

Ä Ü A ËqÂ¹/Ê÷ÝUDÊÒë

Q: ÄfÄ Êë%Ü1BIOS1ÄÄöP

A: AOpen çUØ Ä`ÄÖ BIOS ÄÄöÖÑ`BýçöÀs POST (Power-On Self Test) ÝvÇËÄÖçÄ%h
Ä%»T%QË ÄíÖ»»RÆ çY R Ð"Új »RÄvÇËÆ çUØ Ä`ÄÖÖ»RÄüÇËÄyÆ % ÎÜ»TÄiÄf»X

AP53/AX53 R3.80 Oct.22.1996

↖ BIOS revision

Q:1ÄfÄ çë1PCB %hÊë%ÜçUØ Ä`ÄÖÄÖÖÖaÄÄöP

A: AOpen çUØ Ä`ÄÖÄÄöÖÖÖxiÑ`ÖëçöÀs PCB %h»RÄpÈ Ä»Æ REV:X.X»TÍ„ËqÆ Às
AOpen ÖëÖ`ÖaçUØ Ä`ÄÖÖÄ Ä`»TÄiÄf»RAX6L REV:1.2»X



Q: %ÊÖ Æ MMX»Y

A: MMX Æ Ñ†%Qç Intel Pentium PP/MT (P55C) %ëPentium II CPUÄÖÍ Ä`ÄyÄ ç`
(single line multiple instruction) ÄöÍ_»RMMX %ÄÄ ç`ÄsÄyÍTB ÚÍçè%hÉdÄ`ÄÍEP (Äf
3D çüb Ö%ÖÍ»S3D ÇÍEP»SÍ ÊëÑ`PÍÖaÖ~)»TÄyÍTB ÚÍçèÍ'Ä»ÇjÄéçè MMX Ä`ç`Ë_
çz%ÄÍeÄ Í×%ÄQËEPÉü»TÄö ð AOpen çUØ Ä`%hÄÍÄö%ÖÜ Ö„Ñ×%pÍÄ P55C»RÄY%ÄÖ÷
ÇËÉdÈ %ÄÍÖ% Äí%pÍÄ MMX CPU Äj çzÄéçèÄÖ%QçnÉü»T

Q: Pentium II ÀsÊ Ä`ÊPÉü%hÄÍÄy%ÄÄÖÄ Í×P

A: ÄöÇaË_Ñ†%Qç ÄÖ CPU ÈÍÄíÈÍ%W% ð »RçY%ÄÄÖÍ ÖíÏÄXÍ'ÄëÈ' ÈÍÆÈëÄi»T

DRAM : 64MB EDO Äë SDRAM

HDD : Quantum Fireball 1280AT

VGA : Matrox Millennium VGA, 4MB, 1024x768 24bit, 85Hz.

OS : Windows 95 4.00.950

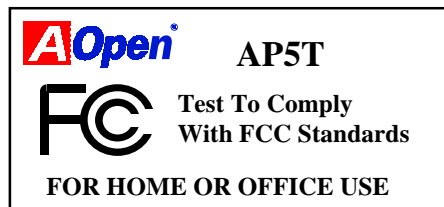
ĖqĀ¹Ė÷ÝUDĖÒĕ

CPU	MB	Chipset	Winstone97 Business	Winstone97 High-End
PP/MT-200	AP5T/AX5T	Intel 430TX	48.3	21.9
PP/MT-233	AP5T/AX5T	Intel 430TX	50.5	23.6
Pentium II 200	AX6F	Intel 440FX	45.3	24.1
Pentium II 233	AX6F	Intel 440FX	48.4	26.5
Pentium II 266	AX6F	Intel 440FX	50.8	28.2
Pentium II 266	AX6L	Intel 440LX	54.5	30.8

ĭĕĭY%hĀĖ Ė ĀoÇæĭzĭYĪ, Ī' »RĀs Business Winstone97 ĀĖĪ Ėi ĪĪĀX%»R Klamath-233 % Ėp PP/MT-233 ĀYĀdĀĪĀy%ĖĖġĀ' »WĀ Ās High-End Winstone97 Ā, ĀĪĖ ŪĲĪĀĖĀ Ī' »TĪ, ĭzĖĖĖ ĀnĖ Klamath ĖSŪZŌSŌuĀĖĖ% Ė Ā»RĖRĀi ĭĕĀiĖĪĖ ĀĖĪSĪ' »T

Q: %ĖĖ Ė FCC DoC (Declaration of Conformity)?

A: U, TĪĖ %QĖĖNġĀĖMTTĪĪĖ Ė' YĪĖĖĀ»RNġĖĖĖĀĪhĀSĪZj 10ġĪĭ ĭ ĖĀfĭUĖ Ā': Āsĭĭĕ U, TĪĖĖĪĖĪ, x, ĭ ĖĀ»RĭĪNĪĖĖ% ĪuĀĖĖĖ »RĀpĪ Ėi Īh»uĖĖĖEHITWc1BF?DBTĭUĖ Ā' %ĀĪ, TĪĪ Ėi %ĖĀĖMTTĪĪ ĖiĀ ĭĪĀĲ »RĀfĀXĭUĖ Ā'Ī, ŌĪĪ, TĪĪ Ėi »RĪĭĭĀ ĭU Ō Ā'ĀĖN^ZĪŪ ĖxĀUĖqĀT»RĀi ĭYĖ' ĭzĭYĭĕĭ Ā Ā × ĀĖĖ ĪuĖĀĭĀ\Ė ĭĕĖĀĀQĀĖĖ Īuĭ ĭz:»TĀĖ ĖR' fVĖ1Nġ%QĭĀĖĖĖ Ā'Ī'»ĖĪ, ŌĪĪ, TĪĪ Ėi »R'fĖĖĀĭĖĖ, TĪĖĖĪĖĖĖĖX



Q: %ĖĖ Ė Bus Master IDE (DMA mode)?

A: ĖĀĖĖĖ PIO (Programmable I/O) IDE Ė÷ÇĖ CPU Ā ĀfĀĪY IDE ĭ Ī»ĀĖĖ Ā ĖĀ ĀQ»RĭnĖRĪ ĭĀ÷Ė Ė ĖĀĀQĀĖĖĖ»TĖĖĪ %Ė CPU ĀĖ%ĀQÇġĖ»RBus Master IDE ĖĀĖ ĭzĀ×ĖĪĀĲĀ Ė ĖĖB Ė Ė»R%ĖĖĖĖCPU»RĭSĭzĀĖ CPU ŌSĀQĀ^Ė ĖĖB ŌĀ IDE ĖĀĖ Ė»ĀĖĖ ĖĀĖĖĖĖĖĖĖ »T%ĖĖ Bus Master IDE Ė÷ÇĖ Bus Master IDE BĭĖĀĪ' Ā»Ā^ Bus Master IDE ĪSŌĖĀĭ%ĖĪ% ĭzĭŪĖĖĖĖĖT

ĖqĀ1Ė÷YUĖĖ0ë

Q: ĖĖ0 Ė Ultra DMA/33?

A: Ī, Ė ĖQ00NġĀ0ĪhĖ »RġòĀ0ĀsĀ Ī× IDE ĪS0ëĀ0ĖĀŮ Ī%»RĖĀĪë%Ā PIO Mode ĖĀĀëġë IDE ĖĖĀ ĀY00%Ā%ġ (Rising edge) ĀĪĖĀŮ 0 ĖĀ»RDMA/33 ĀyġzĀĀĖĀĀëġë%ġ×ġĀ^ %f×ġ(Falling edge) »RĀNĀ00 ĖĖĖĀŮ Ī%Ė PIO Mode 4 Āë DMA Mode 2 Ā0ĀŮĢŮ»R (16.6MB/S x 2 = 33MB/S) »T

%fĀ ĀTġi IDE PIO Ā^ DMA Mode%ĀĖĀŮ Ī%»RĀN IDE ĖñĀĖĖĀĖ 16 bit»RĖĀTĀ0ĖĖ Ů Ė 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

Q: ĖĖ0 Ė ACPI (Advanced Configuration & Power Interface) Ā^ OnNow»Y

A: ACPI Ė 1997(PC97) Ā0%Q00NġĀ00„N×00Ī' ĪhĖ »RĀpġòĀ0ĀsĀ Ėz%QĀS0xġëĀQŮ•Āġ Īë(OS)ĀĪ0qĖ00„N×ĀĪ %Ā' 0ġĖĀĪë Green PC BIOS»RĖĖ0ĖĀ Ā0ġòĀ0 Chipset Āë Ultra I/O Ī0% 0÷Ī%ĖĖ0ëNĀ%ĖĖĖ (Standard Register Interface) Ī0ĀQŮ•ĀġĪë (Āf Win98)»RĀYġZ%ĀĀQŮ•ĀġĪëĪ ŮhY ĪĖĀ^Ā Īp%ĀĀĪ0% 0„N×%ĀġnĖŮ»RĪ, NĖĀĪ ĖĀĪŮZ 0ĪŮYĪ»Āġġë PnP %Ā%ĖĖĖ (Register Interface)»T

ACPI ĪhĀSĀëġëĪĪĖ,Ā»0„N×Ā Ůp (Momentary Soft Power Switch) ĀĪĖĖĀ ġë0„N× ĀĖĖ%Ā%ŮĪĀ»RĀNĀ0ġĪĖNĀs ATX Form Factor ĖġĪĪi Momentary Soft Power Switch Ā0Āëġë%Ė%ĖŮ ByĀpĖĖĀX»TACPI ĪĖĀġ%0%QĖ 0„0ĪĀëġëĀĖĀ0Ī»ġ ġzĖŮĖ ġëġzĖŮĀ» 0„0% (Notebook) ĀĪĀĪĀ ĀĪĀĪĀ00tNĖ "OnNow"»TĪ, ġnĖŮ%0ĪmĀĖĀ%ĖĀoĀ %Ė%QĀ0Y 0 ĀvĀ0%ĀQĪvĖĖ»RĀĪ%ġġëĀŮĀ ĖĀĖ»ĪġĀ÷Ė„Ė"0 ĖĪĖĀ (Bootup)»RĖz%Ī Win95»RĪ^ĀŮ Ėz%Ī Winword»TĀëġë TX Ī0% %ĀĀ0 ð AOpen AX5T»RĀġ %pĪĀ ACPI ġnĖŮ»T

ĖqÂ¹Ê÷ÝUDÊÒë

Q: Ās 440BX ĳUØ Ā`%h AGP ĀŌŪhĪ%ĒĒ ?

A: ĳYĀŌ AGP ĀŌŪhĪ%Ī½Ē Ōa Intel 440LX ĪŌ% Īi ĒŌĀa»Rĸj 440LX Ģn 75Mhz»RĀy AGP %nĸĒĢn 75MHz»TĀ ĀnĒĒ Intel 440BX ĪŌ% Īi ĳzĳY%pĪĀ 100Mhz ĳ•Ūh»RĪ, %ŠŌxĢh ĳi AGP ĀŌĪhĒ %W»RĀi ĳYĀŌĸaĳ ĪĢŅĀūĀpŪhĪ%Ā`Ā Ās 66Mhz»RĪ ĳnĳUØ Ā`ĀŌĳ•ŪhĒĒ Ā »RĪ, ŌaĒĪ% Ō ĒūĒ »eĀ`ĀĳĪĒĀŌŸĸĀŠĀ»T

Q: ĒĒ%ĒŌ Ās Windows895 ĀŌŌaŌ~ŌŌĪ`ĸ %ĸ»RAGP VGA ĳuŌa PCI-to-PCI bridge (ĀĒ AGP bridge) N`Ē»Ģ»Ē ?

A: Ī, Ē ĳĒĒĀŌĀĒĸ»TĀnĒĒ Windows'95 ĳŌ%ĳpĪĀ AGP»RĀi ĳYŅ`ĀĪŌ•ĀaĀŌĒ»ĀĒ»T%½Ōĳ»RĪ, ĀY%Ā`Ō%ĒĒĪĒĀŌĒĒĒ»RĀi ĳY%ĀŌ÷Ā{Ē{ĳyĀQĸnĳŪ»TĀ÷ Microsoft Windows 98 ĒŪĳiĀū»RŅ N`ŌĒĀ^ĀŌĒ÷YU»T

Q: ŌĀŌŌĀŌĀs»QBIOS Setup %Š%ŠŌxĢ`Ēi %W»QAPM»RĀ ĒĒĒ Windows 95 ĒĒĒ ĳ<ŌaŪŌĒĒĒĒĪĪŸĳö»`Ō, N`ŌŌĪ`»%ŌĒĳöĀ` ?

A: Ē÷YUĒ ĳiĀsĒ`ĀŠŌa»QWindows 95»QĸĀĪYĳŌĒi ĳĒ»QAPM ĳnĒū»TĀi ĳYĒ` ĳĪĢŅĀs»QBIOS ĀŌ APM ĳnĒūĒi ĳĒū»RĸĀŅĳĀRĀŠŌa%QĀŌ Windows 95»T

Q: ĒĒĒ ĀĳĪĒĒs Win95 %ĸĪĳĪĳ|Ģz%ĳ suspend ŌiĀ»?

A: Ī, ĀĪĳzĒūĒ ĒWĀnĀ CDROM ĪnĀŠĸa»RĀnĒĒĒs»QVin95 %ĳCDROM ĀŌ"ĀŌĒĒĀŠĪ»Ī,, ĀŌ" Ū ĢĪŌŠĪnĸaĒĒĒ`ĒiĀŌ»RĀi ĳYĀĳĪĒĒ`Ā p ŌaĒĒĒ`ĀŌ CDROM»RĳYĀĀĪĸĸ %Ā %ĳĒĒĳzĳYĀŌĒĒĒ Ā »RĀiĪ, Ē_N`Ō%ĒĒĪĒĒz%ĳ»Qsuspend ŌiĀ»»TĸĒŌĒĀ`Ī, ĸĪĒ÷YU»R ĳzĳYĢz%ĒĒĒ ĳ<Ē ĀĳĪĒĒ Ē ŌaŌ~ŌŌĪ`ĸ Ē CDROM Ē ĪnĀŠĸa»RŸ ĪĒ"ĀŌĒĒĀŠĪ»Ī,,ĀŌ" Ū ĢĪĪĳĳz»T

Q: ĀŌŌiĀĳĀ ĀaŪp Windows 95 ĀŌĀĀĳŌĀ` ?

A: Ē` ĳzĳYĀĒĒĪĳY%ĸĀŌĀSĀ[ĀĪŪaĪ Windows 95 ĀŌĀĀĳŌ»X

1. Ā Āū%ĸ»ĒĒĒ ĳ<»%Š%ĀŌ»ĀĳĪĒĒ»%ŌĒĳö»T

2. Ū Ā »^%QĒ »%ŌĒĒi»T

3. Ē,,»ĀĳĪĒĒ»%ŌĒYU%ĸ»RĒ` ĳzĳYĪ^N`ĀŌĒĒĒi Windows 95 ĀŌĀĀĳŌ»X

4.00.950	Windows 95
4.00.950A	Windows 95 + Service Pack or OEM Service Release 1
4.00.950B	OEM Service Release 2 or OEM Service Release 2.1
4.00.950C	OEM Service Release 2.5

$$\ddot{E}q\hat{A}^{1/2}\hat{E}\div\acute{Y}U\mathfrak{D}\hat{E}\hat{O}\ddot{e}$$

CjĖ'ĭ'ĀsĖ Ā ĀŌĖ OSR 2.1»R;ZĀsĖĖĀ ĭ'ĀŌ'ĤŊŌh'ŌŌĖ'Ā'Ā»%ŌĖĖĀ Ā "USB Supplement to OSR2"»T;ĭ;Ė»RĀs Windows\System\Vmm32 Ō ĖĀĀĀ%Ė'RŪĀĖ Windows\System\Vmm32 ¾ĀŌŪĀĖŊ Ntkern.vxd ĖĀĖĖ 4.03.1212 ĀĀĀŌ»T

Q: LX/TX/BX ¿U0 Ä-Ä0Ä†IeÄŠ0aA€ Win95 Äü»RÄs»^ðàð-ð0I‘ Ç »%¾FÑ“¿iİ‘İiÇi “?”
İB00»RÄ0UÍ0iÄfÄ È È¼Ä, ÄÄÈ÷00ÄÄ»Y

A: Ī, ĀāĒ=00Æ çēĀ Win95 ĨĴ|ĴŬ×eŬ Yē LX/TX/BX Ū0% ĨĪĀīÇa»RĀĴ ĄēĀfA0»RĔ» A0Ä±
İēĀāī^zçYçŬQŮSAQ»T³40ĴĒ Ā »Q0ĀāĒēçēĀāŌCēĀU»RĀOÇa»nĪ¹Āē¹WQÇİ AOchip
¼ĀyĪ' Ā»»RçZÜĒĀFĔ» ðĀĀ¹Ī, ÇİĒ=ŶU»TĪ, ÇİĪ' Ā»Āēçē»hĀŬQūĪĀ »RĀİçSØRçĒĀ ĀİĀĪ
Ā0 LX/TX/BX çU0 Ä»»RĀİ¼½çÇČĀŠĀ AOpen Ā0Ī¹Ā»»Tç¹ÇĒĒ» PĒĒ, Āēçē»RçZçYĀ0
çē¼Ĥ0 ðāĪĪĪ, »Tç¹ç¹ç·ÇĴĒ» NßÇēĀēçē USB ðāð~»RŬóçİDÑĀĪ USB BİĒāĪ' Ā»»RĪ, Ās
Win98 ¾Ē N¹Ī¹Āē»T

Q: ÀfÀ ÀŠ0à Windows 95 USB Bi ÊäĬ' À»?

A: Cj È'Æ Win'95 OSR 2.0 ÆÄæçäÅ (.950B, ByöÆ "PCI Universal Serial Devices")»R×ê È,, Microsoft Ô ÊÖÄÜâDcÓ,,ò¼ÀÛÔÊîİSÂ È, Microsoft USB supplement (USBSUPP.EXE) Í, Çıİ'À»»RASô¾ÄÄ»RE'N'AsEEÄ ç~ÄO»ÑtOh/IÖE'I'À»ÖæF-Ä "USB Supplement to OSR2"ASô¾ÄÄÈARE À AOchip.exe»R ÄfAON"Äs~ÖaÖ-Öoİ'Ç »%fBy;ë%Çı'~USB Controller»%T

Çj'Ë'Æ Win'95 OSR 2.1 Äë 2.5 ÄÖÄë;èÄä»Räÿ;^Ç€Äë;è AOchip.exe Î_À€³ÄT

ÎæÂ»RÇj È Win'95 ¿ÙÀ»ÄÄÄÔæ¿èÄæ(.950 or .950A)»RMicrosoft ¿òÀvÔöÄdÄÎÎ½
¿iÔèÂ^ÄÔ¾Ä|»RÄ ÖŞÇf Windows'98 È¿¿¿YÔèÄ^Î, ÇiÊ¿ÝU»T

Q: 3/4 E jumper-less ; U0 Ä`?

A: AOpen AX6L/AX6LC/AX6B 1.4E EP₂ è jumper-less 1nCf»Tf, 0òzU0 À 2zZiYÀ0EaE0
 I CPU 0,,U»RÀŸZiZzYB È Às CMOS Setup 34nÀS CPU UHl%»RÀi j BÑÀeZiEÀ
 jumper»TÀiZS0 0òÀ0 CPU 0 ÈeN"À†À Às EEPROM 34»R0f»Q CMOS Àd0,,ÀaEa»d
 ÀeE0ZiUxe CPU UHl%ÈÀ»RÈ 3n j 0÷ZiB0 0 IuUÀ»RÀi f, 3nZiUÈ 3QÈ jumper-less ZU
 0 À 1a34À 00Àr34 »T

Q: 3/4 Ê Æ battery-less ; U0 Ä` ?

A: AX6L/AX6LC/AX6B ÖSçè%WEEPROM òàEdÈ ×`ð (%öì×eÊ^Áb)»RçzçYB È'ÚçÀ† çòAvÄÖ CPU òa CMOS Setup İiÖR»RçSİjIõ÷Æèçè0„AÜ»Tç¿ÇçUÖ„Nç×`ÄÎI»Ïò»R RTC (real time clock) ¶İçzçYÄ Þ ÖSAQ»TCJ CMOS ð ÈaN_ç•U ç¿MRE'ç¿Ççè EEPROM ÇAN†ò % CMOS İiÖR»RA†İEäN“”àoIpÄ çÜEqÄHÖR»T

ĖqĀ¹Ė÷ÝUDĖÒë

Q: ĀéçèĀoĪpĀ»Ā`ÚZĪÑĀŌĀ€ĪSĀĖĀ ?

A: ÐāĪēĀŌŌĪŪpĀ»Ā`ÚZĪÑ (pico-fuse) Çj Ū`ÑĪ»RĀ\Ō÷ÇĀÑ†Ō~ĪĀ%QŪ »TĪ, ÇĪĖāĀQçĪÐÑçĖ Ė^Ñ•ĀŌŌ Çñ%Ī'Ė%•ĖūĖĪĀ »RĖĪÐ`Ėā%đŌ÷ĖĪÐ`ÝSç•ĀŌĀĀçŌ»TçĖĀ Ė Āŏ%4ĪpÐzĀS»R AOpen çUŌ Ā`%ŠÐ"Ā}ĀéçèĪæÑ†ĀŌĀoĪpĀ»Ā`ÚZĪÑ (Resetable fuse)»RĪ, Ōò PolySwitch ĖūĀ ĀĪĖPĀrĀ`BQĖ'ĀŌŪp×ĪŌa USB Ō,Ō »TN ĀĪĖ ĀzŌ,,ĀĖĪ½çĖĀ»RĪ, ÇĪ PolySwitch Ñ`ĀsÑçĪ`ĀŌĖĀÐ»%ŌŌWĀ ĖĀĀ Āŏ»RĪ^ĀūĀsĖ ĀzĖ çĪ'Āū»R/dĀŏĖāĀoĪpĀĀÇ Ā}ĀŌĀĀŌR»T

Çççç%Ū%pĪĀ USB ĀŌŌ Ī»ĀŏçnĖū»RĪæĖŪŏĖ ĀéçĖĪ, ŌŏĀoĪpĀ»Ā`ÚZĪÑ»T

Q: %ĖŌ Ė ĀyŌŌĀ† BIOS?

A: ĀĖĪ'Āē AOpen ĀéçèĀāĪæĀēĀŌ%pĪĀ»RAOpen Ī€B Ð"Ī, Ī»Ā ŌxŌĪ%4ĪpĀŌŌŌŪi»RĪñĀ Ā[ĀR%WĪĪĀĪĀŌĖ÷YU»RĀĀçmĪ, ĖzçĪĪ'ĀēĀyŌŌĀçĀĀçŌ BIOS ĀŌĀŏĪ_»T

Ė'çzçYĖ,,ĀŏÇæĀŌŌ ĖŌ%ŌŌ Ė'ĀiÇĖĀŌ BIOS ĀĀçŌ (ŌĪĖ %çççç) »RÇĀÑ†Ū_Ū Ā Ė'ĀŌçUŌ Ā`%ĥ»TçYĀūÐz%[BIOS Setup ĪvÇĖĖĀ»Rç^ÇĖĀ %f F9 Ā Ūp»RĪ_çzçY%ŪĪĀĀĀ%ççççĀŌ ĪvÇĖ»RĀRĀ %QĀŌ F9 ĀjçzĀŌĀ Çŏ%çĪvÇĖ»T

ĀŏĀYĪ, ÇĪĀŏĪ_Ō Ė'ĀsĪñĀŠ BIOS ÐĪçŏĖĀ»RĖ_ĀĪĀĪĀfĖ,,»T

Q: %ĖŌ Ė ĪŠB ŌāĖĖ (Hardware Monitoring)?

A: AOpen ATX (AX5TC/AX6L/AX6LC/AX6B) çUŌ Ā`%pĪĀ%WĪyŌŏĀĪçĖĀŌĪŠB ŌāĖĖçm Ėū»X

1. ŌĪŌ,,ĀĖĀ`BQ: ĀyĀĪCPU Ėŏ%ūŌ,,Ū%ŌĪŌ,,ĀĖĀ`BQĀŌçnĖū»RĖ†ĀiÇ ĀĪĀŌŌ,,Ñ×ĀēŪĪ ŌŌĖ_çZĪ'Āēç %Ā ĀŌĪ^Ō Ā`BQĖū%»T
2. Ā†ĪēŌ,,Ū%ŌāĖĖ: Ā Ð ŌāĖĖĀ†Īē%ĀQŌ,,Ū%ŪāĖūĖ ĀpĀĪĀ†ĪēŌ,,Ū%ÐhŌĪ%Ōç ŌēÑā ĀŌĖ»Āē»RÇjĀĪĪ, ŌŏĖ»Āē»RĪ_Ñ"ŌxçĖ%ĀyĪ'Ā» (ĀĪĀf Hardware Monitor Utility) Ō ĀéçèĀāĪ, çĪpĪĀzĖĖĖĀ»T
3. CPU ŌĪŌ Ā`BQ: Ñ CPU ÑBĀñĖĀĀ ŌŠç ĀŠŌ,,ĀŌÑBĀñĖĀ»RCPU Ī†ĀñĖ_ĀŏĖĀÇĖ ĀT»RĀYçSŌxçĖŪĪçĖĪ€B Ī, çĪpĪĀz»T
4. ÇÑĖĖŌāĖĖ: çUŌ Ā`%ĥĀĪĀūÇĪÇÑĖĖĪŪj»R%QÇĪçzçĖĀ CPU ÇÑĖĖ»RĀĪç†%QÇĪĀy çzçYĪŌŌ ĪūĀŌÇÑĖĖĀēç»TĪ'ŌĪ%ĀyĪ'Ā» (ĀĪĀf Hardware Monitor Utility)»RĀ† ĪēĀsÇÑĖĖYrĖŌĖĀ»RĖ_çzĀŏĖĀĪ½çĪpĪĀz»T

Q: %ĖŌ Ė Hardware Monitoring Utility (AOHW100)?

A: Ī, Ė çĖ AOpen ĀyĪ, çĪĀĪĀŌĪŠB ŌāĖĖĪ€B »RçzçYçĖĀĪŌāĖĖĀ†ĪēŌ,,Ū%SÑBĀñŌāÇÑĖĖ Īç»RĀpŪāĀĥĖĖ AOHW100»RĀp%4 100 Ā çŏĀĀçŌ»RçYĀūçzĖūÑ"ĀĪĀ Ñ†»TĖ'çzçYçĖ ŪYĀ ĀŌç Ōē% %ĀēĀŏÇæĀŌŌ ĖŌĀ Ė, Ī, ÇĪĪ€B »T

ËqÂ½Æ÷ÝUÐÊÒë

Q: ÆÈÀ Àò ðR`fv€¿UØ Ä`Äé¿èÍmÄy Ó,, Òë19**Electrolytic**) Ó,, ÈvÀí ¾Äé¿èÄk×
(Tantalum) Ó,,ÈvP

A: Ó,,ÒëÓ,,ÈvÄ•× Äæ06ÄÄ00%æÖ†ÈiÈ†ÌÄÑ¿¾»T¾QÉ ÄiÖ»Äk× Ó,,ÈvÄ0Ä•× ¾ Ó,,ÒëÓ,,Èv
Ä€»RÀ Ö È Ä ÐbÄ•× Ú`Ä`Ä00,,ÒëÓ,,ÈvÄ, ¾ Äk× Ó,,ÈvÇ€Ä€»TÍæÄÇ AOpen ¿UØ Ä`
CPU ÈáÆ Äé¿è 100uF Ä0Äk× Ó,,ÈvÄiÇÉÁTCPU Ó,,Ú¼0ÄÄz (voltage ripple)»RÄ Ñ†
Ä0Ä0Í_Ä ÐzÄÄ¿mÄ0ÈÜ¿i 1000uF Ñ¿ÁT ESR (Equivalent Serial Resistor) Ä00,,ÒëÓ,,
Èv»RÄp ESR ÄÈ 0.15 ohm»RÄiÄk× Ó,,Èv¾ÄiÇ€Ð.7 ohm»T¿Y¾fÆ ¿ðÄvÄò ðR`fv€
Äé¿èÄ00,,ÈvÍhÈ »X

Äk× 111111111 SPRAGUE 100uF,

Part number 595D107X06R3C2T,

Max ESR is 0.7 at 25 degree 100KHz.

Ó,,Òë111111111**S**ANYO 1000uF,

Part number 16MV1000CG,

Max ESR is 0.15 at 20 degree 100khz.

DgÄyÓ,,ÈvÄY¾¿_Ä CPU Ó,,Ú¼¾QÄŠÄ Ä€»RpfÍÌsÓ,,ÈvÄ0Ä ð~»TÖ ×eÄ0¾Ä|ÆÈÄé¿è
Ú<Ä†Ä»¿öÄz00Ä×ÈYÍ Ð,, CPU Ó,,Ú¼»RÑ Í^»RÄé¿èÄæÄöY Í, ÖaÈY»TÍ, ÜZ AOpen ÁÓ
¿ Ü ÍÇIntel»SAMD ¾Cyrix Ä0ÍnÇfÍh×»RÄY¿SÍ,,Ó] Intel»SAMD ¾Cyrix Ä00`Yi»T

Q: ¾ÈÖ Æ PC 100 SDRAM?

A: Û Í^ 440BX Í0¾ÌiÄÍ¾pIÄ 100MHz ¿•Üh»RÄ ÐäÌeÄ0 FPM Öa EDO DRAM Ä, Í]
Ä|ÄsÍ, Öò¿•Üh¾¿¿ÜÈqÓSAQ»TÆÈ¾W¿c¾U¾pIÄ 100MHz ¿•Üh»RIntel Í½i¾WQÇi "PC
SDRAM Specifications" ÄiÈYÄÈÑ†¾Q¿_ SDRAM ÍnÇfÄ0Äæ00»RÍ, ¾nÍ_Æ ÄiÜnÄ0
PC 100 SDRAM ÍhÈ »TÇ€Äs100MHz ÄæÄöÄ ÈÄÄ0¿•Üh¾¿RÈ, Ä ð Ä€Ä0ÈÐÉúÖaYÇ
ÄŠÄä»RÄoÇæÈ{ÈaÄòPÍÈ' Ü ¿èÌBÄi PC 100 ÍhÈ Ä0 SDRAM»T¿Y¾fÍ_Æ AOpen Í
ÖiÓ]Ä0 PC 100 SDRAM»X

Size	Vendor	Model	Single/Double	Chip Count
16M	Micron	MT48LC2M8A1-08	x1	8
16M	TI	TMX626812BDGE-10A	x1	8
16M	Hyundai	HY57V168010CTC-10	x1	8
32M	Micron	MT48LC2M8A1-08	x2	16
32M	Hyndai	HY57V168010CTC-10	x1	16
32M	NEC	D4516821AG5-A10-7JF	x1	16
32M	SEC	KM48S2020CT-GH	x1	16
128M	Simens	HYS72V16220GU	x2	18

ĖqÂ¹Ê÷ÝUĐÊÒë

Q: 440LX Ńa 440BX ĨÓ¼ ĨiĂŎĹUÇ€È†ĨÁÆÈÀ ?

A: 440LX Ńa 440BX ĂŎĹUÇ€È†ĨÁÀf¼fĂ ĨiĹö»X

ÉdĂä	440LX	440BX
ÍæĚĂĹ•Ũh	66MHz	100MHz
SIMM ĂŎ¼þĨĂ	Yes	No
Íæ¼Ĺ DRAM ĖvĐ,,	1GB EDO DRAM Ăè 512MB SDRAM	1GB SDRAM