LED»RÍ, Çİ ÈàÈŠçz
ØRçèÄ Äf Ö0¾¼ÄaÄÖÖ İü»RÄfÄXÄi ÅŠ0àÄÖÖ İüÄv¾¼
ÇÈÄ` Ä Äİ 4-pin İ†Èİ×^»R×èÄ×Èİİ»¾¼»TÄfÄXç^Ä
2-pin ÄÖİ†Èİ×^»RççYÜ Ö0ÄSİ» 1-2 Äè 3-4»RÄ ×è
ÄqÑ_NçÄä»T

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



2.3.14 CD ÇİÑ××^ËİÚj

Í, ÇiËİÚj Æ çèÁíÍ†Ëİ CDROM ÅÖÇİÑ××^»T



2.3.15 Mono In/Mic Out ËİÚj

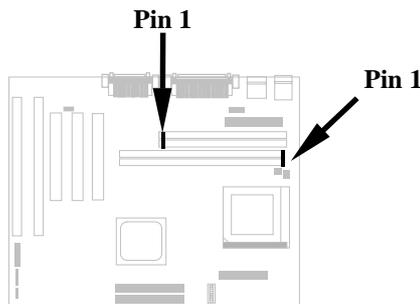
Í, ÇiËİÚj ççèÁíÍ†Ëİ ÅÖËİÀ»ÖàØöçuÄÖ Mono In/Mic Out ËİÚj »TÅp»çç» Pin 1-2 Æ **Mono In**»Rpin 3-4 Æ **Mic Out**»TÇ€ÅqÑ_ÅÖÆ »RçðÁvÍ, %QÝ ÅÖËİÚj ÅÝÁdÁÍÁe ÅŞÅÖöeÑa»Rç^ÁÍ%ðÖaÅÖÖaØöçuÁÍ†^ÁeÍ, ÇiËİÚj »T Û ÜäÁv×êç ÊèØq |¼ ÅÖËİÖ"ÅŞÖ,»RÁÝÀgÖàØöçuÄÖÖiËi ÖüÊ÷Ì ^ Ñ»»T

Pin	Description
1	Mono In
2	GND
3	GND
4	Mic Out



İŞB ÅŠÒà

2.4 ÅŠÒà: UE` Øêß



ÅÓçUØ Ä` ÅÍ 2 È DIMM (Dual-in-line Memory Module) İ»ÖëÖa 2 È SIMM (Single in-line Memory Module)»RçzçY çp İÄ EDO (Extended Data Out) Ä^ SDRAM (Synchronous DRAM)»R İæÄÄ ÈvĐ,,çzÖWÄ 256MB»T

Çj Åa Èä ÅŠÒà DRAM Às DIMM2 Öa SIMM»RÄaÄ` Í ÇËÜ ÇËİ_BöÈ, ÅöÇÁÇ€ çW»TAsÍ, ÖöÄÄÄfçf »RÈ' ç`ÉúÄéçèİ ÇË ÄÖ DRAM»T

çÖçUØ Ä` Äi çpİÄÄÖSIMM Öi İi Äfçf Äi Ç' »X

- I. ÈvĐ,,: Í ÇËÄË 1Mx32 (4MB)»S4Mx32 (16MB)»S16Mx32 (64MB)»SÄi Ü ÇËÄË 1Mx32x2 (8MB)»S4Mx32x2 (32MB)»S16Mx32x2 (128MB)»T
- II. ÍçÄñ: ÄçÄ İçÄñÄË 60ns Äè 70ns»Th ç_Ä çbÄÖÇçWÄÖç »RÄi s ç_Ä "second (Ä)"»R60ns Äj 60 Çi çbÄÖÇçWÄçÄçQÄ »T
- III. Ý Ä` : FPM (Fast page mode) Äè EDO (Extended data output)»T
- IV. ÄaÄ çÖ: İ] parity (32 bit)»T

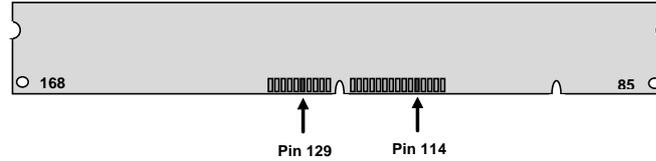
çÖçUØ Ä` ççYçpİÄÖëÑa64 bit ÄÖ DIMM Öi İi »T

- I. çççç: Í ÇËÄË 1Mx64 (8MB)»S2Mx64 (16MB)»S4Mx64 (32MB)»S8Mx64 (64MB) »S16Mx64 (128MB) »WÄi Ü ÇËÄË 1Mx64x2 (16MB) »S2Mx64x2 (32MB)»S4Mx64x2 (64MB)»S8Mx64x2 (128MB)»T



İçö: ÄÍÇi ç Ä|çzçYÜaÄüÈ` ÄÖ DIMM Ä Í ÇËÜöÄ Ü ÇË -- ÄÄÄ-DIMM çhÇËÄÖ pin 114 Öa pin 129»RÄfÄX ÄÍÈçÖ-Ö,,Ö »RÍ, È DIMM çzÉúİ Ä Ü ÇËÄÖ»WçpÄy İ Ä Í ÇËÄÖ»T×èÈëNi çÇËÄÖÖèÖ»T

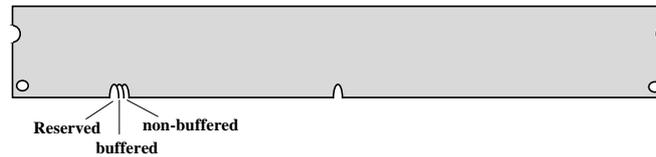
İŞB ÅŞ0à



DİÁZ: ÇjÀaÈaÅŞ0à DRAM Ås DIMM2 Õa SIMM»RÁaÁ`Í ÇÈÜ ÇÈİ_Bö È, ÅöÇÁÇE»TAsÍ, ÓoÅÅf»RE` ç`ÉuÅé;èÍ ÇÈÅ0 DRAM»T

II. ÍþÄñ: %QÉ Æ Õè;öÅf-12 Í, ÓoÅÅ»»RÍ, Å çöÀ†Å ÍþÄñ (clock cycle time) Æ 12ns»RÁi çYÅ0SDRAM Íæ»Å0 clock Æ 83MHz»TÜoÅÍ;çQ0o0è;öÆ ÅfAa-67 Í, ÓoÅÅ»»RÄ çöÀaÅS0 ÈaDaÜ ÍæÁð;çÅ 67MHz»T

III. Buffered Õa non-buffered: çÜçU0 Å` »þIÄnon-buffered DIMM»TÈ` ççYÅa00 DIMM »hÇÈÈ»»Å0À Ò~»RÁÍÁaÁ non-buffered DIMM Õa buffered DIMM»T×è ÈèÑí»f ÓéÄi çö»X



çèÄ Èä»»Å0À Ò~»»Åa»Rç`ÄÍ non-buffered DIMM ççYÍ»»çU0 Å` »hÅ0DIMM Í»0è»TÜ Ý^ çöÄv;ÇÇÈ»hÆ»Å Å0DIMM Í»»S0xÆ non-buffered Å0»»RÁóÇæ»Í Åó ÞÍÈ`AsÜ ÜaÈaÍæÆÜóÆ Ò ÅÈÈ0uÈ»Í^ Ñ»»T

IV. 2-clock Õa 4-clock signals: Ü Ý^ 2-clock Õa 4-clock Å0 DIMM Í»ççYçèÀsÍ, Ð çU0 Å` »h»RÄ ÆÈ»»ÄIèYÇÅŠÅaÍoÑb»RÁóÇæ»Í ÅoÞÍÈ` ÍæÆÈé;ç4-clock Å0 SDRAM»T



Í»ççYçè: ÇÈÜa»hÈ` Å0 SDRAM Æ 2-clock ÜóÆ 4-clock Å0»RççYÆ»Æ» pin 79 Õa pin 163»RÄfÅXÄÍÈþ0-0,,0 Í_ÜÍ0iÆ 4-clock»WpÅyÅÆ 2-clock Å0»T

V. ÅaÄ »0: »þIÄ0èÑaÅ0 64 bit wide (Í] parity) Å0 DIMM ÕiÍi»T

İŞB ÅŠ0à

BIOS çÄöÊäÊÖİ Ê` 0eß ÄÖÊvD, %ÄÄ»R%ÄÖ-Äéçè Jumper İñÅŠ»Tİ, % çUØ Ä` İæ %ÄÖÊ` 0eß ÊvD,Æ 256MB»T

SIMM1	SIMM2	Subtotal of Bank0
None	None	0MB
4MB	4MB	8MB
8MB	8MB	16MB
16MB	16MB	32MB
32MB	32MB	64MB
64MB	64MB	128MB

DIMM1	Size of DIMM1
None	0MB
8MB	8MB
16MB	16MB
32MB	32MB
64MB	64MB
128MB	128MB

DIMM2	Size of DIMM2
None	0MB
8MB	8MB
16MB	16MB
32MB	32MB
64MB	64MB
128MB	128MB

**Total Memory Size = Subtotal of SIMM1 + Subtotal of SIMM2
+ Size of DIMM1 + Size of DIMM2**



ĐİÁz: ÁöÇæÄY%ÄöĐİ SIMM 0a SDRAM DIMM İgİ»RÊ%ÄU
Ê` ÄÖ SDRAM ÊúÊ ÊvÁİ 5V Ö, Ü½(5V tolerance, Äf Samsung
Äè TD)»TÄpÄyçÊúÑ`AnÆÖ, Ü½%Ä ÊÄ»RÄİÑ}Ñİ SDRAM»T



×eÄqÑ_ : Ê` çİĐÑÄéçèÄüÊ ÅöÄaÄÖ SIMM»T

×eÄqÑ_ : Äİ%QÄáÖ ÜÜÄÖ DIMM Æ ÊĐçè EDO ÄÖÊ` 0eß İÖ
% »RÄnÄÖç`ÉúËİÄ 5V»RçzÉúİJÄ|çèÄ İ, % çUØ Ä` ÄÖ
DIMM İ»Öè»RÄöĐİ Ê` İæÄ€Ü çèÊ`çÜ 3.3V ÄÖ SDRAM
DIMM»T

İŞB ÅŠÒà

çY%ÀTçÄòPíÁéçèÄÖ DRAM İiAi »X

SIMM Data chip	SIMM Parity chip	ÅTÇÈ bit Öàçò	Í Ü ÇÈ	Chip Öàçò	SIMM ç/ç/ç	Æ ÁPÅòPÍ
1M by 4	None	1Mx32	x1	8	4MB	Yes
1M by 4	None	1Mx32	x2	16	8MB	Yes
1M by 4	1M by 1	1Mx36	x1	12	4MB	Yes
1M by 4	1M by 4	1Mx36	x1	9	4MB	Yes
1M by 4	1M by 4	1Mx36	x2	18	8MB	Yes
1M by 16	None	1Mx32	x1	2	4MB	Yes
1M by 16	None	1Mx32	x2	4	8MB	Yes
1M by 16	1M by 4	1Mx36	x1	3	4MB	Yes
1M by 16	1M by 4	1Mx36	x2	6	8MB	Yes
4M by 4	None	4Mx32	x1	8	16MB	Yes
4M by 4	None	4Mx32	x2	16	32MB	Yes
4M by 4	4M by 1	4Mx36	x1	12	16MB	Yes
4M by 4	4M by 1	4Mx36	x2	24	32MB	Yes

SIMM Data chip	SIMM Parity chip	ÅTÇÈ bit Öàçò	Í Ü ÇÈ	Chip Öàçò	SIMM ç/ç/ç	Æ ÁPÅòPÍ
16M by 4	None	16Mx32	x1	8	64MB	Yes, but not tested.
16M by 4	None	16Mx32	x2	16	128MB	Yes, but not tested.
16M by 4	16M by 4	16Mx36	x1	9	64MB	Yes, but not tested.
16M by 4	16M by 4	16Mx36	x2	18	128MB	Yes, but not tested.

İŞB AŞÖà

DIMM Data chip	ÂTÇË bit Öàçò	Í Ü ÇË	Chip Öà çò	DIMM %ç %f	Æ ÁpÀòPÍ
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
4M by 16	4Mx64	x2	8	64MB	Yes
4M by 16	4Mx64	x1	4	32MB	Yes
8M by 8	8Mx64	x1	8	64MB	Yes
8M by 8	8Mx64	x2	16	128MB	Yes

DIMM Data chip	ÂTÇË bit Öàçò	Í Ü ÇË	Chip Öà çò	DIMM %ç %f	Æ ÁpÀòPÍ
2M by 32	2Mx64	x1	2	16MB	Yes, but not tested.
2M by 32	2Mx64	x2	4	32MB	Yes, but not tested.

çY%ÀTçMÀòPÍÆçeÄÖ DRAM İiAi »X

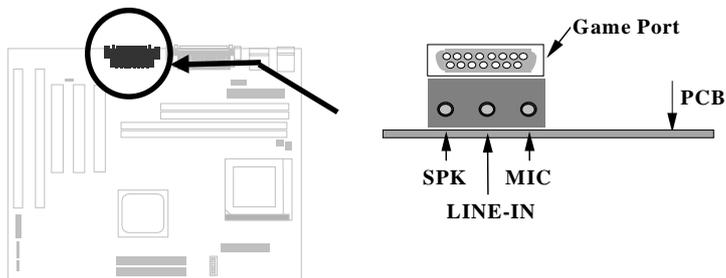
SIMM Data chip	SIMM Parity chip	ÂTÇË bit Öàçò	Í Ü ÇË	Chip Öà çò	SIMM %ç %f	Æ ÁpÀòPÍ
1M by 1	None	1Mx32	x1	32	4MB	No
1M by 1	1M by 1	1Mx36	x1	36	4MB	No
1M by 4	1M by 1	1Mx36	x2	24	8MB	No
4M by 1	None	4Mx32	x1	32	16MB	No
4M by 1	4M by 1	4Mx36	x1	36	16MB	No
16M by 1	None	16Mx32	x1	32	64MB	No
16M by 1	16M by 1	16Mx36	x1	36	64MB	No

DIMM Data chip	ÂTÇË bit Öàçò	Í Ü ÇË	Chip Öà çò	DIMM %ç %f	Æ ÁpÀòPÍ
4M by 4	4Mx64	x1	16	32MB	No
4M by 4	4Mx64	x2	32	64MB	No
16M by 4	16Mx64	x1	16	128MB	No

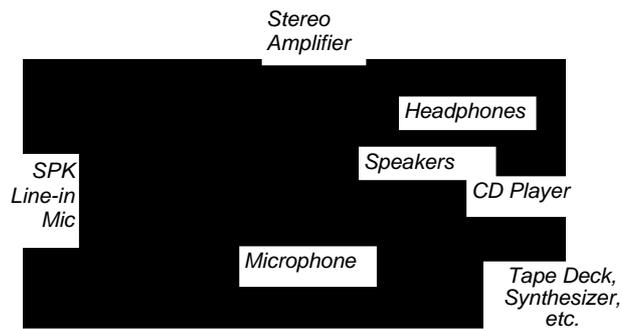
2.5 ÅÖÀÒÇİÈPçu

Í, ç U0 Å` ÅÖÀÒçW16-bit ÅÖ Crystal CX4235 ÇİÈPİSİ·İ0ç »RÅpÅýÁÍçYçf ÅÖÉd Åä»X»T

- ç ÅÖİÅ Microsoft Direct Sound»T
- ç ÅÖİÅ Windows ÜYİ»Åj çè(Plug & Play) »T
- ç ÅÖÅÒ MIDI ÅÇÈ»RçzB È' ç·ÈİÅpçÅÅÖ MIDI İnl'ã»T
- ç çz'·Ójİ€B ÈÈÅ 0a0xÅ Åy0òÈ Å»ÅÖÇİ0ò»T
- ç ÅÖÅÖÁÍ CD audio»Sine-in»R0a microphone inputs ÈİÜj »T
- ç ççYİ€B ç Å»İnlŠ I/O address»SDMA 0a IRQ»T
- ç ç Ü çÇİÈP0SÁQ ÅaÅS0xÅ / Ü Çİ»T
- ç 44.1KHz ÇİÈPÅ·x »T



È' çÈ0mç ÓeÁÍçÈİÅY Dxybİnl'ã»T



2.6 ÅÏÀÒ VGA

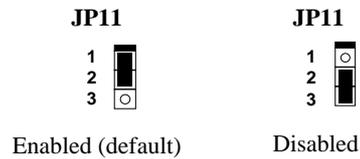
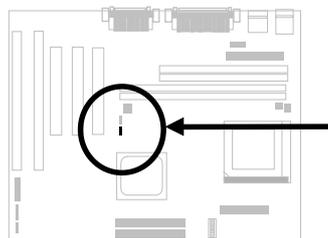
ç_Û_U0 Ä`ÄÍ%ÏÀÒVGA»RN`ÄéçèÄ ÄÏìèç_UË`0eB »RE`çç_YË,, BIOS Setup %41mŠ Ç€%ÛËiÏ_ç_ÄÄÏË`0eB %4%4»TÄ0ç_»RÄfÄXË`ç`ÄÍÄŞ_0à%QË DIMM»Rç_ÏĐÑ_0àÄs DIMM1 Ì»Ïè»T Äa_0àÄr»Rçj ç`ÄÍÄŞ_0aÍ %4SIMM»R %4ç_ÏĐÑ_0àÄs SIMM1»T

ÚYÄ Ä_ÏÄOpen Bonus Pack CD-ROM %4çç_YÄpÄ VGA Ä_ÏBi Ääi`Ä»»T

Bi Ääi`Ä» X:\Mx58plus\VGA

X: Ä ç_öË`Ä_0ç_0e0 ç_0_0»TÄsBi Ääi`Ä»% ÇË»RE%4WWindows 95/98 %Äç_»RÄ_0çæ%ñ Ì`Äè%4WWindows 3.1»SWindows NT 0a DOS Ä_ÏBi Ääi`Ä»»R% Ä`Ë`Äéçè%4AaÄ_0ÄQ Ñ`ÄÏìè»T

Çj È`%4ÄÑbÄéçèÄ_0%ÏÄ_0ÄVGA»Rçç_YË_jumper 11 ÌnË Disabled»T



İP³/eÍÓ Award BIOS

¿ŒÍŒ_Œ»À ÀfÀ ÍmSÀİİeÈeŒa»RÈ' ¿¿YÁé¿è AOFIash Í, Çi%Áýİ'À»ÀíÁ Ñ¿UŒ
À`ÀŒBIOS»T

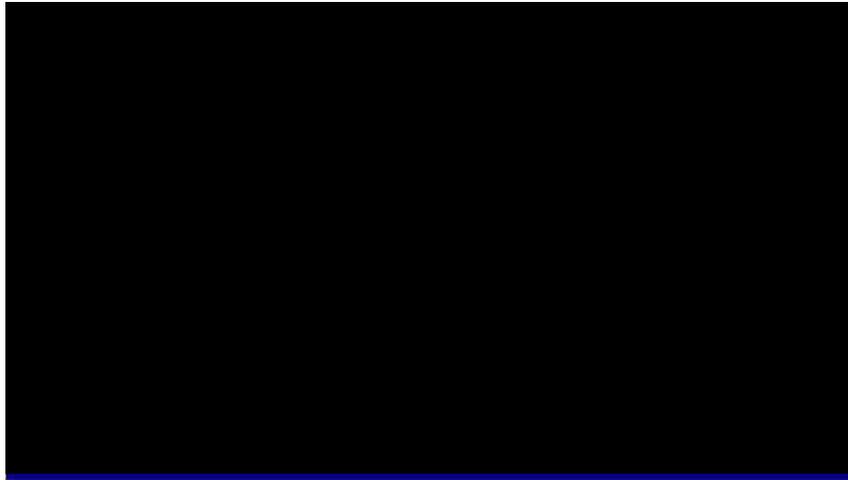


ÇÁÇ€: ÀnÆ BIOS codeÑ“ÚYİŒÁİİeÍ€İSB ÄŒİnÇfÇñÁ
ÀíÁ Đz»RÀi ¿Y¿i ÍwÈaÄŒ BIOS ÄÄ¿Œ¿zÈúÑ“Œa¿ŒÍŒŒ
İeÄŒŒEv (ÉdÁ`Æ Chipset SetupÈeŒa) ÀÍÁaÈİİÁ»T

AWARD BIOS

3.1 Ɖz¾[BIOS Setup ıUÙ Í

BIOS Setup Ɛ %QE,À†Ā Ā Flash ROM ĀÖİ'Ā»xi »RıZıYıZèĀÍĀ Ā ĀıİèÈèÖa»RĀY Ē_ıĀĀ†Ā 128 byte ĀÖ CMOS RAM %»RĀéıèĀĀfÇDz¾[BIOS Setup %»Rı^Ç€ ĀsĐ"Ø ĀúĀıİèÈ Ā POST (ĀóĀóİ Öı) Èa»RĀ %f DEL Ā Ūp»RĀ\ıZz¾[AWARD BIOS Setup ĀÖıUÙ Í »T

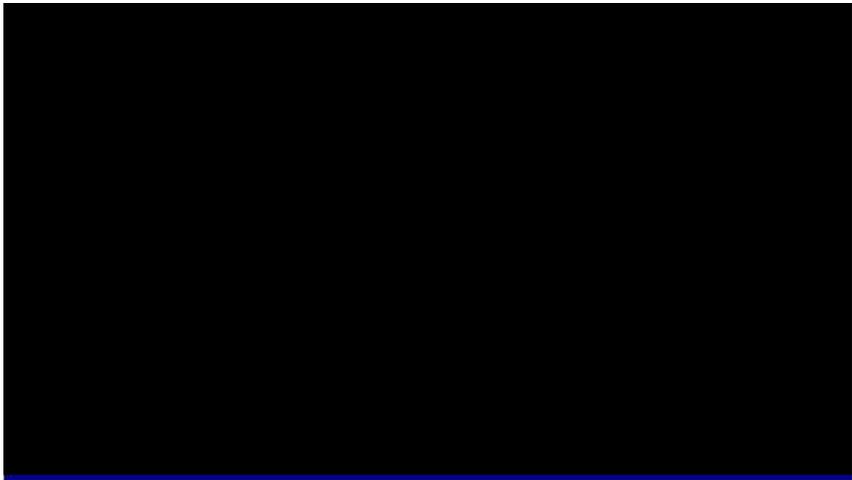


ÍıöKıÜ Öö "Load Setup Defaults" ıZÖ %ĀĀıİèÖŠ ı ĪnĀSĀÖÈèÖaÇa»WıÜ Öö "Load Turbo Defaults" ĀyızĀéıèÖ ĀđĀÖÈèÖaÇa»RĀ ıİĐNÆ Ö Ūİ Ī ĀÖĀı İèİıĀı»T

ĀsİvÇÈ%f% Āı%QĀ ı`Ā »RĀZDUÈ'ĀfĀ Ē_ĀXı ÈèİÖĀ Û Đİ%ı»RĀfĀ Ā Ā ĪnĀS»RıY%è ĀfĀ Ē,,%QÇıİvÇÈİÖĀ ıı%QÇıİvÇÈ»TĀbıè% ĀgŪp»RıZĒ_ĀXı ÈèİÖĀ Ē ÇnĀ ĀÖŪ Đİ %ı»[SHIFT] [F2] ıZĀ BöŪYÓ ĀÖBıZöĀüÈ~»V[] ıZŪ Đ"ĪnĀSİvÇÈ»W[F10] ıZĀsŪ Đ"Āv Ā†Ūa»Tıæ%fÇÈ%QĀ Ɛ Ö ĀıÜ Ā ĐİıöĀÖŪİ%Đ»T
Ū Ā %QÇıĐİıöĀü»RıZıYĀ % [] ĀıÜ Ā ĀeĐz%QöyŪ Ī »T

3.2 Standard CMOS Setup

Ù 0ö "Standard CMOS Setup" ÍnŠİvÇË»R¿¿YÙ 0öÄÏÈÄÖÊ ¿ÖÍnŠ»RÀfÙ %4%
ÎÛ»SÈÄD»%é0é0é0 ÄÄÖRÄÖÍnŠÇâ»TÄé¿èÄæ¿Áb¿è% ÄgÛpÈ_%é¿iÈéÌ0Ä È ÇnÁ ÄÖÙ
ĐÍ%41»RÄRÄé¿ [] Äè [] Ä ÛpÍnŠSÙ ĐÍÄÖÈé0aÇâ»T



Standard CMOS à Date

ÀfÄXÈ' ÑbÇÉÍnŠ% ÎÛ»R¿¿YÁb¿è% ÄgÛpÈ_%é¿iÈéÌ0Ä Date Èé0aÍS»RÄRÄ %f
[PGUP] Äè [] ÍnŠ¿òÄvÄ0% ÎÛ»T% ÎÛÄÖÈé0aÈ Ä»ÆÈ% »S% Ä^ Ä•»T

Standard CMOS à Time

ÀfÄXÈ' ÑbÇÉÍnŠÈäD»»R¿¿YÁb¿è% ÄgÛpÈ_%é¿iÈéÌ0Ä TIME Èé0aÍS»RÄRÄ %f
[] Äè [] ÍnŠ¿òÄvÄ0ÈäD»»TÈäD»ÄÖÈé0aÈ Ä»ÆÈä»S%ÄÄ^ È »RÆ ¿Y4 %fÈä
% Ä»Ä ¿ö»T%Q¿ÖÍnŠÄÈÈäD»Ä^ % ÎÛ»RÄTÄ0ÇÄÑ†D"0 Ä\%Ä0-ÄRÇÄÑ†ÍnŠ»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 ÐĪ ĺzĪnĀŠĀĭĪèĀi ħpĪĀĀŌ IDE ĪŠŌèĒèŌà »RĀi ĀfĒvĐ.,
User	(Size) »SŌèĒĪ ŌĀ(Cylinder) »SŌèŪj ŌĀ(Head) »SŌŠŌĀŪ% (pre-
None	compensation) ĀŌĒpĀ} Cylinder ÇĀ»SŌèŪj ĺ ĒĀĒé (Landing
1	Zone) ĀŌ Cylinder ÇĀ»SŌèĒĒŌĀ (Sector) Īĺ»TŅ Ē'Ē ĒèŌĀÇĀĪn
2	ĒĒ Auto ĒĀ»RBIOS ŅĀsĀĭĒĒ Ā Đ"Ō ĀŌĀŌ ĪŌi (POST) ĒĀ»R
...	ĀŌĒĀĒŌĪ ĪŠŌiŌèŌèŌ ĀŌ Type»RĀŪĀs Standard BIOS Setup
45	»Byĺŏĺi Āi »TÇj ĒŌĪ ħĀ ĪŠŌèĀŌType ĒèŅbĀŌĀ ĪnĀŠĒèŌĀ
	ÇĀ»R×èĪnĒĒ User»TĀfĀXĀĭĪèĀŪĺŌĒĪĀĪŠĀ»ŌèŌèŌ »R×èĒ
	Type ĪnĒĒ None»T
	IDE CDROM ĪĪĒ ĀŌĒĀĒŌĪ ĀŌ»T



ĪĪĺŏ : Ē' ĺzĀbĺèĺŪĪvÇĒĀŌ "IDE HDD Auto
 Detection" Ū ÐĪĀiĀŌĒĀĒŌĪ ĀiĀŠŌĀĀŌ IDE ĪŠŌèĪĪ
 Ē »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	Āéĺè Logical Block Address (LBA) ŌiĀ»ĐĀĒvŌ ĒĀĺ»pĪĀĐĪ
Normal	Ō] 528MB ĀŌĪŠŌè»TĺŏĀvĺĀĪ ħĀĀŌDE ĪŠŌè»ĀŪĀŷĪĀ LBA
LBA	ĐĀĒvŌiĀ»RĀpŪĀĭĒvĐ.,Ā»ĐĪŌ] 528MB»TĀfĀXĀéĺèĀŌĪŠŌè»Š
Large	ĪbĒ Ā»ħĒĒ LBA On »RĪ_ ħĒŪĺèLBA Off ĀŌĪ Ā»ĀĪĒiĒĀ»T

AWARD BIOS

Standard CMOS à Drive A Standard CMOS à Drive B

Drive A
None
360KB 5.25"
1.2MB 5.25"
720KB 3.5"
1.44MB 3.5"
2.88MB 3.5"

Í, ÇiÙ ÐĪççèÁiÙ ØöÍ€ØeÁÖÝ ÁÆ»R »eİØEä¼ ÅgÛpÀö Drive A
Àe Drive B ÍS»RÁ  Àe  Ù ØöÖaÍ€À»ØeØ ÆÌGÄÖÈe
ÖaÁj ç»RÂpÍnÁŠÇaÀfçÄ»T

Standard CMOS à Video

Video
EGA/VGA
CGA40
CGA80
Mono

ÀÖ Ù ÐĪ ççÍnÁŠ Ái Áe çè ÄÖ Bý çö çu ÁÆÖR »R Èe Öa ÖŠ ÍnÇa ÆÈ
VGA/EGA»TçèÄ çöÁvÄÖÇi¼YÖ,,Ø¼ÍæÉ¼ÄÖÍhÈ ÆÈ/GA»RÁiçY
Í, ÇiÙ ÐĪÍi çXÁdÁÍ¼ÈÖ çeÍS»T

Standard CMOS à Halt On

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

ÀÖÙ ÐĪççÈÈ ÁİİeÈ À ÀöÁöÍ Òi (POST) Èã»R ÀfÈÖÍ Á Ù Ö•
Æ ÁpÇ€ÈÈ¼ ÓSÁQ»TÈeÖaÓŠÍnÇaÆÈAll Errors»RÁ çöÁİİeçÇ€ÈÖ
Î Á Ù Ö•ÄÆf»RÁj ÑÈÈ¼ ÓSÁQ»T

AWARD BIOS

3.3 BIOS Features Setup

ÀfÄXÀsçUÙ Í %4Ù Øö “BIOS Features Setup” ðÌçò»RÁj Ñ”ÀsÜÝÓ %4BýçöÀf%FÏv ÇÈ»X



BIOS Features à Virus Warning

Virus Warning	ÀÓÙ ðÌ çzÍnÀŠÓ, ò%ÉwE.À0Ä%çnÉú»RÁ` BQİŠôeÄ0Ð”Ø ÈeÆ,
Enabled	(Boot Sector) %e%4ÍeÄ (Partition Table) %4Ä ÉwEÄZÈqTÀf
Disabled	Ë_Èe0aInÈ»ÇEnable »RÄ çöó, ò%AsÐ”Ø ÓjI' %4»RÀfÁÍÒ Èa
	Öx%4İŠ0eÐ”Ø ÈeÆ, »RÄİeAj ÑÈÈ% ÓSÁQ»RÄYÑ”AsÜÝÓ %4çi İ'
	çY%f Ä0PÍÁÈe00»TÀ0Èa»R×çèÈ×Æ.I' À»Ápçi È÷YUÁi Às»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

External Cache	ÀÓÙ ÐĪ ĵĵ ĪñĀŠĀĭĪēĀé ĵè ĪP%XDĵĀđĀ Ē` ØēB (ĵòĀvĀĒ
Enabled	PBSRAMĀđĀ Ē` ØēB)»RĵYĵĪĀđÓ,ò%ĀŌĒ Ā ĒPĪ%»TĀ Ē
Disabled	ĪñĀŠ Ē`Ī ŌTĀĭĪēĀŌĪĭĀñ»RĀĭ ĵYĀò ÐĪ Ē` Ē_ Ēē Ōà ĪñĀĒ
	Enable»RĒ%ĀUĀĭĪēĪ, ĵç%ĀĶĀŠĀŌĀĒĀĶ%ĪñĀĒ Disable»T

BIOS Features à CPU L2 Cache ECC Checking

CPU L2 Cache ECC Checking	Ī, Ķĭ ÐĪ ĵò ĵzB Ē` ĪñĀŠ Ē` Āp Ēĭ ĵè L2 Cache ECC
Enabled	Checking»T
Disabled	

BIOS Features à Quick Power On Self Test

Quick Power on Self test	ÀÓÙĪ ĵò ĵĵ ĪñĀŠĀĭĪēð ŌĭĀĶ ĀĀĪ Ōĭ ÐĪ ĵò»RĵYĵĪĀđĀŌĪ Ōĭ
Enable	(POST) ĀŌĪ'Āá»TĒēŌāŌŠĪñĀĒ Enabled»T
Disabled	

BIOS Features à Boot Sequence

Boot Sequence	ÀÓÙ ÐĪ ĵĵĀ ĀŠĀĭĪēð"Ø ĒāĀŌÑ(Ī^ ÐÐĀá»TĪŠŌēĀŌŸēĀ` xi
A,C,SCSI	(ID) ĀĶ%ĶĀĭ ĵò»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
F,A,SCSI	Zip: IOMEGA ZIP Drive
SCSI,A,C	
SCSI,C,A	
C only	
LS/ZIP,C	

AWARD BIOS

BIOS Features à Swap Floppy Drive

Swap Floppy Drive	ÀÓÙ ðĬ ĵĵ Y%ÔĪÁÍ€À»Ôé0é0 À0À 0~»TÀi Àf»RCj ÁÍÄüĵ<Í€
Enabled	À»Ôé0é0 (A»RB) »RE' ĵĵ YÁ ĄŠĪP%Qĵ<ÆĒ0é0é0 B»RĪP%X
Disabled	ĵ<ÆĒ0é0é0 A»T

BIOS Features à Boot Up NumLock Status

Boot Up NumLock Status	ÀÓÙ ðĬ ĵĵ ĩnÁŠŪp×] %Ĥ Á00aA..Ūpĵ<Áéĵè0i À»»TĒ Ēē0aÇaĪn
On	ÆĒOn»RÁ ĵöĵB 0aA..Ūpĵ<ÍŠÁ 0aA..Ū %ĤÁÆ0R»WÁfÁXĪnÆĒ
Off	Off»R ÁyÀsD"0 ÁuĐaÉúÁéĵèĪy0éĒĒÁ ĵnū»TĒē0a0ŠĪnÇaÆĒ
On»T	

BIOS Features à Boot Up System Speed

Boot Up System Speed	Ē ĵĵ YŪ 0éÁĪĒéÁ0Ē Ā ĪĪÁñÆĒ High Āè Low»TĒē0a0ŠĪn
High	ÇaÆĒ High»T
Low	

BIOS Features à Typematic Rate Setting

Typematic Rate Setting	ÀÓÙ ðĬ ĵĵ ĩnÁŠÁeÁ È Ūp×] 0i ŪŪÇÁ×a0gŪ0Á0ĵnū»TĒ Ē0Ēē
Enabled	0aĪnÆĒ Enabled»RÁĪĒéÁĵ ĵĵĒĪÁ Ūp×] 0i ŪŪĪbÇÁ×a0gŪ0Á0
Disabled	ĒāÁQ»T

BIOS Features à Typematic Rate (Chars/Sec)

Typematic Rate	ÀÓÙ ðĬ ĵĵ ĩnÁŠÇÁ×a0gŪ0Ūp×] Á0ĪĪñ»RĒē0aÇaÆĒ 6»S8»S
6	10»S12»S15»S20»S24»S30 Īĵ»TÁĪĒé0ŠĪnÇaÆĒÁTE 30 ÇĪ
8	À.30»T
10	
12	
15	
20	
24	
30	

AWARD BIOS

BIOS Features à Video BIOS Shadow

Video BIOS Shadow	Ài Ûñ VGA BIOS Shadow Æ È ÆÿzözuÄÖBIOS Ò Èà×àÕ†
Enabled	Às DRAM È` ØeB %RzçlÁðÂ†IeÄÖÈ À ÈPÌ%RÀnÆ
Disabled	DRAM ÄÖÀ†Â Í†Äñ % ROM Úó Áð »T Èè Òà ÍnÄŠ Ça ÆÈ 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

C800-CBFF Shadow	Í, ÁáÀ Á"Æ È` ØeB Á` ÉuÍÓÛi çCçuÄéçèÄÖ»TÀfÄXÙ Øó
Enabled	Enabled»RÄ†ÈÑÈ_Ûi çCçuÄÖ ROM Code ×àÕ†%Qç Á çU
Disabled	È` ØeB (DRAM) ÈéÈ %RÄÓÁøÍ_ÖóÆ Shadow»RççÓWÄ
	Ò ÁðÄÖÍŠÌ'Í†Äñ»T Çj È' %Ä ^ Ñ»Ûi çCçuROM Code ÄÖÄ
	Á"Ò Èa»RççÈ_ÈèÖaÍ'ÄnÆ Enabled»R¼ Ò ÉúÁ` Ýi Ó Æ^ Á
	ÄiÄÍÄÖROM Code»RÄ È Ð` È` ØeB »T



ÄqÑ_: F000 Ä^ E000 À Á"Æ È^Ä Ä` ÉuÍÓ BIOS Code Ó Æ%Äçè»T

AWARD BIOS

Chipset Features à EDO/FPM DRAM Control

EDO/FPM Timing Control

Fast
Normal

Í, ÇíÙ ĐĲçèĀíĒĒĀ EDO/FPM timing»TÇj Ē'Ī, Ī' ĀĲĒè
¼¼Æ ĀöŸÇĀŠ»R×è0iĪöĒ_Ī, ÇíÙ ĐĲĪĲĲNormal»T

Chipset Features à SDRAM Control

SDRAM Timing Control

Fast
Normal

Í, ÇíÙ ĐĲçèĀíĒĒĀ SDRAM timing»TÇj Ē'Ī, Ī' ĀĲĒè¼¼
Æ ĀöŸÇĀŠ»R×è0iĪöĒ_Ī, ÇíÙ ĐĲĪĲĲNormal»T

Chipset Features à Refresh Cycle Time (us)

Refresh Cycle Time (us)

15.6
62.4
124.8
187.2

çèĀíĪĲŠ DRAM Ā0Ā ĲĲxĪŪ (Refresh Cycle Time)»T

Chipset Features à RAMW# Assertion Timing

RAMW# Assertion Timing

2T
3T

Í, ÇíÙ ĐĲçèĀíĀ ĀŠ RAMW# Assertion Timing»T

Chipset Features à SDRAM CAS Latency

SDRAM CAS Latency

2T
3T

Í, ÇíÙ ĐĲçèĀíĀ ĀŠ SDRAM CAS Latency»TĪ, Æ ¼¼Çí
ĀöÇĀÇĒĀ0Ēè0à»RĲŪ0%BeĀ SDRAM Ā0ĒĒĒ»TÇj Ē' Ā0
SDRAM ĀĪ¼¼ÇĀ0Ī' ĐŸ»R×èĒ_Ā0Ēè0āĪĲĲ3T»T

AWARD BIOS

Chipset Features à SDRAM Wait State Control

SDRAM Wait State Control

0WS
1WS

ç è Áí Á ÑŠ SDRAM às Precharge Èã ÑŒ Wait State Control »T

0WS: zero wait state.
1WS: one wait state.

Chipset Features à Read Prefetch Memory RD

Read Prefetch Memory RD

Enabled
Disabled

Í, ÇíÙ ðĬ ç è Áí ÈÈÁ Read Prefetch Memory RD »T

Chipset Features à CPU to PCI Post Write

CPU to PCI Post Write

3T
4T
Disabled

Í, ÇíÙ ðĬ ç è Áí Ù ŒŒ CPU to PCI Post Write ÄŒŒxÍÙ »T

Chipset Features à CPU to PCI Burst Mem. WR

CPU to PCI Burst Mem. WR

Enabled
Disabled

Í, ÇíÙ ðĬ ç è Áí ÍñŠ CPU to PCI Burst Memory Write »T

Chipset Features à ISA Bus Clock Frequency

ISA Bus Clock Frequency

PCICLK/3
PCICLK/4
7.159MHz

Í, ÇíÙ ðĬ ç è Áí ÍñŠ ISA bus clock »TÍ, Èq PCI bus clock
Ï ç Á CPU bus clock (ç • ÚĤ) È½ ç Y2 »R%ñĬ_Æ
PCICLK=CPUCLK/2 »TÁí ðf »RCPUCLK=66MHz »R
PCICLK=66/2=33MHz »RISA bus
CLK=33/4=8.25MHz »T

AWARD BIOS

Chipset Features à System BIOS Cacheable

System BIOS Cacheable

Enabled
Disabled

ÀÓÙ ðÍ¿ß ÁÏÈ BIOS Á×ÈÈ,,ÁðÀ È`Øèß ÈìÈä»R¿Í¿Á¿
ÌèÁÒÈ Á Í¿Áñ»TÁ È ÀÓÍñÁŠÿÁÏÈ BIOS ÑÈ,, RAM ¾¾
ÈìÈä»TÓŠÍ¿çàÆ Enabled»T

Chipset Features à Video BIOS Cacheable

Video BIOS Cacheable

Enabled
Disabled

ÀÓÙ ðÍ¿ß Ò%ÓÍ BIOS Á×ÈÈ,,ÁðÀ È`Øèß ÈìÈä»R¿Í¿Á¿
ÌèÁÒÈ Á Í¿Áñ»TÁ È ÀÓÍñÁŠÿÒ%ÓÍ BIOS ÑÈ,, RAM ¾¾
ÈìÈä»TÓŠÍ¿çàÆ Disabled»T

Chipset Features à Memory Hole At 15M-16M

Memory Hole At 15M-16M

Enabled
Disabled

ÀÓÙ ðÍ¿ß` ÈùÁ¿È`Øèß ÈèÈ ÍÓÁ ÁŠÁÓ ISA ¿uÁè¿è»R¿YÛñ
Á`È`Øèß Æ×P»TÍÓ% Í¿¿È,,ÁÓÈèÈ ÈÍÁÁ×ÈÍ¿è ISA bus
ðáÙ Ó¿ÁíÁÓÙ ÈàÁ^Øè×i »TÍ,,Èφ»RAÓÈèÈ Æ Á`ÈùÍÓ ¿u
Ó Æ^ Áè¿è»T

Chipset Features à VGA Shared Memory Size

VGA Shared Memory Size

0.5MB
1MB
1.5MB
2MB
2.5MB
3MB
3.5MB
4MB

%ÓÁòÁÓ VGA Ñ¿èÁ %QÍ¿¿ ÁÓÁÏÈÈ`Øèß »RÍñŠÓ %
ÁÓÇà¿¿YÁÍÓ ÀèÁÓÈÈÉú»RÍæÈ¿¿YÍñ 4MB»T

Chipset Features à VGA Memory Clock (MHz)

VGA Memory Clock

55
60
66

¿èÁíÍñŠ VGA memory clock»RÍñŠÓ %ÁÓÇà¿¿Y
ÁÍÓ ÀèÁÓÈÈÉú»RÍæÈ¿¿YÍñ 66»T

AWARD BIOS

Power Management à PM Controlled by APM

PM Controlled by APM
Yes
No

ÀfÁXÙ Øö "Max Saving"»RĪ_ççYB ÂĥĪē%PĪĀDz:Ó,,Ñ×
ÔøĪ' (APM) çĥú»RçĪĒ{ÆÓ,,ÔøĪ' çĥú»TĀi Āf»XĒĒ%
CPU %ŌĪ»ÈaĒúŌSÁQ»T

Power Management à Video Off Option

Video Off Option
Always On
All Modes à Off
Suspend à Off
Susp, Standby à Off

ĀŌŪ ĐĪççĪñŠBççöŌŌÑAsÀ ŌðÆóŌ,,ŌiĀ»%ççÝ ĪĀŪYŌ »T

Power Management à Video Off Method

Video Off Method
Blank Screen
V/H SYNC+Blank
DPMS

çèĀi ĪñŠŌāi ŌŌY ĪĀŌ% Ā|»T

Power Management à Doze Speed (div by)

Power Management à Stdby Speed (div by)

Doze Speed (div by)
1
2
3
4
5
6
7
8

çèĀi ĪñŠ%QççĪĒ%Ōa»RççYĀ ĀŠĀĥĪēDz% Doze Mode Āè
Standby Mode ĀñĀŌŌ ŌðĪĥĀñÇĒĀ Āçç»TĀi ĀfĀççĀĪñ
ĀŠ2 ĀĒĒ%Ōa»RĀi 133MHz Æ ĀĥĪēççŪĒçç»ĀfççĀŌĪĥĀñ»R
ĀççĪēĀs Doze ŌiĀ»%ççĀĒ 133MHz/2 = 66MHz»T

AWARD BIOS

Power Management à Modem Use IRQ

Modem Use IRQ	çêÁíÁzÄØ BIOS/Chipset Òà0600 ÁéçèÄ0 IRQ»T
NA	
3	
4	
5	
6	
7	
9	
10	
11	

Power Management à HDD Power Down

HDD Power Down	Ñ ÁñèDz%Ä0,,ÄÄRÈã»RÀÓÙ DÍçB È'Á ÁŠ IDE ÝŠ0eÈÈ % ÓSÁQÄ0ÈãD»»TçÓÙ DÍÖ-ÈÈi ÁpçÁÏçÁ-0i À»Á^ ÓaÈÈ0i À» ÄÖÍmÁŠçai ÁŠ»T
Disabled	
1 Min	
.....	
15 Min	

Power Management à Doze Mode

Doze Mode	ÀÓÙ DÍçB È' ÍmÁñèDz%0eÉ%0i À»Ä0ÈãD»»TÀsÁ00i À» %f »RCPU Ä0ÓSÁQÈãÈuÑb0ÔT»RÈ' ççYÁ ÁŠ "Throttle Duty Cycle" Ä0ÚhÍ%»TçèÄ ÁñèÆ ÁsÍ,,0,,ÄÄR%»RÄi çY ÈÖÍ Á ç À ÈaÁQÈã»RÍ%ÄçúAj Á ÍpÁ çÜÈqÄÄR%ç»TÄñèÆ Üäçè0ai IRQ Èe00Ái ÈÖÍ Æ»Èã»T
Disabled	
20 Sec	
1 Min	
5 Min	
10 Min	
15 Min	
20 Min	
30 Min	
40 Min	

AWARD BIOS

Power Management à Standby Mode

<u>Standby Mode</u>	ÀÓÙ ÑÏ;B È' ÍñŠÀÏèDz%Í;À÷ÒìÀ»ÄÖEäD»»TÀsÀÓÓìÀ» %f »RÑ*Èì Èä CPU ÄÖÖSÁQÈäÈúBöÖT»RISÖeÖaÈÈBÄÄ Èä ÁQ»RÜYÓ Ý ÍÄÏ;úú»T;èÄ ÄÏèÆ ÄsÍ,,Ö,,ÄÄÖR%»RÄi;Y ÈÖÏ Ä ; À ÈäÁQÈä»RÍ'Ñ;ùÁj Ä ÍpÄ ;ÜÈqÄÄÖR%f »TÄÏè Æ Üä;èÖäÏ IRQ ÈeÖÖÄíÈÖÏ Æ»Èä»T
Disabled	
20 Sec	
1 Min	
5 Min	
10 Min	
15 Min	
20 Min	
30 Min	
40 Min	

Power Management à Suspend Mode

<u>Suspend Mode</u>	ÀÓÙ ÑÏ;B È' ÍñŠÀÏèDz%ÖaÈÈÖìÀ»ÄÖEäD»»TÖaÈÈÖìÀ» ÄÖÍñŠÄÍ Power On Suspend Äè Suspend to Hard Drive Í;ÖìÀ»»T
Disabled	
20 Sec	
1 Min	
5 Min	
10 Min	
15 Min	
20 Min	
30 Min	
40 Min	

Power Management à COM Ports Activity

Power Management à LPT Ports Activity

Power Management à HDD Ports Activity

Power Management à VGA Activity

<u>COM Ports Activity</u>	Èì ;èÍ, Çí Ù ÑÏ»RÄsÆÖ,,ÖìÀ»%f Ñ*ÈÖÏ COM»SLPT»S HDD»SVGA Æ ÄpÄÍ; À ÈäÁQ»RÇj ÄÍÄÖÖ»RÄyÄoÍpÄ ;Ü ÈqÄÄÖR»T
Enabled	
Disabled	

AWARD BIOS

Power Management à IRQ3 (COM2)
Power Management à IRQ4 (COM1)
Power Management à IRQ5 (LPT2)
Power Management à IRQ6 (Floppy Disk)
Power Management à IRQ8 (RTC Alarm)
Power Management à IRQ9 (IRQ2 Redir)
Power Management à IRQ10 (Reserved)
Power Management à IRQ11 (Reserved)
Power Management à IRQ12 (PS/2 Mouse)
Power Management à IRQ13 (Coprocessor)
Power Management à IRQ14 (Hard Disk)
Power Management à IRQ15 (Reserved)

IRQ2 (COM2)

Enabled

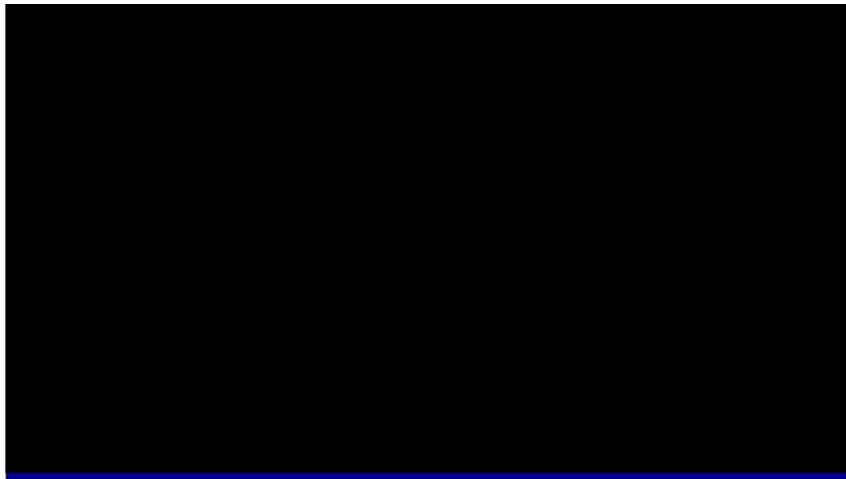
Disabled

Èì çèÍ, ÇíÙ ĐĪ»RÀsÆó.,öìÀ»¼f ÑĒŌÎ IRQ ó ÚÍÁŌòàð~
Æ ÁpÀÍç À ÊäÁQ»RÇj ÀÍÁŌŌö»RÁyÀoÎpÂ çÙÈqÄĤŌR»T

AWARD BIOS

3.6 PNP/PCI Configuration Setup

PNP/PCI Configuration Setup ıB È'İnĀŠĀİè%ĀŌ ISA Ā^PCI İnlà»TĀfĀXĀsıU
Û İ %ĀŪ 0ö "PNP/PCI Configuration Setup" Đİıò»RĀj N'ĀsÛYŌ %ıBıyıòĀf%ı İv
ÇÈ»X



PNP/PCI Configuration à PnP OS Installed

PnP OS Installed	İ., Èq»RĀıİèĀsÈ Ā POST Èā»RŃ'È_İBĀi ÚYİ»Āj ıè
Yes	(PnP) ĀŌİnlāİ.,ĀŌ BIOS»TĀfĀXÈ'ĀéıèĀıYĀİ PnP ııū
No	ĀŌĀQŃ•Āıİè (Āf Windows 95)»Rİ_ıııYÈ_İ, ÇıŪ Đİİn ÆÈYes»RBIOS İ_N'İnĀSÚYİ»Āj ıèĀŌııūĀı Èi Èāİn İà»RĀfVGA/IDE Āè SCSI İıŪi ıııı»T

AWARD BIOS

PNP/PCI Configuration à Resources Controlled By

Resources Controlled by
Auto
Manual

È_ÀÓÛ ÐÍÎÑ Manual»R;ZB Áé;èÀæÆ ISA Á^ PCI Íñ à %MÁ`Á ÁŠÁi Ò÷ÀÓIRQ Á^ DAM»TÀfÁXÍñÆ Auto»RÍ_Ñ Èi ÈäÀðÈäÍñŠ;ñú»T

PNP/PCI Configuration à Reset Configuration Data

Reset Configuration Data
Enabled
Disabled

ÀfÁXÁi Á ÁŠÁÓ IRQ ÁeÁþìèÇÁÑ†ÆÓtÁúÌ, ;çÆ×ÐÁÓÈ» Áe»RÍ_çÈ_ÀÓÛ ÐÍÎÑÆ Enabled»RB ÁþìèÇÁÑ†ÆÓtÁYÁ ÁŠÑ†ÁÓ IRQ»T

- PNP/PCI Configuration à IRQ3 (COM2) assigned to
- PNP/PCI Configuration à IRQ4 (COM1) assigned to
- PNP/PCI Configuration à IRQ5 (Network/Sound) assigned to
- PNP/PCI Configuration à IRQ7 (Printer or Others) assigned to
- PNP/PCI Configuration à IRQ9 (Video or Others) assigned to
- PNP/PCI Configuration à IRQ10 (SCSI or Others) assigned to
- PNP/PCI Configuration à IRQ11 (SCSI or Others) assigned to
- PNP/PCI Configuration à IRQ12 (PS/2 Mouse) assigned to
- PNP/PCI Configuration à IRQ14 (IDE1) assigned to
- PNP/PCI Configuration à IRQ15 (IDE2) assigned to

IRQ 3 assigned to
Legacy ISA
PCI/ISA PnP

ÀfÁXÈ`Ái ÁŠÓàÁÓ ISA ;uÁdÁÍ PnP ;ñú»RÍ_Ò÷ÇéÁ ÁŠ IRQ Ái %þÍÁ;ÁÁÓ;ñú»TÍ, ÁáÛ ÐÍ;ZB È`ÁæÁáÁ ÁŠ IRQ ÍÓLegacy ISA ;uÁ^ PCI/ISA PnP ;uÁé;è»TÑ È`Á ÁŠÆ %QRQ ÆÆ Legacy ISA Èä, ÁþìèÑÍ,,ÁØ PnP BIOS È_Ái ÍñÁÓ IRQ Á`ÉuÍÓ%ŠÁŠÓàÁÓISA ;uÁé;è»TÈèÓáÓŠÍñÇáÆ PCI/ISA PnP»R×éÁqñ_ÁÍÁá PCI ;u (Ò ÜÜÁÆÁÓPCI;uÈ½ ;•) ÁY%ÁÓ÷ÇéÁé;è IRQ»RÍ_çÁ`ÉuÍÓISA ;uÁé;è»T

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
N/A
C800
CC00
D000
D400
D800
DC00

ÀÓÙ ÐĬĬĐÑĒĪi "Used MEM Length" ÐĬĬòÁéĬè»TÁfĀX
 Ē·ĀiĀŠ0áĀ0ISA ĬuĀdĀĪ PnP ĬĪú»RĪ_ĬĬĐÑĀ ĀŠĒ·0eB
 ĒvĐ„Āi%φĪĀĬĀĀ0ĬĪú»RĀiĀÓÙ ÐĬĬyĬĀ ĀŠĪbĀ·ĒuĀ0Ē·
 0eB ĀBĐ»Đ"ĀĬĀ Ā"»T

PNP/PCI Configuration à Used MEM Length

Used MEM Length
8K
16K
32K
64K

ÀfĀXĒ·ĀiĀŠ0áĀ0ISA ĬuĀdĀĪ PnP ĬĪú»RĪ_ĬĬĐÑĀ ĀŠĒ·
 0eB ĒvĐ„Āi%φĪĀĬĀĀ0ĬĪú»TĀÓÙ ÐĬĬĬĪĀŠĀi0·çĒĒ·0e
 B ĒvĐ„»RĀYĪ„Ā0 PnP BIOS Ē_Ē·0eB ĀBĐ»Ā·ĒuĪ0ĀiĀŠ
 0áISA ĬuĀéĬè»T

AWARD BIOS

3.7 Load Setup Defaults

ÀÒÙ ðĭĵĕ, BIOS ROM %D %IæAi ØRÄÖInŠÇa»T%QÉ ÂéĵèÄæ×eÁbĵèÀÒÙ ðĪÒ %
ÓŠInÇa»RÍ, ÁaÓŠInÇaNŦŦ%BeAi ÁÍÁÖ Setup ðĭĵò»RÉ!%WÖeÑaÄÖ CMOS InŠ»TÀfAX
Ë'ÄÖÄĭĭeÅŠòað ÈÄÈvĐ,,ÄÖÈ` ØeB »RAi Ūi ĵcÖe%nl»ò»Ūi ĵcĵu»RÁöÇaÄöPĪË' ÂéĵèÀÖĪĪ
InŠ»T

ÀÒÙ ðĪÄY%Ä/Ä/Ë, Æ ÍæÅŠĵ ÄÖÄĭĭeInŠ»RAi ĵYĵ ÄĭĭeĪ, ĵÇ%ÄÇASAÖÄÄÄf»RÉ' ĵĵYĵè
%iiÈäÄÖ% Ä»Às "BIOS Features Setup" Ä^ "Chipset Features Setup" Ū ðĪ%»RĪn
ÅŠÖ ÖTÄ^ ò YÇASAÖInŠ»T

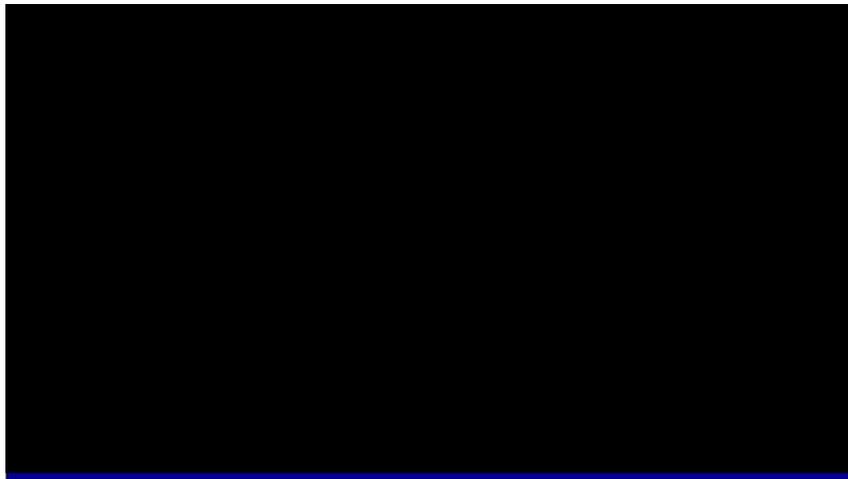
3.8 Load Turbo Defaults

ÀÒÙ ðĭĵò %ÄfÄ BIOS ROM %D ÈÄÈPĪ%ÄÖÓŠInÇa»TÍ, Áað %ÄÖÓŠInÇaNŦŦ%Be
Ai ÁÍÁÖ Setup ðĭĵò»RÉ!%WÖeÑaÄÖ CMOS InŠĵYĵ»TEÄÈPĪ%ÄÖInŠÇaó ÄĭĭeAiÄĵ
ĵÉŪ%Ä/Æ ÍæÄeÄÖInŠÇa»RAfAXË'ÄÖÈ` ØeB ÈvĐ,,%Ä/Ä»R%ÄdÄÍÅŠòaðÄöÄyŪi ĵcĵu»RĪ_
ĵĵYÄi Ö' ÄÖĪĪInŠ»T

Ë' %ĵĵYĵè%iiÈäÄÖ% Ä»Às "BIOS Features Setup" Ä^ "Chipset Features Setup"
Ū ðĪ%ÄInŠÈeÖaÇa»RB ÄĭĭeŪ È, Á ÅÄÖÈ Ä ÈPĪ%T%Ä/ÄJË' ÇÇĵ ŪRòèAi ÁÍÁÖÙ ðĪĵm
ÉŪ»RÄnÈÈÄĪĭInŠÇaÄæĪÓ% İi Ä^ ŪĪĵè×uĪ %Äa»RĵĵĪ/ËÄ 3% Ä 10% ÄÖÈ Ä ÈP
İ%T

3.9 Integrated Peripherals

ÀfÄXÀsçUÙ Í %4Ù 0ö "Integrated Peripherals" ÐÏçò»RÁj Ñ"ÀsÜÝÓ %hBýçöÀf%FÏv ÇÈ»X



Integrated Peripherals à Internal PCI/IDE

Internal PCI/IDE	ÀÓÈèÖàççYËiçèÀeÝ ÍÆ Primary Àè Secondary IDE òà
Disabled	Ò~»T
Primary	
Secondary	
Both	

- 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

AWARD BIOS

- **HPSIR** - ÀfÀXÀs0,0%À0 IrDA ÍtËÏ00%h%ŠÀŠ0a%WE ç•x^ËÏÀ00(ÍrDA)»RÎ_ ççYÁéçèÀ0Û ðÏ»RÍ, 0oÍrÀŠççĐaÈvÀ ÀTÈeÈÁÓW1 15K ÁzÉd»T
- **ASKIR** - ÀfÀXÀs0,0%À0 IrDA ÍtËÏ00%h%ŠÀŠ0a%WE ç•x^ËÏÀ00(ÍrDA)»RÎ_ ççYÁéçèÀ0Û ðÏ»RÍ, 0oÍrÀŠççĐaÈvÀ ÀTÈeÈÁÓW1 9.2K ÁzÉd»T

Integrated Peripherals à IR Function Duplex

IR Function Duplex	À0Û ðÏçç È'ÍrÀŠ IR Í,,ÈeÀ0Û %0iÀ»»TÑ È'È_Èe0a ÇaÍnÈ Full Èa»R%0ÍmÍR Í,,ÈeçYÛ Ag0iÀ»Í,,Èe»TÁfÀX ÍnÈ Half Èa»RĐaÉúçYÍ Ag0iÀ»Í,,Èe»T
Full	
Half	



ÀqÑ: À0Û ðÏĐaÉúÀs Onboard UART 2 ModeÀ0ÈÈ 0a%çE StandardÈa»R% ÈúÈi Èa IRÍrÀŠççmÈú»T

Integrated Peripherals à RxD, TxD Active

RxD, TxD Active	À0Û ðÏççÈÁÍ Û 0o UART (Àf IR 0a0~Àe0a000 Ìç) À0 RxD (Receive Data) 0a TxD (Transmit Data) À00iÀ»»R xèÈe0m0i 0a0~À0i'Á•0»Á Èe»T%QÉ Ái 0»»RÈ' ç^ÇÈÁ` Èu0Š Írçai_À %W»T
Hi, Hi	
Hi, Lo,	
Lo, Hi	
Lo, Lo	

Integrated Peripherals à Onboard Parallel Port

Onboard Parallel Port	À0Û ðÏççÈÈÀ çU0 Ä` ççhÀ0ÁYÀTÈ À Á"%e%ççp%0ÇÈ»T
3BC/IRQ7	
378/IRQ7	
278/IRQ7	
Disabled	



ÀqÑ: ÀfÀXÈ' ÁéçèÀ0 I/OççnÄ ÁÍ%QÇiÁYÀTÈ »R xèxèÁŠÁéçèÀ0À Á"0a IRQ %4Ñ"0a0 Ä` ççhÀ0ÁYÀT È Æx»P»T

AWARD BIOS

Integrated Peripherals à Onboard Parallel Mode

<p>Onboard Parallel Mode</p> <p>Normal</p> <p>EPP</p> <p>ECP</p> <p>ECP + EPP</p>	<p>ÀÓĐĪçòçB È'À ĀŠĀYĀTĒ çYÀ ÓðøøÁQÖiÀ»ĀiĐaÙ Ò Èà»T</p> <p>ÈèÖaÓŠĪçĀĒ Normal»R%ñĪ_Ē SPP (Stand Parallel Port) ÖiÀ»»RĒĒ IBM AT Ā^ PS/2 ĀðÈvÖiÀ»»RççÖĪñĀY</p> <p>ĀTĒ ĀsĪ ĀgÖiÀ»%f çYçÜÈqĪçĀñøøÁQ»EPP (Enhanced Parallel Port) 1ÖiÀ»»RçÖĪñĀYĀTĒ ĀsÜ ĀgÖiÀ»%f çYĪĀç%ĪçĀñøøÁQ»TECP (Extended Parallel Port) ÖiÀ»»R%ĪĀĒĀĪñĀ ĀðĀÖÜ ĀgĀYĀTĒ øøÁQ»RĒ çDMA Ā^ RLE (Run Length Encoded) ÚĪj Ā^ ÒèÚĪj ĀÖ% Ā»ĀiĐaÙ Ò Èà»TEPP1.7 Ā^EPP1.9 Ē Ā %ĪĀĀÖĪ„ÈĒĀ ĀŠ»T</p>
--	--

Integrated Peripherals à ECP Mode Use DMA

<p>ECP Mode Use DMA</p> <p>3</p> <p>1</p>	<p>ÀÓÙ ĐĪçB È'À ĀŠ ECP ÖiÀ»ĀÖĀYĀTĒ ĀiĀéçèĀÖ DMA Ī„ÓU»TÈèÖaÓŠĪçĀĒ3»T</p>
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Integrated Peripherals à Parallel Port EPP Type

<p>Parallel Port EPP Type</p> <p>EPP1.7</p> <p>EPP1.9</p>	<p>ÀÓÙ ĐĪçèĀiÙ øø EPP ÖiÀ»»T</p>
--	----------------------------------

Integrated Peripherals à PS/2 mouse function

<p>PS/2 mouse function</p> <p>Disabled</p> <p>Enabled</p>	<p>ÀÓÙ ĐĪçèĀiÈiçèĀéY ĪĒPS/2 ÑāÓĀ»T</p>
--	--

Integrated Peripherals à USB Controller

<p>USB Controller</p> <p>Enabled</p> <p>Disabled</p>	<p>USB òaò~%ÖĀŠĒ ĀéçèPCI INTD#»RÖa PCI slot4 Ā Āa»Tçj È'ĀĪĒ_PCI çuòĀs slot4 ĀiĀéçèĀ INTD#»R×È_ÀÓÙ ĐĪY ĪĒTĀfĀÓUSB òaò~È_Ī Ā Āéçè»T</p>
---	---



×èĀqÑ_:%QÉ ĀiÖ»»RPCI VGA ĀY%Ö÷ĀéçèĀ PCI %Īp»RĀnĀÖççYĒ_PCI VGA Ī»Ās slot4»T

AWARD BIOS

Integrated Peripherals à USB Keyboard Support

USB Legacy Support	ÀÓÙ ÐĬ;ZĬNŠĬÈÀ È USB Ūp×]ĀŌBi ĒāĬ'Ā»TĀfĀXN̄bÇĒ
Enabled	Āé;è USB Ūp×]»R%ĀĀĬŌRĀi ĀŌBi ĒāĬ'Ā»R;ZĒ_ĒēŌāĬn
Disabled	ÆĒ Enabled»TĀŌŪp×]Bi ĒāĬ'Ā»%ŌĀŌsBIOS %Ō»R;ZŌi ŪŪ

ÐāĬèŪp×]Āc;`»RĀY;SĀsÐ"Ō È Ā POST Ĭ'ĀāĒāĒiĒĒ
USB Ūp×] ;nū»TĒēŌāŌSĬnçāÆ Disabled»T



×ēĀqN_: ×ē%ÇĒāĒāĒé;è USB ĬnĬāĀ^ USB ÐāĬè
Ūp×]»TĀfĀXĀQÑ•ĀĬĒē%ŠĀSŌā USB Bi ĒāĬ'Ā»R×ē
Ā È "USB Legacy Support" ;nĒú»T

Integrated Peripherals à Power Button Over Ride

Power Button Over Ride	Ĭ,Æ ACPI %ĀŌĬhÈ %Ā%Q»TŊ Û 0Enabled Ēā»RĀv%
Enabled	ÇĒĀ`%hĀŌsoft power switch ;z;Y;ēĀĬĒĒĀ ĀĬĒēÐ"Ō »S
Disabled	ŌāĒĒ (Suspend) ĀēY Ō »T ĀsÐ"Ō ĀŌĀĒŌR%f »RÇj Ā %f

switch»R;SĒēĀ»%ŌĀ 4 Æ »RĀĬĒēĀ\N̄D%Ā Suspend Ōi
Ā»»WÇj Ā %f ĀŌĒēĀ»ÐhŌĪ Æ »R ĀĬĒēĀ\N̄Y Ō »TŌSĬĬĀŌ
ĀĀŌR%f Æ Disabled»Rsoft power switch ;ĒĒú;ēĀĬĒY
Ō »RĀĀĬĬ Suspend»RĀi ;z;Y%ĀĀĬĬ 4 Æ PŪĀŌÇÇĀ »T

Integrated Peripherals à Power Up by Alarm

Power Up by Alarm	ÀÓÙ ÐĬ;ēĀĬĒi;ēĀēY ĬĀŠĒēĀÐ"Ō ĀŌ;nū»T
Disabled	
Enabled	

Integrated Peripherals à Month Alarm

Month Alarm	ĒĬĀi "Power Up by Alarm" Û ÐĬĀé;è»R;ZĀ ĀŠ% ; »T
NA	
1	
2	
.....	
12	

AWARD BIOS

Integrated Peripherals à Day of Month Alarm

Month Alarm	ÈÏÀi "Power Up by Alarm" Ù ĐĪĀé;è»RÈÏÀi "Month Alarm"»R;ZĀ ĀŠĀ Ći ¼ ĀŌĀ ¼Q¼e»WĈj ¼ĪnĀŠMonth Alarm"»RĀyĀ ĵöĀTĈi¼ ĀŌĀ ¼Q¼e»T
NA	
1	
2	
.....	
12	

Integrated Peripherals à Week Alarm

Week Alarm	ÈÏÀi "Power Up by Alarm" Ù ĐĪĀé;è»R;ZĀ ĀŠ¼Q¼eĪÛ¼¼ ĀŌĀ Īi ¼e»T
SUN	
MON	
.....	
SAT	

Integrated Peripherals à Time Alarm

Time Alarm	ÈÏÀi "Power Up by Alarm" Ù ĐĪĀé;è»R;ZĀ ĀŠĐ"Ø ĀŌÈā Đ»»T
hh:mm:ss	

3.13 Exit without Saving

Ü Ð" Setup »RÀ »ÀÚ«À†Á Á Ó]ÄÖ CMOS Çà»TÀfÄXÈ' ÇÉÚ«À†Ñ†ÄÖIñŠ Çà»R×è»ÇÉÄé¿ÄÖÜ ÐI»T

3.14 NCR SCSI BIOS and Drivers

NCR 53C810 SCSI BIOS »QÖaÈq0€ÀsÆÀaÄÖÄðÈ' È` 0èB ÎÖ% »RÑ ÄÄÄ†È BIOS Äé¿è»TÇÉÄé¿èÄ` »ÄÖNCR BIOS»RÈ' ¿IÐÑ¿ ÄsÄ†È»RÄŠÖá»Q% NCR 53C810 SCSI ÈÈÄ ¿u»T

ÄiÄIÄSÖaÄ Ä†È»ÄÖ SCSI Íñà»RÍ½Æ Ö=ÇÉÍ€B Bi ÈäI' À»»NCR SCSI BIOS ¿Z Ä×ÈIÄs DOS »F »PÄ SCSI ÍŠÄ»ÖéÖè0 »RWindows » OS/2»T»Y¿YÄb¿è NCR 53C810 SCSI ÈÈÄ ¿uÄiÄ ÄÖI€Ä»ÖéÖè0 Bi ÈäI' À»»R¿YDOS È À»»%Ä SCO UNIX È À»ÄiÄé¿èI€Ä»ÖéÖè0 »TDOS È À»ÄÖBi ÈäI' À»»ÄÄ SCSI Íñà»RÆ ¿Z¿Y¿èÄs DOS»RWindows NT»RNovell NetWare » OS/2»TÄi SCO UNIX È À»ÄÖBi ÈäI' À» »ÄÄ SCSI Íñà»R¿Z¿èÄ SCO UNIX»TÍ, ÄaBi ÈäI' À»% ¿èÄ×ÈI BIOS Äi »PÄÄÖÈP ÈúÜöÈÄ»T

ÇÉÄé¿èBi ÈäI' À»»RÈ' ¿IÐÑÈ_Í, ÄaI' À»ÄSÖaÄ Ä†ÈIŠÄ»ÖéÖè0 »RÄY¿SÈ_¿Ä¿IÄ È' ÄÖÄ†ÈIñŠÜá»TÄöÄ ÖiIiÄSÖa¿ Ä|»R×èÆÍ, ÄaBi ÈäI' À»ÄiÄ ÄÖ README ÜaÈñ »ÄÖÖ»Ä »T

3.15 BIOS Flash Utility

¿YÄÖÄ¿U0 Ä` Í½Æ È_BIOS Ä Äs»QÖð0óÆ EPROM ÄÖÈ` 0èB »RÑ Ö=ÇÉÄ Ñ† BIOS ÄÖÈaÇi»R¿IÐÑÄé¿èÄ EPROM Û_Ü 00»RÄi ¿Y¿QÈ Äé¿èÄaYI|Ä|ÄöÄ Ä Ñ† BIOS»TÄiÑ†»Q¿_ÄÖ¿U0 Ä` »ŠÍ%0¿Ä ¿Flash ROM ÄiÚ«À† BIOS»RÄpÜ`ÜZÄÄ Äé ¿èÄæ¿`ÇÉÍ`Ó] »ÄYI' À»»RÄ`¿ZÄöÄ Ä Ñ†Ñ†ÄÄÄÖ BIOS»RÄUÈq% Ä`»T

Ä Ñ† BIOS ÄÖ¿ðÄÖÄsÄ Í½ÆÑ†ÄÖ¿ñú»RÄè»PÄIÄ»QÄ¿ÄÇÈ»ÄÑ†ÈÜ¿i ÄÖIŠB »TÈ' ¿ZÄé ¿è BIOS Û_Ü Í' À»ÄiÄ Ñ† BIOS ÄÖÄÄ¿Ö»RÇÉÄ È, ÍaÑ†ÄÖ BIOS ÜaÈñÖaÜ_Ü Í' À»»R×èÆ/ÖüÈ' ÄÖÖx0aÈi»RÄèÄa»Y¿Z¿YD¿ÄóÇaÄÖÖ ÈÖ (<http://www.aopen.com.tw>) »F Ö (download)»TÜ_Ü Äv×è×eÄSÈ' ÄiÄ È, ÄÖBIOS ÜaÈñÆ ¿Ü×eÄÖÄÄ¿Ö»R¿QÈ Äi Ö»»RÈ' ¿Z¿YÈ,, ÜaÈñÄhÖóÄiÄaÜp»TÄi Äf»XCj ÜaÄhÄX58P110.BIN»RÍ_¿_Ä Í, Ä MX58 Plus ¿U0 Ä` ÄÖBIOS»RÄpÄÄ¿ÖÆ 1.10»T

AWARD BIOS

Áô ÇæÀQ Î½Äë ¼WÄü Çí ¼ Äý Í' À» »XCHECKSUM.EXE ¾è AOpen Û_Û Í' À»
AOFLASH.EXE»TÄéçè¼ Ä|×èÈèÀì çY¼f ÄÖÄSà[»X

[CHECKSUM.EXE]

Í, Çí ¼ Äý Í' À» ççYÜÈÈ' ×eÖ' ¼f Ò ÄÖ BIOS ÚaÈñ chechsum Æ ÁpçÛ×e»T

1. ×èÈ À CHECKSUM Biosfile.bin
Biosfile.bin Á ÄÖÆ BIOS ÚaÈñÄÖÄhÖó(ÀfMX58P110.BIN)»T
2. Í' À»ÑBýçö "Checksum is ssss"»T
3. ×è¼ Ò Ç ¼AXÀs AOpen Ö ÉÖÄè BBS ¼ÄÄÖchecksum "sss"»RÆÆÆ ÁpçÛ
×e»TÄfAX¼çÛ×eÄÖö»R×è¼ÈÈ À Û_Û ÄÖÈaAQ»RAYÇÄÑ¼f Ò ¼QÄÖ»T

[AOFLASH.EXE]

È À CHECKSUM Í] Ö•Äü»RÄ\ççYÄéçèAOFLASH.EXE Äí Û_Û ÑÄÄÄÖ BIOS
¼WÄü, Çí Û_Û Í' À»Ñç ÚaÈñUÖ Ä` ¾è Super/Ultra I/O IC ÄÖÄÖÖ»RçY×eÄ BIOS
ÚaÈñÆ çÛ×eÄÖ»T×eÄqñ_»XÛ_Û ÄÖÄÄü»RçBIOS È_ÑÍbÜeÖñÖ»T

1. çè A ÖéÖèçY DOS Ð"Ø ¼ Ð"Ø »RAYçS×è¼ÈÈ À Äf ÖöÈ' ØeB Ööì' Í' À» (Äf
HIMEM»SEMM386»SQEMM386, ...)»T
2. ×èÈ À AOFLASH Biosfile.bin
Biosfile.bin Á ÄÖÆ BIOS ÚaÈñÄÖÄhÖó(ÀfMX58P110.BIN)»T
3. ÀsÖ ¼ÑÍÄÖ BIOS ÚaÈñÄü»RÍ' À»ÑÈ÷È'Æ Ápç€È_ÜÜÄÄÖ BIOS ÄÍÄ ÖéÖè¼¼R
×eÛ Øö "Y" È_ÄpÄÄÆ "BIOS.OLD"»T
4. Ú:ÄÍÜÜÄÄ BIOS ÄÖÍÄÄü»R×eÄ ¼f"Y" Ð"Ä}ÐzÀ Û_Û »T
5. ÀsÛ_Û Ó]Í' ¼¼RÜÝÖ Ñ" Býçö¼QÄ "FLASHING" ÄÖÈeÄÄ (Û_Û ¼¼)»RÄÖÈa¼iÖf
¼ççY Ø »T
6. Às "FLASHING" ÈeÈÄÈ ç¼Äü»R×eÝ ÍÄÖ,Ñ×ÄYÇÄÑÍÐ"Ø »T
7. Ð"Ø ÄüÄ ¼f "DEL" ÜpÐz¼ BIOS Setup ÝvÇÈ»T
8. ÇÄÑÍÜ ÄŠ "BIOS SETUP DEFAULT" Û ÐÍ»RÈ_ÄÍèÍÄSÄsÍæYÇÄSÄÖÄÖR»WÄè
ÄæÈ' ¼ççY×iÖyÄÇ ç ÄÖÍÄSÇa»T
9. Û Øö "Save & Exit"»RÄ ÄÖÍ_¼çÍzÄÄÈi»Z

AWARD BIOS



Πήλαζ: ×ê¼¼Ç€Às Û_ Û Ó] Ì' ¼¼ (Ì_Æ Ñ ÙÝÓ ¼¼By çö
"FLASHING" Èä) Ý Ø »T ÀfAXAdAÍÛ_Û ÁÓÁÁÌ_Ý Ø »R
Á±ÌèÈ_Ï]Ä|ÇÄÑ†ÈìÈä»RÈ: Ì_çÌDÑÁ ÌÁ BIOS Flash ROM
¼¼T



Ì¼çö: È' ¼nçzçYÁæÌqÀaÓaÁÖÏ' Áá»R È_ÛÛÁÁÁÖ BIOS
"BIOS.OLD" ÖxÁo»T

Ä Ü C Jumper ÍnÃŠÄ

ÍnÃŠ CPU Ó,Ú½

CPU	Type	Vcore	S4	S5	S6	S7	S8
INTEL P54C	Í Ó,Ú½	3.45V	OFF	ON	ON	ON	OFF
INTEL P55C	Ü Ó,Ú½	2.8V	OFF	OFF	OFF	ON	OFF
AMD K5	Í Ó,Ú½	3.52V	ON	ON	ON	ON	OFF
AMD K6-166/200	Ü Ó,Ú½	2.9V	ON	OFF	OFF	ON	OFF
AMD K6-233	Ü Ó,Ú½	3.2V	OFF	OFF	ON	ON	OFF
AMD K6-266/300	Ü Ó,Ú½	2.2V	OFF	ON	OFF	OFF	OFF
AMD K6-II	Ü Ó,Ú½	2.2V	OFF	ON	OFF	OFF	OFF
Cyrix 6x86	Í Ó,Ú½	3.52V	ON	ON	ON	ON	OFF
Cyrix 6x86L	Ü Ó,Ú½	2.8V	OFF	OFF	OFF	ON	OFF
Cyrix M2	Ü Ó,Ú½	2.9V	ON	OFF	OFF	ON	OFF
IDT C6	Í Ó,Ú½	3.52V 3.3V	ON ON	ON OFF	ON ON	ON ON	OFF OFF



ÞÍÁz: ÀfÁXË' Áéçè Intel PP/MT-233 Æè AMD K6 Â†ÂTÍŠÌ' ÓÓ»R×éÁé çè ò %4ÄÖ CPU ÇÑËË»TÀfÁXÌJÄ|ÌBÀiÍ, Áá CPU ÄÖÍÏÖ Ö÷ÄU»RÄ†Èè çZÉuN"Í, çç%4ÄÇÄSÄÖÌ' ÐY»TÁÍÝ Ä CPU ÇÑËË»RÄSÄÖÇæÄÖ web ÈÖ (<http://www.aopen.com.tw>) %hÄÍÄTçjÆÝ ÄÖÖ Èe»T

ÍnÃŠ CPU ÚhÌ%

S1	S2	S3	CPU Frequency Ratio
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
OFF	OFF	ON	5.5x

Jumper İnÃŠÄ

JP4	JP5	JP6	CPU External Clock
2-3	2-3	1-2	50MHz
2-3	2-3	2-3	55MHz
1-2	2-3	1-2	60MHz
2-3	1-2	1-2	66MHz
1-2	2-3	2-3	75MHz
2-3	1-2	2-3	83MHz

INTEL Pentium	ƒŒİ»Ūİİ%º	ÇŪŪİh%	ç•Ūİh	S1	S2	S3	JP4 & JP5 & JP6
P54C 75	75MHz =	1.5x	50MHz	OFF	OFF	OFF	2-3 & 2-3 & 1-2
P54C 90	90MHz =	1.5x	60MHz	OFF	OFF	OFF	1-2 & 2-3 & 1-2
P54C 100	100MHz =	1.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
P54C 120	120MHz =	2x	60MHz	ON	OFF	OFF	1-2 & 2-3 & 1-2
P54C 133	133MHz =	2x	66MHz	ON	OFF	OFF	2-3 & 1-2 & 1-2
P54C 150	150MHz =	2.5x	60MHz	ON	ON	OFF	1-2 & 2-3 & 1-2
P54C 166	166MHz =	2.5x	66MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
P54C 200	200MHz =	3x	66MHz	OFF	ON	OFF	2-3 & 1-2 & 1-2

INTEL Pentium MMX	ƒŒİ»Ūİİ%º	ÇŪŪİh%	ç•Ūİh	S1	S2	S3	JP4 & JP5 & JP6
PP/MT 150	150MHz =	2.5x	60MHz	ON	ON	OFF	1-2 & 2-3 & 1-2
PP/MT 166	166MHz =	2.5x	66MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
PP/MT 200	200MHz =	3x	66MHz	OFF	ON	OFF	2-3 & 1-2 & 1-2
PP/MT 233	233MHz =	3.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2

Cyrix 6x86 & 6x86L	ƒŒİ»Ūİİ%º	ÇŪŪİh%	ç•Ūİh	S1	S2	S3	JP4 & JP5 & JP6
P120+	100MHz =	2x	50MHz	ON	OFF	OFF	2-3 & 2-3 & 1-2
P133+	110MHz =	2x	55MHz	ON	OFF	OFF	2-3 & 2-3 & 2-3
P150+	120MHz =	2x	60MHz	ON	OFF	OFF	1-2 & 2-3 & 1-2
P166+	133MHz =	2x	66MHz	ON	OFF	OFF	2-3 & 1-2 & 1-2
P200+	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 2-3

Cyrix M2	ƒŒİ»Ūİİ%º	ÇŪŪİh%	ç•Ūİh	S1	S2	S3	JP4 & JP5 & JP6
MX-PR166	150MHz =	2.5x	60MHz	ON	ON	OFF	1-2 & 2-3 & 1-2
MX-PR200	166MHz =	2.5x	66MHz	ON	ON	OFF	2-3 & 1-2 & 1-2
	150MHz =	2x	75MHz	ON	OFF	OFF	1-2 & 2-3 & 2-3
MX-PR233	200MHz =	3x	66MHz	OFF	ON	OFF	2-3 & 1-2 & 1-2

Jumper ĪnĀŠĀ

Cyrix M2	»Ī»Ī%»	Ī%»	Ī•Ī	S1	S2	S3	JP4 & JP5 & JP6
	166MHz=	2x	83MHz	ON	OFF	OFF	2-3 & 1-2 & 2-3
MX-PR266	233MHz =	3.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
MX-PR300	225MHz=	3x	75MHz	OFF	ON	OFF	1-2 & 2-3 & 2-3
	233MHz=	3.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
	240MHz	4x	60MHz	ON	OFF	ON	1-2 & 2-3 & 1-2

AMD K5	»Ī»Ī%»	Ī%»	Ī•Ī	S1	S2	S3	JP4 & JP5 & JP6
PR75	75MHz=	1.5x	50MHz	OFF	OFF	OFF	2-3 & 2-3 & 1-2
PR90	90MHz =	1.5x	60MHz	OFF	OFF	OFF	1-2 & 2-3 & 1-2
PR100	100MHz =	1.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
PR120	90MHz =	1.5x	60MHz	OFF	OFF	OFF	1-2 & 2-3 & 1-2
PR133	100MHz =	1.5x	66MHz	OFF	OFF	OFF	2-3 & 1-2 & 1-2
PR166	116MHz =	1.75x	66MHz	ON	ON	OFF	2-3 & 1-2 & 1-2

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

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

Ī^Ē%CMOS

JP14	Ī^Ē%CMOS
1-2	Normal operation (default)
2-3	Clear CMOS

ĪnĀŠ PCI Clock

JP8	ĪnĀŠ PCI Clock
1-2	Sync (default)
2-3	Async

Jumper ÎnĂŠÄ

Ý ÍÆÔÀð VGA

JP11	Ý ÍÆÔÀð VGA
1-2	Enabled (default)
2-3	Disabled

Ý ÍÆÔÀðÇÌÈÏÓ¼

JS1	Ý ÍÆÔÀðÇÌÈÏÓ¼
1-2	Enabled (default)
2-3	Disabled

Ä Ü A ÈqÂ½Ë÷ÝÜÊÈÒë

Q: ÀfÀ Èé%Ú1BIOS1ÄÄ;ÖP

A: AOpen çUØ Ä` çUØ Ä` ÄÖBIOS ÄÄ;ÖÑ`BýçòÀsD`Ø Èä POST (Power-On Self Test) Ä Ä »RÍ„ÈqÑ`çY R Ä.D`Új »X

AP53/AX53 R3.80 Oct.22.1996

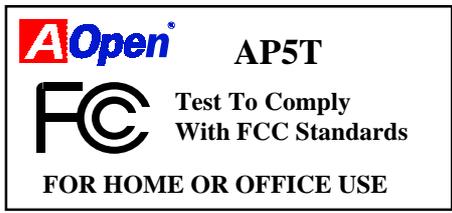
↙ BIOS revision

Q: %ÊÖ Æ MMX»Y

A: MMX Æ Ñ`%Qç Intel Pentium PP/MT (P55C) %è Pentium II CPUÄÖÍ À ÄyÄ ç` (single line multiple instruction) ÄÖÍ_»MMX %ÄÄ ç` ÀsÄyÎTB ÚÍçè%hÉdÄ` ÄÍÈP (Äf 3D çüb 0%ÖÍ»S3D ÇÍÈP»SÍ ÈeÑ`PÍ0að~)»TÄyÎTB ÚÍçèÍ'À»Çj ÄéçèMMXÄ ç` È_ççÄÍeÄ Í×%ÄQÈPÉú»TÄò ðAOpen çUØ Ä` %hÄÍÄò%ØÜ Ö„Ñ×%pÍP55C»RÄÝ %ÄÄ-ÇÈÈÈ %ÄÍÖ% ÄÍ%pÍÄ MMX CPU Äj çÄéçèÀÖ%Qçmú»T

Q: %ÊÖ Æ IWTTIU, T19Uvt}r.r}z, €l, wT, €w ...z}E»Y

A: U, T1Æ %QÖòÑ`ÄÖIWTTIÍhÈ Ö`YiÖeÑä»RÑ`ÖeÑäÍhÄSj 10†Iiç 19ÄfçUØ Ä` :1Äsçí ×eIU, T1ÖeÍÓI9], x, l:Èä»Rç;ÌDÑIØÈ%Ø ÍüÄÖÖ(Ü »RÄpÍ ÖiÍh×uÆEIEHTWcIBFDB»TçU Ø Ä` %ÄIU, T1Í Öi% ÐäÍeIWTTIÍ ÖiÄ çlÄ<Ý »RÄfÄXçUØ Ä` Í„ÓjIU, T1Í Öi»RÍ_ç_ Ä çUØ Ä` ÄÖIV^Z Ü ÈxÄUÈqÄT»RÄi çYÈ' ççYçèç À Ä × ÄÖØ ÍüI 9Äj Ä`Æ çèÈäÄQÄÖ Ø Íüç çz»TÄò ðIR`fvçIÑ`%Qç_ÄÖçUØ Ä` Í%SÍ„ÓjIU, T1Í Öi»R%f ÖéÄj ÄEIU, T1Öe ÍÖöa;Ö»X



ÄqÄ½Ä÷ÝUÐÈÖë

Q: ÄËÖ Ä ADM (Advanced Desktop Manager)P

A: Í, Ä Acer Í, ÈÄÖÍÈß »R;ÄÝ Ä Intel LDCM»RÄ ÄÍ½QÄáÄ Ð»ADM ¾¾^¿èÄ Ü ¾«ÄáÖ Ò Ú Óì»R;ÄÄÄÈã¿¿èÄ Ä½èÄÄÖRÄÖÈÖÍ »RÄf CPU ÇÑÈÈÈÖÍ »RÄ½èÖ,,Ü½ ÈÖÍ ¾è CPU Ó]Ö Ä`BQ»T

Features	ADM 2.1	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	Yes	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

Ä Ü B ÜÏÃ ÅXÕóËàÊ½

òf%QË' Ó[Ã Ê=ÝU»R%f ATT' Áá¿z;YUÊÁf È' àóÁóUaI »RÀfAXÌP%QDÏÏ]ÈP×eËÏíòrìP%Å
ĐÍ»T



Ï½ ö: ÁÍÍmÿÁÍ¿èÄÖÖ ÈàÀsÁóÇæÄÖÖ ÇD%Ö»RÀf jumper
ÍnÅŞÇa»RÍæÑ†ÄÖ BIOS %eBi ÊäÍ' à»»RËqÁ½Ê=ÝUÍ¿¿¿T
×eÍËÍiÁóÇæÄÖÖ ÊÖ»RÆ=Æ=Æ ÁpÁÍË' Ö=Ç€ÄÖÏÄËñ»RÁó
ÇæÄÖÖ Á"Æ »X

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

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

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



ÇÁÇ€: ÀsÎ^ÂUÖxÖaÊíÂ Áf%ÁÁ»R×e×eÅŞË' %ŞÖiÓ]¾fÀT
ÅXÕóËàÊ½' Áá»RÁÝÖx%çÖiÍiÄÖÊ=ÝUÍË' »R¿nAR¿UÖ
Ä`ÅÄÖÖ»SBIOS ÄÄ¿ÖÍ¿¿TÍË' ÀrÑfÖiÍi»RÁóÇæÍSI' %e
ÖeÄ^ÄÖÍ¿¿ÄñÑfÁð»RÁóPÍË' ¿è email Àè FAX»RÓ,,ÖöÑÖ
Í,,Ö Í]ÈPÍ%çSÄ À ×^»RË' ¿z¿YÁb¿èÄ Ü ÄÖÊ=ÝU%çÚÍ
Ä (Technical Problem Report Form)»T

ÜÏÃ ÅXÕóÈàÊ½

ÜÝÓ ¼Býçök

- ×eÚáÅ Jumper Å ÁpçÜ×eRñÅpÅCPU ÅÄÓ»RÍ /Ü Ó,,Ñ× (P54C/MMX)»RCPU ÚhÍ%çÇÚÚh¼ I%»T
- ×eÚáÅÓ,,Ñ×Èà×^Å ÁpËÍ%çÈÈÏÅ (CPU ÇÑÈÈÅ ÁpçÜÈqÓSÚú)»T
- çUØ Ä`ÀÍÍ]¼çÜÈqí^ò Ì`ÐY(Ó,,Ñ×ÇÑÈÈÅ ÁpçÜÈq)»T
- ×eÌØÈ!ÁiÁÍ%ÐÇÈçu%çÍç/ÌŠÓeÈà×^»Rç^òá¼BýçöçYÜÌ%çÈ÷YU»T
- ÅfÅ PCI Býçöçu»RÁ ÎÅpçÀPCI Î»ÓeÅÈ BýçöçuÒiÒi»T
- È`ØeB (SIMM/DIMM) Å ÁpÅŠòàçÜ×e»RÁ ÎÅÈ`ØeB Î»ÓeÅÈÅpç]È`ØeB »T
- ÚáÅÍŠÓeÈà×^ Pin 1 ¼ ÅgÅ ÁpçÜ×e»T

ÀÍÜÝÓ »RÀ "Ñ "ÀsÌpçQçíÏvçÈ»RÍ]Ä|Ðz¼[BIOS ÍnÅŠ:

- ÚáÅÛp×]Å ÁpËÍp¼Å"»R×e¼UÎÅNum Lock ÛpÅÅ LED Å ÁpçÜÈqÜZÚ»T
- ÚáÅ Turbo Switch Å ÁpPÚÅ (Release)»R×e¼BÅŠ"Ø ÅvÅçè Turbo Switch»T (Pentium çY¼hØ Óð%ŠÍTurbo çñú»RTurbo Switch ÍbÑ ÅÅ Suspend Switch çè»T)

ÀóÈä Reboot»RÇÅÜeÐ"Ø :

- È_CMOS Ì^È»BIOS ÑBÅÅ ÓŠÍçä (default)»RÈ_ÅÏeÍnÅŠÅÍçYÇÅŠÅR»T
- Ü Íq "ÜÝÓ ¼Býçö:" ÅÓÚáÅ¼ Å»ç]ÍiÚáÅ»T

ÀÍÜÝÓ »RÀ Í]Ä|Ð"Ø :

- ÌŠÓeÍ]Ä|Ð"Ø »RÚáÅBIOS ÅÓÍnÅŠÅ ÁpÅELBA (Í,,ÈqÈvD,,¼Å 540MB) È À»»T
- È_BIOS ÍnÅÓŠÍçä (Setup Default)»T
- ÍçÓeÐ"Ø Å ÁpçÜÈqRÅfÅXçÜÈqRçÉúÅ ÍŠÓeÈà×^ÀeÍŠÓeçÓÅÇ»T

ÌŠÓeØ Í]Ä|ÈÓÍ ÀÅçm(HDD Controller Fail»Rcan't detect HDD):

- ÚáÅÍŠÓe¼Master/Slaver ÍnÅŠÅ ÁpçÜ×e»T
- ÚáÅÍŠÓeÈà×^ÀeÁ ÎÅpçÀÍŠÓeÒiÒi»T

ÜÏÃ ÅXÕóËàÊ½

Í€0é/ Ña0Á/ Å]Ä Ø ¼¼ ÜËqÃèÏ]Ä| ¼¼ ÁQ:

- a. ÚáÆuÍ€0é/Å ÅT/ÅÝÅTËá×^Æ ÁpçÛ×e»T
- b. Ð"Ó,,Ñ×ËáÍ€0é0éÚj Æ ÁpËáÁQ»RÁ ÍÁÁpçÁÍ€0éÑa0Á/Å]Ä Ø òiòì»T

Ð"Ø ÈãÛp×]Ï]ËáÁQÃè BIOS Býçö Keyboard Controller Error:

- a. ÚáÆuÛp×] LED Û` (Numeric Lock) Æ ÁpÃ ÑÚçÛËq»T
- b. ÚáÆuçUØ Ä`Ä` ÚZÍÑ(Fuse) Æ ÁpÛ_Ûp(ÁéçéÓ,,Û ÚáÆuÆ ÁpÍ^Ø »RÁ` ÚZÍÑÀ ò~ ÀsÛp×]Ï»ËËá»RÍ,,ËqËË0 Áü0éçöÆ F1, 3A/125V»T

Ï]Ä|Û<À† BIOS Setup Æé0,,ÀÚÁd0,, (COMS data lost, Battery Low):

- a. ÚáÆu0,,ÀÚÆ ÁpÁd0,, (ÁTÄ 2.5V)»T
- b. ÚáÆu Clear CMOS Jumper Æ ÁpçÛ×e»T

ÜÏÃ ÅXÕóËàÊ½

Technical Problem Report Form	
<p>Ï¼Å • Model Name:</p> <p>Åá00 Serial Number:</p>	
<p>ÛfÏ0%Å Contact:</p>	<p>Name: _____</p> <p>TEL: _____ FAX: _____</p> <p>Email: _____</p>
<p>Ê÷ÛÛÏ(ÅÇ Error Symptom:</p>	
<p>Å‡ÏèÏiÔR (×è0i Ç' ÅÅ00%eÅÅ¿0) System Configuration: (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>