

16 frfbfg

^è"x,É 16 frfbfg, ,.Â,ìff[]f^,ð^—□,·,éfn[]fhfEjFfA,Ü,½,í\ftfgfEjFfA,ìŽd—l,ðŽw,·—
pCEè□BWindows ŠÂ««,Å" @□ì,μ'P^è,ìf[]f,š—e—Ê,ð<α—L,·,é 16

frfbfgfAfvfŠfP□[]fvf#f",ífvfCEfGf"fvfefBfuf}f<f`f^fXfN□^—□,ª,Å,«,Ü,¹,ñ□B

16 frfbfg CPU ,ìff[]f^,ð 16 frfbfg,ìfOf<□[]fv'P^Ê,Å^μ,ì,é,æ,α,É 16

frfbfg"à•"fCEfWfXf^,ð"à' ,μ,Ü,·□B16 frfbfgff□[]f^fofX ,í^Ü,È,éVfXfef€fRf"f[]fif"fgŠÔ,Åff□[]f^,ð

16 frfbfg,ìfOf<□[]fv'P^Ê,Å"]'—,Å,«,Ü,·□B16 frfbfgf[]f,šfAfhfCEfXfofX,ª, ,é,ÆfRf"fsf...□[]f^,í 64KB
,ìf[]f,š,ð'¼□ÚfAfNfZfX,Å,«,Ü,·□B16 frfbfg,Å•\,¹,é□Å'å'l,í-ñ 64000 ,¾,© ,ç,Å,·□B

□Å□Vfo□[]fWf#f",ì Windows ,ì,Ü,Æ,ñ,ç,í□Å□V,ì 32 frfbfg CPU ,ðŠ^,©,¹,é 32 frfbfg

flyfCE□[]fefBf"fofVfXfef€,Å,·□B

16550 UART

[fVfŠfAf<ÉM](#), ÉŽg, í, ê, é PC fRf“fsf... [f^, lf`fbfv B'1/2,, ì PC ,ÉCE©, ç, ê, éCEÃ, ç 8250A ,Æ 16450
UART f`fbfv, É`ã, í, é, à, ì, Å, ·B

16550UART , íCEÃ, çf`fbfv, ìCEÀŠE, ð'Å, ž"j, èAŠ...èŽ, Ý, ð¶¶- , ·, é'O, É 16

•¶Žš, Ü, Åfofbftf@, É"ü, è, Ü, · (CEÃ, çf`fbfv, í•¶Žš, ^, Æ, ìCEã, ÉŠ,, èŽ, Ý, ð¶¶- , µ, Ü, ·)B, æ, è' -, -
Š,, èŽ, Ý, ©, ç%õñ•œ, µ, Å^—, ð'±s, Å, «, Ü, ·B

, ±, lf`fbfv, í Windows , Å 9600 bps , ð' , ·'—“x, Åff [f^, ð“`—, ·, éŠO•“'ÉMfffofCfX ('Éí, íf, fff€)
, ðŽg, ¶fRf“fsf... [f^ , Å, í•K, 'Ç%oA, ·, é•K—v, a, , è, Ü, ·B

32 frfbfg

^è"x,É 32 frfbfg, ,Â,ìff□[f^,ð□^—□,·,éfn□[fhfEjFfA,Ü,½,í\ftfgfEjFfA,ìŽd—l,ðŽw,·—pCEê□B32 frfbfg,ìfAfvfŠfP□[fvf†f",í^è"Ê,É 16 frfbfg,ìfAfvfŠfP□[fvf†f",æ,è,à□^—□'—"x,Æf□f,fŠ,ìŠÇ—□,ì"_,Å —D,è,Ä,ç,Ü,·□B

32 frfbfg CPU ,ìff□[f^,ð 32 frfbfg,ìfOf<□[fv'P^Ê,Å^μ,ì,é,æ,α,É 32 frfbfg"à"·"f□fWfXf^,ð"à' ,μ,Ü,·□B32 frfbfgff□[f^fofX ,í^Ü,È,éfvfXfef€fRf"f□[fif"fgŠÔ,Åff□[f^,ð 32 frfbfg,ìfOf<□[fv'P^Ê,Å"]'—,Å,«,Ü,·□B32 frfbfgf□f,fŠfAfhfCEfXfofX,ª, ,é,ÆfRf"fsf...□[f^,í 4GB ^È□ã,ìf□f,fŠ,ð'¼□ÚfAfNjZfX,Å,«,Ü,·□B32 frfbfg,Å·\,¹,é□Å'å'l,í-ñ 4300,000 ,¾,©,ç,Å,·□B □Å<β,ì Windows ,ì,Ü,Æ,ñ,Ç,í□Å□V,ì 32 frfbfg CPU ,ðŠ^ ,©,¹,é 32 frfbfg flfyfCE□[fefBf"fofvfXfef€ ,Å,·□B

fAfNfZf%o fCE [f^fL [

f f f f ... [fRf}f"fh,đŽÀs,·,é,½,ß,É%oÿ,·fL [[B

fAfNfZf%o fCE [f^fL [,í f f f f ... [[€-Ú-¼, ìCEã,ÉfjfbfR,É"ü,Á,½%o°ü•t,«,ì%opŽš,Á\ ,³,è,Ü,·B f f f f ... [fo [,É, ,é f f f f ... [[€-Ú, ìê [AfAfNfZf%o fCE [f^fL [,đ%oÿ,·'O,É Alt fL [,đ %oÿ,·K-v,ª, ,è,Ü,·B f f f f ... [fo [,©,çhf f b f v f _ f E f " f f f f ... [,ª\Ž | ,³,è,½,ç AfAfNfZf %o fCE [f^fL [,đ%oÿ,·,¾, ,Á f f f f ... [f l f v f v f f " ,đŽÀs,Á,«,Ü,·B,½,Æ, | ,î A Alt { F ,đ %oÿ,·,Æ f t f @ f C f _ f f f f ... [,ª\Ž | ,³,è,Ü,·B,ç,Á,½,ñ,» ,í f f f f ... [,ª\Ž | ,³,è,½,ç A [; "x, í%opŽš, ì O ,í f L [,đ%oÿ,·,¾, ,Á Af } f E f X, Á m Š J , (O) n ,đ ' l ' đ , · , é , ì , Æ " , ¶ C < %o Ê , É , È , è , Ü , · B

fAfNfefBfufEfBf“fhfE

Œ»Ÿ'ı'đ,μ,Ä,ç,éEfBf“fhfE□B,Ù,©,İEfBf“fhfE,ı'Ō-Ê,É•\
Žı,³,ê,Û,·□B'Êı□AfAfNfefBfufEfBf“fhfE,İf^fCfɡf<fo□[ı,ı,Ù,©,Æ^Ù,È,é□F (ffftfHf<fg,Å,ı□Å)
,Û,½,ı<P“x,Å•Žı,³,ê,é,ı,ÅAfNfefBfu,Å,È,çEfBf“fhfE,ÆŒ©•ª,ª,Å,«,Û,·□B

ANSI • ŽšfZfbfg

ANSI , í American National Standards Institute (•Ä'KŠi<|%öï) ,ì—
ª,ÅA•Ä',ì•W€<KŠi,đš'è,·,é<@ŠÖ,Ü,½,í,» ,ì<@ŠÖ,ªš'è,µ,½<KŠi,Å,·B“ú-{|,ì JIS ,É'Š“-
,µ,Ü,·BANSI •ŽšfZfbfg,ì•W€ [ASCII](#) •ŽšfZfbfg,ìã^ÊfZfbfg,Å,·B

API

Application Programming Interface ,i—ªB“Á’è,ì<@”\

,ðŽÄs,·,é,Æ,«,ÉŽg,í,ê,é<ª’Ê,ìŠÖ” ,ÆfTfuf<[f`f” ,ìW#BMicrosoft ,É,Í Windows

APIAWin32APIAOLE APIAMAPIATelephony API ,ðŠÜ,ß,Ä,ç,,Â,©,ì API ,ª, ,è,Ü,·B

fAfvfŠfP[fVf+f“fEfBf“fhfE

fAfvfŠfP[fVf+f“,ì<Æ—î^æ,Æ,μ,Ä—p^Ó,³,ê,éfEfBf“fhfE□B

fA[fjfcfu'®«

,±,ìftf@fCf<'®«,Í'O%oñ,ÉfofbfNfAfbfv,ðïï¬,μ,Ä,©,ç•ïX,ª, ,Á,½ftf@fCf<,ðŽ~•É,·,é,½,β,ÉŽg,í,
ê,Û,·BfA[fjfcfu'®«,ìfrfbfg,ìftf@fCf<,ª%½,©,ì•ù-
@,ÅC³,³,ê,é,Æftf@fCf<,ìffBfCfNfgfŠfGf“fgfŠ†,Å 1 ,ÉY'è,³,ê,Û,·BfA[fjfcfu'®«,ìfrfbfg,Í 0
ftf@fCf<,ìfofbfNfAfbfv,ìïï¬-CEã,ÉfA[fjfcfu'ftfgfEjfA,É,æ,Á,Ä 0 ,É-β,è,Û,·B

fAfZf“fuf%CE¾CEè

'á...€ ,íRf“fsf... [f^fvf[]fOf%of€CE¾CEè B,Ç,ì-½—B,à'P^è,ì<@ŠBCEè-½—B,É'Í
%ož,μ,Ü,·BfAfZf“fuf%CE¾CEè,Å[]',ç,½fvf[]fOf%of€ ,Í C ,Ü,½,Í BASIC ,É,Ç,ì[],...€CE¾CEè,Å[]',ç
,½fvf[]fOf%of€ ,æ,è,à^è”É,É[],'¬,Å,·B CPU ,ìŽí—p,ª^U,É,é,Æ%ođŽB,·é<@ŠBCEè-½—
B,ª^U,É,é,ì,Å[]A1 ,Å,ì<@Ží,íRf“fsf... [f^,½,B,É[]',©,è,½fAfZf“fuf%CE¾CEè,ífvf[]fOf%of€
,đ^U,É,é<@Ží,íRf“fsf... [f^,ŽŽÅ[]s,·,é,É,ífvf[]fOf%of€,đ[]',«¼,·K—v,ª ,è,Ü,·B

"ň"~Šú

f^fCf}}[][, ©,ç"Æ—š,μ,Äi□s,·,é'€□□B,½,Æ,i,î□Af,fff€,δ'Ê,μ,Ä,ì"ň"~Šú'Ê□M,Åf,fff€,í'—
□M,²,Æ,ÌŠŽn□M□t,Æ□l—¹□M□t (fXf^□[fgfrfbfg,ÆfXfgfbfvfrfbfg) ,ÉŠî,Ä,č
,Äff□[f^ÆđŠ,ì•à'²,đ,Æ,è,Û,·□B

Ž“®f}fEf“fg

fffBfXfN,đ³□k,μ,½□ê□#□AfffBfXfN,É“ü,Á,Ä,ç,éftf@fCf<,Í^ê□□,É^3□k,³ê□u^3□kf{fŠf...
□[f€□v,ÆCEÄ,Î,ê,é“Á•Ê,Ì%°B,μftf@fCf<,Æ,μ,ÄŠi”[,³ê,Ü,·□B^3□kf{fŠf...□[f€,^af}fEf“fg,³ê,Ä,ç,È,ç
,Æ,«,Í□A’P,ÉfzfXfgfhf%ofCfu□ă,Í’ă,«,ç%°B,μftf@fCf<,Æ,μ,Ä•\Ž|,³ê,Ü,·□B^3□kf{fŠf...□[f€
,^af}fEf“fg,³ê,é,Æ□AflfyfCE□[fefBf“fOjVfXfef€,Í,±,ê,đ³□kfffBfXfN,Æ”FŽ⁻,μ,Ä□A^{fzfXfgfhf}
%ofCfu,©,ç“Æ—š,μ,½•Ê,İfffBfXfN,Æ,μ,Ä^μ,ç,Ü,·□B
^3□kf{fŠf...□[f€,đŽ“®“l,Éf}fEf“fg,·,é,æ,π,ÉfVfXfef€,ª□Ý’è,³ê,Ä,ç
,é□ê□#□A^3□k,³ê,½ftf□fbfs□[fffBfXfN,ÍŽ“®“l,É”FŽ⁻,³ê□AfffBfXfNfhf
%ofCfu,É’}“ü,·,é,Æf}fEf“fg,³ê,Ü,·□B

AUTOEXEC.BAT

Windows 95/98/Me: fRf“fsf...[]f^,^N“®,. ,é,ÆŽ©“®“l,ÉŽÀ[]s,^,é,fRf}f“fh,^“ü,Á,Ä,ç
,é,fofbf`ftf@fCf<[]B’É[]í[]AAUTOEXEC.BAT ,ifRf}f“fh,Í PATH ŠĀ<<•Ī[]” ,đ[]Ý’è,μ[]ADOS
fvf[]f“fvfg,İŠOŠĪ,đCE^’è,μ[]ATSR ,đŠjŽn,μ[]AfRf“fsf...[]f^,î<N“®Žž,ÉŽÀ[]s,μ,È, -,ê,Î,È,ç,È,ç
,>,l’1/4,İfvf[]fOf%of€ ,đŽÀ[]s,μ,Ü,·[]B

fofbfNfOf%ofEf“fh

fofbfNfOf%ofEf“fh, ĀŽÀ□s,³,ê,é□^—□, ĩftfHfAfOf%ofEf“fh, ĀŽÀ□s,³,ê,é□^—□, æ,è,à’á,ç”ä—|, Ā CPU, ĩ□^—□ŽŽŠÓ,đŽó,žæ,è,Ü,·□B

ffftfHfçfg,Ā, ĩ□AftfHfAfOf%ofEf“fh, ĀŽÀ□s,³,ê,éAfvfŠfP□[fVf#f“, ĩfRf“fsf...□[f^, ĩ^èžŸf^fXfN,Ā, ,è□A Žc,è, ĩŽÀ□s’t, ĩfAfvfŠfP□[fVf#f“, æ,è,à□,ç”ä—|, Ā CPU, ĩ□^—□ŽŽŠÓ,đŽó,žæ,è,Ü,·□BfofbfNfOf%ofEf“fh, ĩfAfvfŠfP□[fVf#f“, ĩ□AftfHfAfOf%ofEf“fhf^fXfN, ĩ□^—□, ĩ’â”•a,a—ž,ž’.....,Æ CPU, ©,ç,» , ĩfAfej“fVf#f“, đŽó,žæ,è,Ü,·□B



Windows NT/2000: ftfHfAfOf%ofEf“fh,Æf ofbfNfOf%ofEf“fh, ĩf^fXfN,ÉŠ,,è“-

,Ā,é’Š’Ī“Ī,É□^—□fAfej“fVf#f“, đ•Ī□X,Ā,«,Ü,·□BWindows NT

, ĩ□é□#,É, ĩfRf“fgf□□[fçpflfç, ĩ□mfVfXfef€□n,Ā□mfptfH□[f}f“fX□nfy□[fW,đ•\

Ž!,μ,Ā□mfAfvfŠfP□[fVf#f“, ĩ□^—□—D□æ“x□nfOf<□[fv,É, ,éfXf

%ofCf_□[,đ”@,©,μ,Ā²□@,μ,Ü,·□BWindows 2000

, ĩ□é□#,É, ĩfRf“fgf□□[fçpflfç, ĩ□mfVfXfef€□n,Ā□m□Ú□×□nfy□[fW,đ•\

Ž!,μ,Ā□mfptfH□[f}f“fXflfvfVf#f“(P)□n,đfNfŠfbfN,μ,Ü,·□B

Šî-{"ü□o—ÍfVfXfef€

fofbf`ftf@fCf<

fIfyfCE[fefBf"fOfVfXfef€,ì 1 ,Â^Èä,lfRf}}f"fh,ð—

ñ<L,μ,½fefLfXfgftf@fCf<Bfofbf`ftf@fCf<,lfVfXfef€,É,æ,Á,Ä (AUTOEXEC.BAT ,ì,æ,α,É)

Ž©"®"l,ÉŽÀs,³,ê,é,©A,Ü,½,ÍDOS fvff"fvfg,Åftf@fCf<-¼,ð"ü—

í,μ,ÄŽè"®,ÄŽÀs,μ,Ü,·Bfofbf`ftf@fCf<,ðŽÀs,·,é,ÆAfRf}}f"fh,^a‡,ÉŽÀs,³,ê,Ü,·BDOS

ŠÄ<<%o^o,Å,lfofbf`ftf@fCf<,É,í .BAT ,Æ,ç,αŠg'£Žq,^a•t,«,Ü,·B

f{[fCE[fg

ff[f^“`‘—,ì’—“x,đ•\,·,Æ,«,ÉŽg,κ—pCEê,Å□A’Ê□í,íj,fff€,ì’—,³,đŽw,μ,Û,·□Bf{□[fCE□[fg,í 1 •b“-
,½,è,ì□M□t,ì•í%o»,ì%oñ□”,đŽw’è,μ,Û,·□B^ê”Ê,Éf{□[fCE□[fg,í bps
,ì”˘`CEê,Æ,μ,ĂŽg,í,ê,Û,·,ª□A,»,ì,æ,κ,ÉŽg,ç•û,í•s□³Šm,Å,·□B1 %oñ,ì□M□t,ì•í%o»,ª 1
frfbfg,ìff□[f^,đ•\,·,±,Æ,à, ,è,Û,·,ª□ACE»□Ý,ì□,‘—’Ê□M,Å,í 1 %oñ,ì□M□t,ì•í%o»,ì’Ê□í 1
frfbfg^Ê□ã,đ•,□t%o»,μ,Û,·□B

BBS

Bulletin Board System , ì—ª□Bf,fff€,É,æ,Á,ÄVfXfef€,É□Ú'±,µ,Ä,ç,éft□[fU□[ŠÔ,Åf□fbfZ□[fw'—
□M□A“dŽqf□□[f<□Aftf@fCf<“]’—,ª,Å,«,élf“f%ofCf“fT□[frfX□B

fxf`f}[]fN

f\ftfgfEjFfA,Ü,½,Ín[]fhjEjFfA,ì^—□'¬“x,ð'è,·,éfefXfg□B

frfbfg

fofCfifŠ,Ä,Ü,è 2 i" ,ì 1 œ... ,Ä, ,è AfRf"fsf... [f^ ,Ä^— , ,é î•ñ,ð•\ ,Ä¬'P^ÊB1 frfbfg,Í 0 ,Æ
1 ,ì,Ý,ð<L%¯ , ,é 2 i-@,ÉŠî,Ä,ç,Äî•ñ,ð•\,µ,Ü,·B

BIOS

Basic Input /Output System , àBf , fŠ AfffBfXfNfhf%ofCfu AfffBfXfvfCfC, È, ÇfRf“fsf...
 [f^ , ìfRf“f| [f|f“fg, ÌŠÖ, Å, ìî•ñ, ì“]’—, ðfTf] [fg, ·, é, ½, ß, ìf< [f`f“, ðŠi” [·, ·, éfRf“fsf...
 [f^ , ìfTfufVfXfef€ BPC , ìfVfXfef€ BIOS , í [ROM](#) , ÉŠi” [·, ·, é, é, ì, Å ROM BIOS , Æ, ç, ç, Ü, · B
 Windows , ÍŠi” [·, ·, é, Ä, ç, é BIOS f< [f`f“, ì½, , ðfofCfpfX, ·, é, ±, Æ, É, æ, Á, ÄŠfAf<f. [f, Å, Í, È, -
 [fvf \[fefNfgf. \[fh, Å“ @ \[·, ·, é, æ, æ, É, È, è, Ü, · B V, µ, ç BIOS , ì•W€
 , ìfn \[fhfE fFfAfffofCfX, ì, ½, ß, ìfvf%ofOfAf“ fhfvfCfC<@“\, ð” ö, ì, é, æ, æ, É \[·, ·, é, Ä, ç, Ü, · B](#)

fufbfN

1 ,Â,î'P^Ê,Æ,μ,ÄffBfXfN,Æ,ÌŠÔ,Å“Ç,Ý□',«,³,ê,é^ê~A,iff□[f^,ì□W,Ü,è□B

fu[fgfCfR[fh

ftf[fbfs[fffBfXfN,ìÅ%°,ì• — fZfNf^,Ü,½,ífn[fhfffBfXfNfp[feBfVf#f“,ìÅ%°,ì~ —
fZfNf^BfffBfXfN,íA[fLfefNf`ff (fZfNf^fTfCfYAfNf%ofXf^fTfCfY,É,Ç) ,ðŽ`•É,μ,Ü,·Bfu[fq
%oÁ“\,ÉfffBfXfN,ífu[fgfCfR[fh,É,íflfyfC[fefBf“fOfVfXfef€,ðf[fh,·,éfu[fqfXfgf
%ofbfvf[f_[] ,à“ü,Á,À,ç,Ü,·Bfu[fgfCfR[fh,ífffBfXfN,ífu[fqfZfNf^,ÉŠi”[,³,è,Ü,·B
,Ç,ì~ — ffffBfXfN,É,à 1 ,Á,ífu[fgfCfR[fh,ª, ,èAfuf[fgfCfR[fh,ífffBfXfN,ì~ _[]\¬,Æ•” — []\
[]¬,É,Á,ç,À,ìŽŸ,ìî•ñ,ðŠi”[,μ,Ü,·B

- fZfNf^“- ,½,è,ìfofCf[]”
- fNf%ofXf^,íTfCfY (fNf%ofXf^“- ,½,è,ìfZfNf^[]”)
- fffBfXfN[]à,ìfZfNf^[]”
- fgf%ofbfN“- ,½,è,ìfZfNf^[]”
- fffBfXfN,ì-É[]”
- }‘ì<L[]qfofCf[]

fu [fgfZfNf^

fu [fgfZfNf^, ðŠi”[, ·, éfZfNf^ Bfu [fgfZfNf^, íftf [fbfs [fffBfXfN ä, ì Å % , ì • —
 [fZfNf^, Ü, ½, í ~ — [ffBfXfN (fn [fhfffBfXfN, ífp [fefBfVf#f“)

, ÌŠŽnfZfNf^, Å, · Bfu [fgfZfNf^, ífffBfXfN, ífA [fLfefNf`ff (fZfNf^ fTfCfY AfNf% fXf^ fTfCfY, È, Ç)

, ðZ · È, µ, Ü, · Bfu [fg % Å “ \, ÈfffBfXfN, ífu [fgfZfNf^, É, ífíyf [fefBf“ fOfVfXfef€

, ðf [fh, ·, éfvf [fOf % f€, à “ ü, Á, Ä, ç, Ü, · B

fu [fg%oA" \fffBfXfN

fRf"fsf... [f^, ð<N" ®, ·, é, ½, ß, É•K—v, ÈfVfXfef€ftf@fCf<,ª"ü,Á,Ä,ç,éfffBfXfN□B□Å<ß, ðfRf"fsf...
□[f^,É, ðfRf"fsf... [f^, ð<N" ®, ·, é, Æ, «, ÈŽg, í, ê, éfu□[fg%oA" \, Èfn□[fhfffBfXfN,ª, ,è,Ü,·,ª□A' Èí□ufu□
[fg%oA" \, ÈfffBfXfN□v, Æ, Í□A, à, µfn□[fhfffBfXfN,ª'¹ŠQ, ðŽó, ¯, ½Žž, ÈfRf"fsf...
□[f^, ð<N" ®, ·, é, ½, ß, ÈŽg, !, éftf□fbfs□[fffBfXfN, ì, ±, Æ, ð, ç, ç, Ü, ·□B

fu[]fgfXfgf%ofbfvf[]f_[]

fu[]fg%oo^"\\ffBfXfN,ifu[]fgfCfR[]fh,É"ü,Á,Ä,ç,ÄfRf"fsf...

[]f^,i,N"@Žž,ÉflfyfC[]fefBf"fOfVfXfef€,đf[]fh,·,é¬,³,çfvf[]fOf%of€[]B

“dŽqŒfŽ;”ÂfVfXfef€

fofX

CPU A“üo—Í|[]fg[]Af[]f,fŠ,È,ÇfRf“fsf...[]f^,ì^Ù,È,éfRf“f[]f[]fg,ðÚ±
,·,é“dZqf`fff[]f<,lfVfXfef€[]B

f{f^f"fo

fAfvfŠfP[fVf+f",ìfif...[fo],ì^%º,É, ,éf{f^f",i•À,ÑB€-
Ú,ìRfs[A^Ú"@AíœA^ê'è,ìi•ñ,i\Ži,É,ÇA'Á'è,ìf^fXfN,đŽÀs,Å,«,Ü,·B

fofCfg

8 ĆÂ,ifrbfg,Å\□-,³,é,Rf“fsf...□[f^,ìî•ñ,ìP^Ê□B'Êí□A1 fofCfg,í”¼Šp%op□”Žš<L□t,ì 1
•¶Žš,É‘Š“-,:.éff□[f^,ðŠi”[,μ,Ü,·□B

fLffffbfVf...

fRf“fsf...[]f^,ì‘S’ì“l,È□^—□’—“x,ðŒü□ä,·,é,½,ß,Éff□[]f^,Ü,½,ífvf□[]Of%of€-½—ß,ð^èŽž“l,É<L
%o~·,éfRf“fsf...[]f^,ì“Á•É,Èf□f,fŠfTfufVfXfef€□B,Ù,Æ,ñ,Ç,ífLffffbfVf...,ífRf“fsf...[]f^,ì•W□€<L
%o~^æ ([fffBfXfN](#),Ü,½,í [RAM](#)),©,çff□[]f^,ð CPU ,Å,à,Á,Æ’—,fAfNfZfX,Å,«,éŽí—p,ì<L
%o~^æ,ÉfRfs□[],μ,Ü,·□B^ê•”,ífLffffbfVf...,í‘Ò<@—p,ì<L%o~^æ,Éff□[]f^,ð•Ü,¿□ACPU
,ð‘¼,íf^fXfN,ì,½,ß,É%oð•ú,μ□ACPU ,ífAfCfhf<Žž,É,ì,Ý,»,íf□[]f^,ð□’,«□ž,ß,Ü,·□B
[fffBfXfNfLffffbfVf...](#),í”ñ□í,É□,’—,È CPU ,Æ’á’—,ÈfffBfXfNfhf%ofCfu,ÌŠÔ,É, ,é’—“x,ì,,ê,ð•â,æ,æ,æ,
,É□YŒv,³,ê,Ä,ç,Ü,·□B“à•”f□f,fŠfLffffbfVf...,ÆŠÔ•”f□f,fŠfLffffbfVf...,í CPU ,Æ’á’—,È [RAM](#)
f`fbfv,ÌŠÔ,É, ,é’—“x,ì,,ê,ð•â,æ,æ,æ,É□YŒv,³,ê,Ä,ç,Ü,·□B

fLffffbfVf...fRf“fgf[]f%o

fLffffbfVf.... ,ì“@[]ò,ð[]§CEä,·,é‘·‘u[]B“à•”f[]f,fŠfLffffbfVf...[]AŠO•”f[]f,fŠfLffffbfVf...
[]A^ê•”,ìfffBfXfNfLffffbfVf... ,ìfLffffbfVf...fRf“fgf[]f%o,ìfn[]lfhfEjFfA%oñ~H,Æf\
ftfgfEjFfA,ð‘g,Ý[]‡,í,¹,ÄŽg,ç,Û,·[]B,» ,ì¹¼,ìfffBfXfNfLffffbfVf... ,ìfRf“fgf[]f%o (VCACHE[]AWindows
,ìfffBfXfNfLffffbfVf... ,È,Ç) ,ìf\ftfgfEjFfA,ì,Ý,ðŽg,ç,Û,·[]B

fLffbfVf...fqfbfg—!

CPU ,^a—v<□,μ,½ff□[f^ ,^afLffbfVf... ,É, ,é,Æ,« ,ì”ä—!□BfLffbfVf...fqfbfg—!,^a□,ϕ,Æ CPU
,^aff□[f^ ,ð,·,î,â,fAfNfZfX,Å,« ,é,ì,ÅfRf“fsf...□[f^ ,ì^—□’¬“x,^aCEü□ã,μ,Û,·□B

fLfffbfVf...f~fX—!

CPU ,^a—v<□,μ,½ff□[f^ ,^afLfffbfVf... ,É,È, fffBfXfN,Ü,½,Í RAM ,©,çŽæ,è□o,³,È,¯,ê,î,È,ç,È,ç,Æ,«,ì"ä
—!□BfLfffbfVf...f~fX—!,^a□,,ç,ÆfLfffbfVf... ,iff□[f^ ,ðŽg,!,é□ê□‡,É"ä,x,ÄfRf"fsf...□[f^ ,ì□^—
□'—"x,^a'á%°°,μ,Ü,·□B

CD-ROM fhf%ofCfu

fCE[fU[fR[f€Af~f%o[AŽÊ^ŒÿoŠí,đŽg,Á,Ä [CD-ROM](#)
, ©, çff[f^,đ“Ç,Ÿž,p,½,ß,ífffofCfXBCD-ROM, í“Ç,ŸŽæ,èê—p,ìff[f^<L%-^æ”}‘ì,È,ì,ÅACD-
ROM fhf%ofCfu, í CD-ROM, É‘í,μ,Äff[f^,ì“Ç,ŸŽæ,è,ì,Å,«,Ü,·,ª‘,«ž,Ÿ,ì,Å,«,Ü,¹ñB

fjfXfP[fhf fjjf...[

f fjjf... [[€-Ú, ð'í'ð, μ, ½, Æ, «, É, ³, ç, É•Ž, ³, ê, é fjjf... [[BfjfXfP[fh,ª—p^Ó, ³, ê, Ä, ç, é fjjf... [[€-Ú-
¼, í%oE, É, í > ,ª•Ž, ³, ê, é, Ì, ÅŒ©•ª, ¯,ª, Ä, «, Ü, ·B

'†%o>[]^—[]'•'u

CGA

Color Graphics Adaptor , à—ªBfp□[f\fi<fRf“fsf...□[f^, ÅŽg, í, ê, éfrfff!fAf_fvf^f{□[fh, ì 1 Ží□BPC , ìfrfff!fffBfXfvfCfC•W□€, ì”“W, É, “, ç, Å CGA , ìf, fmfNf□fffBfXfvfCfCfAf_fvf^ (MDA) , ìCä, ÉŠJ”- , º, è, Ü, µ, ½□BCGA fj□[fh, É, í, ç, , Å, ©, ìfrfff!f, □[fh, º, , è, Ü, , º□AfOf%oftjBfbfN, É, Å, ç, Å, í 4 □□AfefLjXfg, É, Å, ç, Å, í 16 □F, ì□\$CÄ, º, , è, Ü, .□B

f`fF[]f“

'P^êftj@fCf<,ì•”•a•”•a,afffBfXfN[]ã,ì~A'±,μ,È,çfNf%ofXf^,ÉŠi"l,³,ê,Ä,ç,é[]ê[]#[]Aftj@fCf<,ì
([]ÅCEä,ìfNf%ofXf^,ð[]œ,) fNf%ofXf^,ÉŠÖ,·,é FAT fGf“fgfŠ,ìftj@fCf<,ìff[]f^,ðŠi"l,μ,Ä,ç,éŽÿ,É'±,-
fNf%ofXf^,ðŽì,μ,Û,·[]Bftj@fCf<,ìfNf%ofXf^f`fF[]f“,ÉŠi"l,³,ê[]AFAT fGf“fgfŠ,í FAT
f`fF[]f“,ðCE`[]¬,μ,Ä,ç,é,Æ,ç,ì,Û,·[]B

fNf fbfNfTfCfNf<

fRf“fsf... [f^, aCEÅ X, i'€ i, ðŽÀ s, ·, é, ½, ß, É•K—v, ÈŽžŠÔ, i Å —'P^ Ê B, ½, Æ, i, Î ACPU , a 2
, Å, i fCEfWfXf^ ŠÔ, Åff [f^, ð“] —, ·, é, ½, ß, É, Í 1 fNf fbfNfTfCfNf<, a, ©, ©, è, Ü, · BfNf fbfNfTfCfNf<, i, ±
, Æ, ð uCPU fTfCfNf< v, Ü, ½, Í ufNf fbfNf` fbfN v, Æ, à, ç, ç, Ü, · B

fNf%ofXf^

Ž¥<CfffBfXfN<L%o~'•'u,ìŠî- {Š,,è“-,Ä'P^Ê□B1 ,Â,ìfNf%ofXf^,í 1 ,Â^È□ă,ìfZfNf^,Ă□\
□→,³,ê,Û,·□Bftf@fCf<ftfCfY,ªCEµ-§,ÉfNf%ofXf^ftfCfY,ì” {□”,É,È,é,±
,Æ,Í,Û,ê,Ă,·□B'Ê□í□Aftf@fCf<,ìff□[f^,ðŠi”[·,·é□ĂCEă,ìfNf%ofXf^,ì□,í,è,É□ufXf%ofbfN—
ì^æ□v,ÆCEÄ,Í,ê,é<ó,ì—ì^æ,ª, ,è,Û,·□BfNf%ofXf^,ðŽg,ª,±,Æ,ĂfifyfCE□[fefBf”fOfVfXfef€
,ìfZfNf^fCEfxf<,Ă□ì<Æ,·,é,æ,è,àfffBfXfN□ă,ìftf@fCf<,ðCEø—!“l,ÉŠÇ—□,Ă,«,Û,·□B

fRf“f{f{fbfNfX

fefLfXfgf{fbfNfX,ÆfŠfXfgf{fbfNfX,ì<@”\,ð‘g,Ý☯,í,¹,½ GUI fRf“f|□[flf“fg□BfefLfXfgf{fbfNfX,ì,æ,α
,Éft□[fU□[,ª“ü—í,Å,«,é“ü—íftfB□[f<fh,ÆfŠfXfgf{fbfNfX,ì,æ,α,É,»,±,©,ç‘l‘ð,·,éflfvfVf#f“fŠfXfg,ª—
p^Ó,³,ê,Ä,ç,Ü,·□B

fRf}f“fhf{f^f“

f{f^f“ã,lfefLfxfg,Ž,“®ì,žÀs,·,é’·ûĈ` ,lf{f^f“BĀ,à^è”É“l,ÈfRf}f“fhf{f^f“,ÍmOKn,Æ
mfLfff“fZf<n,Ā,·BmOKn,Í“®ì,žÀs,Û,½,ÍEx,âf{fbfZ[fW,Ém’è
%ž“š,μ,Û,·BmfLfff“fZf<n,Í%½,à,μ,É,ç
,Āf_CfAfOf{fbfNfX,đ•Ā,¶,Û,·BfRf}f“fhf{f^f“,đ’P,Éuf{f^f“v,Æ,à,ç,ç,Û,·B

COMMAND.COM

Windows 95/98/Me: DOS ,lffftfHf<fg,lfRf}}f“fhfCf“f^[]fvfŠf^fvf[]fOf%of€[]BfL[]f{[]fh,©,ç“ü
—í,³,ê,½fRf}}f“fh,đŽó,~Žæ,èA'¼,lfvf[]fOf%of€,đf[]fh,μ,½,è[]Afvf[]fOf%of€,Æ [CPU](#) ŠŎ,ìî•ň,ì—
¬,ê,đ[]\$Eä,·,é,È,Ç,lf^fXfN,đŽÀ[]s,μ,Û,·[]B

fRf~fbfgf f, fš

Windows , l^—, l, 1/2, B, lf f, fš, đ 2 'iŠK, Āš,, è“-, Ā, Ū, ·B'æ 1 'iŠK, Ā, í ê~A, lf f, fšf Afhf fX, đ^—
l, 1/2, B, É—\-ñ, μ, Ū, ·B'P, Éf f, fš, l~A'±fuf fbfN, lš—LCE , đ•Ūžç, ·, é, 3/4, ·, l, 1/2, B, ÉAžAŪ, É^ê“x, É•
K—v, É (, Ā, Ū, èžg, x) , æ, è, à'1/2,, lf f, fš, a^—, l, 1/2, B, É—\-ñ, 3, è, é, ±, Æ, a, , è, Ū, ·B, ç, , è, É, μ, Ā, àA
—\-ñŪ, Ÿ, lf f, fšf Afhf fX, a fffBfXfN ä, l•— f f, fš (RAM) , lžA<óšŌ, đ•\, ·, Æ, í, ©, -, è, Ū, 1, ñB
žAŪA^—, lfVfXfef€ ä, Āžg, l, é, æ, è, à'1/2,, lf f, fš, đ—\-ñ, Ā, «, Ū, ·B
%o'1/4'zf f, fšf Afhf fX, đ^—, Éžg, l, é, æ, x, É, ·, é, É, l Af Afhf fX, ÉžAŪ, l<L%o~^æ (RAM
, Ū, 1/2, l fffBfXfN) , Ā'1%ž, ·, éff [f^<L%o~^éš, a•K—v, Ā, ·BfRf~fbfgf f, fš, l—\-
ñŪ, Ÿf Afhf fX, ÉšŌ~A•t, ·, 3, è, 1/2f f, fš, Ā, , èA, μ, 1/2, a, Ā, Ā^ê“É, É'1/4, l^—
l, É, lžg, l, Ū, 1, ñBfRf~fbfgf f, fš, l RAM , Ū, 1/2, l fffBfXfN (fXf fbfvftf@fCf<) , l, ç
, , è, ©, É, , é, l, ĀfVfXfef€, ÉfCf“fXfg [f<Ū, Ÿ, l RAM , l—e—É, đ' , l, é, ±, Æ, a, , è, Ū, ·B

^3kf{fŠf...lf€

u^3kf{fŠf...lf€ftf@fCf<v,Æ,à,ç,ç,Ü,·B^3kffBfXfN,ð\¬-,·,é
%B,µftf@fCf<,Å,·BffBfXfN,ð^3k,·,é,ÆA,»,lftf@fCf<,lTfCfY,Ík¬-,³,èA'P^è,ì^3kf{fŠf...lf€
,É,Ü,Æ,ß,ç,è,Ü,·B^3kf{fŠf...lf€,ízfXfgfhf%ofCfuă,ÉŠ!'[,³,è,Ü,·B

^3k

ff[f^,É•K—v,ÉfRf“fsf...[f^,ì<L%oo^æ,ªCE,é,æ,α
,Éff[f^,ð<Ãk,·,é<ZpB^3k,μ,½ff[f^,í,à,Æ,ì^3k,μ,È,çff[f^,æ,è,àŠi”[Žž,ÉfffBfXfNä,Åè,β,
é•—“l,É—í^æ,ª,È,ªAfrf“fsf...[f^ŠŎ,Å,ì“‘B,à‘¬,-
,É,è,Û,·BCEÂX,ìftf@fCf<,Û,½,ífffBfXfN‘S‘í,í”C^Ó,ìft[fefBfŠfefBf\
ftfgfEjFfA,ðŽg,Á,Å^3k,Å,«,Û,·B

CONFIG.SYS

Windows 95/98: fVfXfef€, ðfn[fhfEjFfA, ð'è, µAfffofCfXfhf
%oCfo, ðf[fh, ·, éfRf}f"fh, º"ü, Á, Ä, ç, éfefLfXfgftf@fCf<BfRf"fsf...
[f^, º<N"® , ·, é, ÆŽ©"® "l, ÉŽÄs, º, ê, Ü, ·B

fRf“fefLfXfgf[]fjf...[]

fCj“f^[]ftfF[]fXfIfufWfFfNfg,đ%EfNfŠfbfN,·,é,Æ•\Ž!,³,ê[]A,»,}fIfufWfFfNfg“Á—
L,}fIfv}Vf#f“,Æ[]î•ñ,đ’ñ<Ÿ,·,éf[]fjf...[][]BfRf“fefLfXfgf[]fjf...[][,É•\
Ž!,³,ê,éfRf}f“fh,í,»,ì,Æ,«,É’l’đ,μ,Ä,ç,éfIfufWfFfNfg,É,Ä,ç,Ä,Ä,«,é‘€[]ì,É%ž,¶,Ä•İ,í,è,Ü,·[]B

~A'±

• "—□"l,É%½,©,Æ—×□Ú,μ,Ä,ç,é,±,Æ□B1 ,Â,ì«ŠE,ð,í,³,ň,Å□Ú,μ,Ä,ç,é,±,Æ□B

fRf“fgf□□[f<f□fjf...□[

fEjBf“fhfE□Af_fCfAf□fOf{fbfNfX□AfAfCfRf“,δ□^—□,Å,«,éf□fjf...□[□BfRf“fgf□□[f<f□fjf...
□[.ÍfRf“fgf□□[f<f□fjf...□[f{fbfNfX,ðfNfŠfbfN,μ,½,Æ,«□A,Ü,½,Íf^fXfNfo□[,ì□Å□_
%o»,³,ê,½fAvfŠfP□[fVf†f“,ÍfAfCfRf“,ð%oEfNfŠfbfN,μ,½,Æ,«,É•\Ž|,³,ê,Ü,·□B□ufVfXfef€f□fjf...
□[□v,Æ,à,ç,ç,Ü,·□B

«'²"l,Éf}f<f`f^fXfN

f}f<f`f^fXfN,î`èží□BfAfvfŠfP□[fvf#f“,É`È`¶,μ□A`èŠú“l,É CPU ,É□],Á,Ä (-¾,~“n,μ,Ä)
flfyfCE□[fefBf“fofvfXfef€,É□§CEä,ð-ß,μ,Û,·□B,»„lžž“_„ÅflfyfCE□[fefBf“fofvfXfef€
,lžc,è,l,Ç,lAfvfŠfP□[fvf#f“,Éžÿ,ì CPU ,Ö,lAfvfZfX,ð<-‰Å,·,é,©CE`è,μ,Û,·□BfAfvfŠfP□[fvf#f“,a-
¾,~“n,·,Û,Å 1 ,Ä,lAfvfŠfP□[fvf#f“,a CPU ,Ö,lAfvfZfX,ð±,·,é,ì,ð<-‰Å,·,é,ì,Å□A,±
,l}f<f`f^fXfN<Z□p,É,í CPU ,ð□è—L,μ,È,ç,æ,α,É□ÝCEv,³,è,½fAfvfŠfP□[fvf#f“,a•K—v,Å,·□B□è—
L,l}f<f`f^fXfN,ì-Û“l,É”½,μ,Û,·□B
Windows ,l’¾,ì Windows fv□fof%of€,Æ,ìCEÝŠ·□«„ð•Û,Å,½,ß,É 32 frfbfgfAfvfŠfP□[fvf#f“,Æ DOS
VM ,Å“®□ì,·,é DOS fAfvfŠfP□[fvf#f“,ÉfvfCEfGf“fvfefBfuf}f<f`f^fXfN,ðžg,ç□AWindows
fAfvfŠfP□[fvf#f“,É«'²"l,Éf}f<f`f^fXfN,ðžg,ç,Û,·□B

fjFef“f^

Windows NT/2000: Windows ,ifufWfFfNfgCE^,i'®«BfIfufWfFfNfg,É,Â,ç
,Ä,ì“CEvî•ñ,đŽ!,•ï“”l,aŠi”[,³,è,Ü,·B,½,Æ,!,îAf□f,fŠIfufWfFfNfgCE^,É,íLfffbfVf...
fofCfjFef“f^,ª, ,èACE»ÝfVfXfef€,iffBfXfNfLfffbfVf...,É-\\-ñ,³,è,Ä,ç,éf□f.fŠ,ì-e-
É,đŽ!,µ,Ü,·B

CPU

Central Processing Unit ('†%oo>^—'•'u) ,ì—ªBCEvŽZ,đ,μA-½—β,đŽÀs,μAfrf"fsf...
[f^,ìŠe•",Æ,ìŠÖ,Åî•ñ,đ"]'—,·,éfRf"fsf...[f^,ì^è•"BPC ,ì,æ,α,Èf}fCfNf"frf"fsf...
[f^,É,íuf}fCfNf"fvf"ZfbfT"v,ÆCEÄ,ì,è,éfVf"fOf`f`fbfv,ì CPU ,ª"«Ú,³,ê,Ä,ç,Ú,·B

fNf fXfŠf“fN,μ,½ftf@fCf<

2 ,Â,î^Ù,È,éftf@fCf<,É'® ,·,éff□[f^ ,áfffBfXfN□ă,Â“^ ,¶fNf%ofXf^ ,ð□è—L,·,é,±,Æ,ðŽ!,· [FAT](#) ,ìfGf
%o□[□ðŒ□□B1 ,Â,ìfNf%ofXf^ ,É“ü,é,í,1 ,Â,ìftf@fCf<—
p,ìff□[f^ ,ÉŒÀ,ç,ê,é,ì,Â□Afnf□fXfŠf“fN,μ,½ftf@fCf<,ífffBfXfN,ìftf@fCf<□\‘ç,É,“,ç,ÄfGf
%o□[,ðŽ!,μ,Û,·□Norton Disk Doctor ,íff□[f^ ,ì-{-,ì□Š'® □æ,ðŒ^'è,μ□A,±,ìŽí—p,ìfGf
%o□[,ð'ù□³,Â,«,Û,·□B

CRC

Cyclic Redundancy Check (CRC) is a type of error-detecting code. It is used to detect errors in data transmission. The CRC is calculated by dividing the data by a polynomial. The remainder of the division is the CRC. The CRC is then appended to the data. The receiver then divides the data by the same polynomial. If the remainder is zero, the data is correct. If the remainder is not zero, there is an error.

fVfŠf“f_

Ž¥<CfffBfXfN ä, ÅfffBfXfN, ì', ©, ç“™ <—£, É, , é'î%ž, ·, égf%fbfN, ìZfbfg B, » , ì, æ, α, Èfgf %fbfN, ìZfbfg, ð W, β, é, Æ%~“>CE` , Å, Ü, èfVfŠf“f_ CE` , É, È, é, ì, Å ufVfŠf“f_ v, ÆCEÅ, Ñ, Ü, · B—¼- Èftf fbfs ìfffBfXfN, ìê#A, Ç, ìVfŠf“f_ , à•\, Æ— , ì 2 , Å, ìgf%fbfN, ì, Ý, Å \ □→, ³, ê, Ü, · Bfn ìfhfffBfXfN, ìê#A fVfŠf“f_ , í, ç, , Å, à, ìgf%fbfN (%~”Ö, ², Æ, ì•\, Æ—) , Å \ □→, ³, ê, Ü, · B

ffCfW[f`fF[f“

ffftHf<fgf{f^f“

f_fCfAf□fOf{fbfNfX,Å□AffffHf<fg,Å'l'ð,³,ê,Ä,ç

,éfRf}f“fhf{f^f“□B,»,l'¼,lRf}f“fhf{f^f“,æ,è□A««ŠE□ü,ª”Z,,È,Á,Ä,ç,Ü,·□Bf_fCfAf□fOf{fbfNfX,ª•\
Žl,³,ê,Ä,ç,éŠÖ,É Enter fL□[,ð%Ÿ,·,Æ□AffffHf<fgf{f^f“,ðfNfŠfbfN,·,é,ì,Æ“~,¶CE<%oÉ,É,È,è,Ü,·□B

'f•D%oo»%oođ□Á

,»ê,¼,è,ìftf@fCf<,đ□\□¬,·,éff□[f^,ª~A'±fffBfXfNfNf%ofXf^,ÉŠi"[,³,ê,é,æ,ϣ
,ÉfffBfXfN□ã,ìftf@fCf<,ì•Ö□¬,đ□C□³,·,é,±,Æ□Bftf@fCf<,ª'f•D%oo»,·,é,ÆfffBfXfN,ì□^—□'¬"x,ª'á
%oo²,μ,Ü,·□B

<L□qŽq

f□f,fŠ,ì“Á`è,ìfZfOf□f“fg,É,Â,ç,Ä,ì□î•ñ,đŠi“[,·,é RAM ,ì—ì^æ□B□fv□fe□Nfgf.□[fh,Å“®□ì,·,é CPU
,ìŠg’£<@“\,ì’â•”•³,ì<L□qŽq,đŽg,±,±,Æ,©,ç”h□¶,μ,Û,·□B<L□qŽq,ì□u<L□qŽqfe□[fuf<□v,Æ,ç,± RAM
,ì“Á•Ê,Ê—ì^æ,ÉfGf“fgfŠ,Æ,μ,ÄŠi“[,³,ê,Û,·□B□zf□ef□nf^,³<L□qŽqfe□[fuf<,ìfGf“fgfŠ,đŽw,μ,Û,·□B

fffofCfXfhf%oofCfo

fRf“fsf...[]f^,afffofCfX (fvfŠf“f^,âf,fff€,È,Ç) ,Æ'Ê[]M,Å,«,é,æ,ɹ,É,·,éfvf[]fOf%of€[]B

Windows ,É,Ífvf[]fefNfgf.[]fh,lfhf%oofCfo,Å, ,é%¼'zfffofCfXfhf%oofCfo,ª, ,è,Ü,·[]B

%¼'zfffofCfXfhf%oofCfo,Í•K—vŽŽ,É” @“l,Éf[][]fh,âf[][]fh%ð[]œ,³,è,Ü,·[]B%ú,ì Windows

,lfo[]fWf‡f” ,Æ DOS ,Å,Í[]AfffofCfXfhf%oofCfo,Í [CONFIG.SYS](#)

ftf@fCf<,Åf[][]fh,³,è,ÄŠfAf<f.[]fh,Å,Í,Ý” @[]ì,μ,Ü,μ,½[]B

f_fCfA_fOf{fbfNfX

□î•ñ,ð—v<□,Ü,½,í'ñ<ÿ,·,é“Á•Ê,ÈŽí—p,ìfEfBf“fhfE,Å,·□B

ffBfCEfNfgfŠ

ffBfŒfNfgfŠfcŠ[]

ffBfCEfNfgfŠ'®□◀

ftfHf<f_, Å, éffBfCEfNfgfŠfGf"fgfŠ ,đŽ⁻•Ê,.,éftf@fCf<'®□◀□B

ffffBfXfN,íf<[fgfffBfCefNfgfŠ,Ü,½,íffffBfXfNä,ìĈĀX,ì€-Ú,ð<Lq,·,éftfHf<f_

(‘Ēí,íftf@fCf<,Ü,½,íftfHf<f_üj,ÉŠi”[,³,ê,éî•ñBffffBfCefNfgfŠfGf“fgfŠ,É,Í-
¼‘O□A□ê□S□AftfCfY,Æ□€-Ú,ì“Á•Ē,Ēftf@fCf<’@□□«,Ē,Ç,ìî•ñ,ª“ü,Á,Ā,ç
,Ü,·□B,Ç,íftf@fCf<,âftfHf<f_É,àffffBfXfN□ä,É‘í%ž,·,éffffBfCefNfgfŠfGf“fgfŠ,ª, ,è,Ü,·□B‘·,çftf@fCf<=
¼,ª•t,ftf@fCf<,í 1 ,Ā^Ē□ä,íffffBfCefNfgfŠfGf“fgfŠ,É‘·,ç-¼‘O,ðŽó,~“ü,ê,é,æ,α,É-v<□,·,é,±
,Æ,ª, ,è,Ü,·□B~_—□ffffBfXfN,²,Æ,ÉffffBfXfN,íf{fŠf...□[f€f
%ofxf<,ðŠi”[,·,éffffBfCefNfgfŠfGf“fgfŠ,ª“ü,Á,Ā,ç,é,±,Æ,ª, ,è,Ü,·□B

ffBfXfNfLffbfVf...

RAM ,đŽg,Á,Ä^èŽž“l,Éff□[f^,đffBfXfN,©,çŠi“l,·,éLffbfVf...,)Ží—P□BŽ¥<CffBfXfN,Ü,½,í CD-ROM ,©,ç,lff□[f^fAfNfZfX,í RAM ,lff□[f^fAfNfZfX,É”ä,x,Ä’Š’í“l,É’á’¬,Ä,·□B

fffBfXfNfRf“fgf□□[f%◦

fffBfXfNfhf%◦fCfu,Æ CPU ,l'Ê□M,ö□\$CEä,.,éfn□[fhfEfFfAfrf“f|□[flf“fg□B

ffBfXfNf{fŠf...[]f€

ffBfXfvfCfCfAf_fvf^

DLL

Dynamic Link Library ,i—ª□BfAfvfŠfP□[fvf#f“ ,iŽÀ□s,É,æ,Á,Ä<¤—L,Å,« ,éŽÀ□s%oÅ“\ ,ÉfR□[fh,ª“ü,Á,Ä,¢ ,é Windows ftf@fCf<□BDLL ,ðŽg,¤,ÆfAfvfŠfP□[fvf#f“ ,Å“Á'è,ì<@“\ ,ðŽÀ□s,· ,é,½,ß,É•K—v,È'¼,ìfŠ^□[fX,à<¤—L,Å,« ,Ü,·□B

• 1. 'fEjBf"fhfE

• \CEvŽZf□□[fNjV□[fg,Ü,½,ÍfefLjXfgftf@fCf<,È,Ç,İfAfvfŠfP□[fVf#f" • 1. ' , δ • \Ž | , . , éfEjBf"fhfE□B

DOS f, fš

fRf“fsf... [f^f, fš, ì Å%, ì 1MB B, fRf“fxf“fvfif<f, fš, Æ UMA, Å\ - , ³, ê, Ü, . B

DOS VM

DOS Virtual Machine , à BDOS fAfvfŠfP[fVf#f“ , ì, ½, ß, É Windows , à Intel 80386 ^È ã, ì [CPU](#) , ì %oo¼'zf, [fh, Å ì ñ, , é%oo¼'zf}fVf“ , ÌŽ í—p BWindows , íĈĀ—L, ì DOS VM , ì'†, Ā“ © ì, μfvfĈfGf“fvfefBfuf}f<f f^fXfN, Ā^—, ³, ê, Û, ·BfvfXfef€ VM , Ā“ äŠr, μ, Ā,, ¾, ¾, †B

fhf[]bfvf_fEf“fRf“f{f{fbfNfX

fejLfXfgf{fbfNfX,Æfhf[]bfvf_fEf“fŠfXfg (fvf[]f“fvfgf{f^f“,đfNfŠfbfN,.,é,Æ%oo°,É‘l’đfŠfXfg,³•\
Ž|,³,ê,é) ,đ‘g,Ý[]†,í,¹,½“Á•Ê,ÊfRf“f{f{fbfNfX[]B

fhf□fbfvf_fEf“fŠfXfg

fvf□f“fvfgf{f^f”, ðfNfŠfbfN, ·, é, Æ□A%º, É'! 'ðfŠfXfg, ð•\Ž|, ·, éfŠfXfgf{fbfNfX□B□€-
Ú, º'! 'ð, º, è, é, Æ□A fŠfXfg, Í•Â, ¶, Ü, ·□B

DRAM

'É□í,íRf"fsf...□[f^,íŽâ<L%~ RAM ,ì,½,β,ÉŽg,í,ê,é"¼"±'ífx□[fX,íf□f,fŠ,íŽí—p□BDRAM
f`fbfv,íŽžŠÖ,ª,½,Â,Æ"d%o×,ª□Á,í,éfRf"fff"ft,ð"à' ,.é,ì,Á□AŠi"[□í,Y,ì□î•ñ,ð□â,í,□',«'¼,·
(,Â,Û,è□u□X□V□v,·,é) ,æ,α,ÉfRf"fsf...□[f^,É—v<□,μ,Û,·□B,±,ê,í□X□V,ð—v<□,μ,É,ç,Á□î•ñ,ð•Û,Â
SRAM f`fbfv,Æ'í□Æ"l,Â,·□B,±,ê,ç,íŽí—p,ì RAM ,í—¼•û,Æ,àŠö"□«,íf□[f^<L%~^æ,ð—p^Ó,μ,Â,ç
,Û,·□BDRAM f`fbfv,í,æ,è^À%o¿,Á SRAM f`fbfv,æ,è'½,,ì□î•ñ,ðŠi"[μ,Û,·,ª□ADRAM
,ì□î•ñ,ÉfAfNfzfx,·,é,ì,É,íŽžŠÖ,ª,©,©,è,Û,·□B

DRVSPACE.BIN

Windows 95: DriveSpace, É, æ, Á, Ä³ k, ³, ê, ½fhf%ofCfu, ðfTf|[]fg, ·, é, ½, ß, ÉŽg, í, ê, é DOS, ìfhf%ofCfo[]B

“džqf□□[f<

Electronic ,ì“ª•¶Žš,ì E ,đ,Æ,Á,Ä□uE f□□[f<□v,Æ,à,ç,ç,Ü,·□B<κ'Ê,ìfRf“fsf...□[f^flfbfgf□□[fN,đ<κ—
L,·,é□l,Ü,½,í,»±,ÉfAfnfZfX,Å,«,é□l,Éf□fbfZ□[fW,âî•ñ,đ (ftf@fCf<,đŠÜ,ß,Ä) ‘—□M,Å,«,Ü,·□B

EGA

Enhanced Graphics Array , Ì—ªBfp [f\jif<fRf“fsf... [f^, ÅŽg, í, ê, éfrfffIfAf_fvf^f{ [fh, Ì 1 ŽíBPC
—pfrfffIfffBfXfvfCfC•W [€, Ì“W, É, ”, ç, Å EGA , Ì CGA , ÌCã, ÉŠ” , ³, ê, Ü, µ, ½BEGA fj [fh, É, Ì, ç, -
, Å, ©, ÌfrfffIf, [fh,ª, , è, Ü, ,ªAfOf%oftfBfbfN,ÆfefLfXfg, Å 16 [F, Ì [SCEÀ,ª, , è, Ü, ·B

EISA

Extended Industry Standard Architecture ,ì—ª,Å□ufC□[fT□v,Æ”%oo¹,μ,Ü,·□BISA fofX,ÉŠî,Ã,-
fRf“fsf...□[f^fofX,ì—Ž@□B32 frfbfgff□[f^fpfX,đŽg,ϕ□AISA fofX,É,Í,É,ϕ□,“x,È<@”\,đ”ō,ı,Ã,ϕ
,Ü,·□BISA Šg’£fj□[fh,đ EISA fofXfRfjNf^,É□·,μ□ž,p,±,Æ,Í,Å,«,Ü,·ª□AEISA fofX,ì□,“x,È<@”\,Í—
p,Å,«,Ü,¹,ñ□B

E f□□f<

ŠĀ««•İ”

ŠĀ««•İ” ,İfİfyfĈ[fefBf“fOfVfXfef€
,Æ,» ,İ¼,İfAfvfŠfP[fVf#f” ,Žg,ŞeŽÍ,İfOf[fof<,ÈŸ’è,đŠi”[,µ,Ü,·B,±
,ê,ç,İŸ’è,İ•İX,Ā,«ASĀ««•İ” ,ÉĈ»Ÿ,İŸ’è,Ši”[,³,ê,Ü,·BDOS ,ĀŽg,í,ê,é“TĈ^“İ,ÈŠĀ««•İ” ,İ
PROMPTĀTEMPĀPATH ,È,Ç,Ā,·BPROMPT ,Í DOS fvf“fvfg,đ,Ç,Ş•\
Ž! , ,é,©,đŽw’è, ,éŠĀ««•İ” ,Ā,·BTEMP ,İ^èŽŽ“İ,ÈfvfOf%of€,İ<L
%o~^æ,İ,½,ß,ÉŽg,ŞftfHf<f_ ,đŽw’è, ,éŠĀ««•İ” ,Ā,·BPATH ,İfİfyfĈ[fefBf“fOfVfXfef€,İfRf}f“fhf
%ofCf” ,Ā“ü—İ, ,éŽĀ[s%oĀ“\,ÈfvfOf%of€,đĈŸö, ,éftfHf<f_ ,İfŠfXfg,đŽw’è, ,éŠĀ««•İ” ,Ā,·B
Ĉ»Ÿ,İ’è<`İ,Ÿ,İŠĀ««•İ”Ÿ’è,đĈ© ,é,É,İADOS fEfBf“fhfE,đŠJ,č,ĀfRf}f“fhfvf“fvfg,Ā SET ,Æ“ü
—İ,µ,Ü,·B

EPROM

Erasable Programmable Read-Only Memory, è—ª, ÅufC[f]s[f]f€v,Æ”%º¹,µ,Û,·B<-
,çŽšŒŒü,ð”-,Ä,Ä^È’O,lfvf[f]Of%ºf€,ðÁ<Ž,µ,½Œä,ÅÄfvf[f]Of%ºf€,Å,«,é PROM ,lŽí—
pBEPROM ,í•sŠö”◀f[f],fŠ,Å,·ªAŠi”[f]i,Ý,lî•ñ,ðÁ<Ž,·,é,É,l•”—f”l,ÉfRf”fsf...
[f^,©,çŽæ,è,í,,·K—v,ª, ,è,Û,·B

DEF_EPROM topic.

EMS f, fš

Expanded Memory Specification, l—^aBfšfAf<f.□[fh, Å“®□i, ;é DOS fAfvfšfP□[fVf†f“ ,Å 640KB
,đ“ ,í, éf□f, fš, đŽg, í, é, æ, x, É, ;, é, ½, ß, lžd—l□BEMS ,ífRf“ fsf...□[f^, í [UMA](#) , đŽg, Å, Å 1 BM
,đ“ ,í, éf□f, fš, l□è□š, đ^èŽž“l, Éf}fbfv, μ, Ü, ·□B, ±, ê, ç, lf□f, fš, l□è□š, đ□Å□%o, l 1MB
^È“à, ÉĀ© ,í, é, æ, x, É, ;, é, ±, Æ, ÅfAfvfšfP□[fVf†f“ , ©, çfAfNfZfX, Å, «, Ü, ·□BEMS , đŽg, x, É, í EMM
(Expanded Memory Manager) ,Æ, ç, x“Å•É, Èf\ftfgfEjFfA, ^a•K—v, Å, ·□B80386 ^È□ă, l [CPU](#)
,đ“ <□Ú, ·, éfRf“ fsf...□[f^, í EMM386.EXE
, È, Ç, lf□f, fšf}f□[fWff, đŽg, Å, Åšg'Éf□f, fš, ÉfAfNfZfX, μ, Ü, ·□B

Šg'£f{[]fh

fRf“fsf...[]f^,î<@”\,ðŠg'£

(,½,Æ,!,î[]AfWf#fCfXfefBfbfN[]AfTfEf“fh[]Af}f<f`f[]ffjBfAfffofCfX[]AfIfbfgf[][]fN[]Ú'±,ðfTf|[]fG)

,·,é,½,ß,ÉfRf“fsf...[]f^“à•”,lfXf[]fbfg,É[],μ[]ž,p%ñ~HŠî”Â

(,Ü,½,íj[]fh)[]BŠg'£f{[]fh,ð[]ufAf_fvf^[]v,Ü,½,í[]ufAf_fvf^fj[]fh[]v,Æ,à,ç,ç,Ü,·[]B

EDO RAM

Extended Data Out Random Access Memory, $\dot{i} - a \square B \square \hat{A} < \beta - v < \square, ^3, \hat{e}, \frac{1}{2} f f \square [f \wedge, \delta$
%oδ•úCEã,ÉfLfffbfVf... 't,É•Û,Ä,é□V,μ,ϕ□, '¬,É **DRAM**, Ĩí—p□BEDO RAM, í□^—□'¬“x, ð 20%
,Ü,ÅCEü□ã,μ,Û,·□B

XMS fmf, fš

fRf“fsf... [f^, i Å % , 1 MB , æ, è, à ä, i RAM B'É í AŠg'£f f, fš, í fvf fef Nfgf. [f, Ü, ½, í %¼'zf. [f, Å“ @ ì, , éfRf“fsf... [f^, Å, ì, ÝfAfNfZfX, Å, «, Ü, . BXMS (Extended Memory Specification, i—^a) , íŠfAf<f. [f, ífAfvfŠfP [fVf†f“ , ÅŠg'£f f, fš, ðŽg, i, é, æ, x, É, ., é, ½, ß, É Lotus Alintel AMicrosoft, AAST Research, íŠeŽĐ, ^a'è<` , , é•W €f\ftfgfEjFfAfCf“f^ [ftfF [fXŽd— l, Å, . BXMS, ðŽg, x, É, í EMM (Expanded Memory Manager) , Æ, ç, x“Á•É, Éf\ftfgfEjFfA, ^a•K— v, Å, . B

fRf“fxf“fv†fif<f f, fš AUMA AEMS, àŽQ Æ, µ, Ä, , ¾, ¾, ç B

ŠO"”f□f,fŠfLffffbfVf...

"ň□í,É□,‘¬,È CPU ,ÆfRf“fsf...□[f^,ìŽã<L%o~ RAM ,ì’á’¬,È DRAM f`fbfv,ìŠÖ,ð’±%oî,·,éLffffbfVf...
□BŠO•”f□f,fŠfLffffbfVf...,í□,‘¬,È SRAM f`fbfv,ìfn□[fhfEfFfA%oñ~H,ðŽg,Á,Äf
ftfgfEfFfA,ð□\$CEä,μ,Û,·□BŠO•”f□f,fŠfLffffbfVf...,í CPU ,ìŠO•”,É, ,é,ì,Å“à•”f□f,fŠfLffffbfVf...
,æ,è,à’á’¬,Ä,·□B,ç, ,è,ìf□f,fŠfLffffbfVf...,à CPU ,^a RAM,É—
v<□,·,é•p“x,^a□Ä,à□,,çff□[f^,ðŠi”[,μ,Û,·□Bf□f,fŠfLffffbfVf...,í RAM ,æ,è,à,·,î,â, CPU ,Éff□[f^,ð’—
,é,ì,Å□AfRf“fsf...□[f^,ì□^—□CEø—|,^aCEü□ã,μ,Û,·□BŠO•”f□f,fŠfLffffbfVf...,ð□u“ňŽÝfLffffbfVf...
□v□ufCEfxf< 2 fLffffbfVf...□v□uL2 fLffffbfVf...□v,Æ,à,ç,ç,Û,·□B

ftj@fCf.š,,è“-,ÄfGf%o[]

ftj@fCf<,iffBfEfNfgfŠfGf“fgfŠ,ž!,.ftj@fCf<fTfCfY,Æ FAT ,ì†,ÅŠÖ~A•t,¯³,é,fNf
%ofXf^,ìĈĀ”,ž!,.ftj@fCf<fTfCfY,ì•s^é'v[]B

FAT32

Microsoft ŽĐ,ªŸŒv,µ,½V,µ,†ftf@fCf<fvfXfef€B'å—e—Êfn[fhfffBfXfnfhf%ofCfu,đfTf|
[fg,µi“Á,É'å—e—ÊfffBfXfnã,Åj,†,Á,»»,æŒø—!“l,ÊfffBfXfn—í^æ,đŽg,†,Û,·B

FAT

ftf@fCf<fVfXfef€, í, à, Æ, à, Æftf[]fbfs[]ffBfXfN—p, ÉŸŒv, ³, è DOS flfyfŒ[]fjefBf“fofVfXfef€, Åì—
p, ³, è, Ü, µ, ½BFAT ftf@fCf<fVfXfef€, Æ, ç, x-¼'O, ÅŒÄ, Ö, Ì, Í [FAT](#)
, ðŽg, Á, ÄffBfXfN[]ä, Ì, ;, x, Ä, ÌfAf[]fP[]fVf†“ftfjfbfgfNf%ofXf^, ÌS,,, è—
, Ä[]i•ñ, ð<L~^, ;, é, ©, ç, Å, ·BFAT ftf@fCf<fVfXfef€, Í [NTFS](#) , Ì, æ, x, É'å—e—Ê, ÌffBfXfN, âtf@fCf<, ðfTf|
[]fç, µ, Ü, ¹, ñ[]B

Windows NT/2000 , Å, Ìfn[]fhffBfXfN, Í FAT ftf@fCf<fVfXfef€—p, Ü, ½, Í NTFS —
p, ÉftfH[]f}fbfg, ³, è, Ü, ·Bftf[]fbfs[]ffBfXfN, Í FAT ftf@fCf<fVfXfef€—p, É, Ì, ÝftfH[]f}fbfg, ³, è, Ü, ·B

FAT

ftf@fCf'®□◀

ftf@fCf'®□◀,ífffBfCEfNfgfŠfGf"fgfŠ,Å•\,ff□[f^,ì"Á'è,ì□◀Žì,đ<L□q,μ□AflfyfCE□[fefBf"fOfVfXfef€
,Å,»,íff□[f^,đ,Ç,π□^—

□,·,é,©,đCE^'è,μ,Û,·□B,Ç,ìftf@fCf'®□◀,àfffBfCEfNfgfŠfGf"fgfŠ,Æ^ê□□,ÉŠi"l,³,ê,éff□[f^,ì'P^ê,ìfrf
bfg,Å•\CE»,³,è,Û,·□B1 frfbfg,É,ílf",Æfift,ì 2 ,Å,ì□ó'Ö,μ,©,È,ç

,ì,Å□Aftf@fCf'®□◀,ªŽì,·,ì,ífffBfCEfNfgfŠfGf"fgfŠ,ª,»,ì'®□◀,đ□^—□,Å,«,é,©,Å,«,È,ç
,©,Å,·□Bftf@fCf'®□◀,íŽÝ,ì 6 ,Å,Å,·□B

- fA□[fjfCfu'®□◀
- ftfHf<f'®□◀
- %oB,μ'®□◀
- "Ç,ÝŽæ,è□ê—p'®□◀
- fVfXfef€'®□◀
- f{fŠf...□[f€f%ofxf<'®□◀

ftj@fCf·fT[]fo[]

f|fbfgf[]fNft[]fU[][,^a<κ—L,ifAfvfŠfP[]fVf#f",Æff[]f^ftj@fCf<,ÉfAfNfZfX,Å,«,é,æ,κ
,É,·,é[]A|fbfgf[]fN,É[]Ú'±,³,ê,³/₂+%>fffBfXfN<L%o~'•'u[]BLAN ,àŽQ[]Æ,μ,Ä,,³/₄,³,ç[]B

ftj@[]f€fEjFfA

•sŠö"«f[]f,š ,ÉŠi"[,³,ê,é\ftfgfEjFfA[]BfRf"fsf...[]f^,ì ROM BIOS ,í[]Å,à^ê"Ê"l,Èftj@[]f€fEjFfA,ì
—á,Å,·[]B

ftf%ofbfVf...f[]f,fš

Intel ,^aSj” ,μ,½”¼“±‘İfx[]fX,İ•sŠö”□«f[]f,fš□Bftf%ofbfVf...f[]f,fš,Í **EEPROM** ,Æ“˘ ,¶,æ,κ
,É“dŽq“İ,É□Á<Ž%Ä”\,É,İ,ÄfRf“fsf...[]f^,©,çZæ,è,İ, ,³,È,,Ä,à□Äfvf[]fOf%of€ ,Ä,« ,Ü,·□B,±,İŽí—
p,İf[]f,fš,İfuf[]fbfN,Ä□Á<Ž,·,é•K—v,^a , ,é,İ,Ä 1 %oň,ÉfofCfg‘P^Ê,Ä%ü•İ,·,é,±
,Æ,İ,Ä,« ,Ü,¹,ň□B,μ,½,^a,Ä□AfRf“fsf...[]f^,İŽâ<L%o˘ **RAM** ,İ‘u,«Š,İ,É,Í“K,μ,Ü,¹,ň,^aftf%ofbfVf...
f[]f,fš,İf[]f^fuf<fRf“fsf...[]f^,İf[]f,fš,ð•â,κ,½,β,É **PC f[]f[]fh**,É,æ,Žg,İ,é,Ü,·□B
ftf%ofbfVf...f[]f,fš,ðŽg,κ 1 ,Ä,İ—á,İfVfXfef€ **BIOS** —p,Ä,·□B<ÆŽ® ,İ ROM BIOS
f`fbfv,İ□ê[]±,ÉfRf“fsf...[]f^,İ BIOS ,ð□X□V,·,é,É,İ•˘—□“İ,É‘uŠ,·,é•K—v,^a , ,é,İ,É‘İ,μ□A,±,İŽí—p,İ
BIOS ,İf\ftfgfEfFfA,Ä□X□V,Ä,« ,Ü,·□B

ftfjfbfs[fffBfXfN

ff[f^,đŠi"[.,é,½,β,ÉŽg,í,ê,éŽ¥<C"}'ì,ì^êŽí□BŽ¥<C"}'ì,í"-.,Ä•½,ç,Èf}fCf%oo[fffBfXfN,É□Ú'...
,³,ê,Ä,ç,é,ì,Åftfjfbfs[fffBfXfN,í□_“î,Å,·□B,±
,ê,íŽ¥<CfR□[fejBf“fO,μ,½CE~,ç'f□P,ÅCE`□-,³,ê,éfn□[fhfffBfXfN,Æ'î□Æ“ì,Å,·□BCE»□ÝŽg,í,ê,é□Å,à^
ê”Ê“ì,Éftfjfbfs[fffBfXfN,ìftfH□[f}fbfg,í 3.5
fCf“f` ,Å,·□Bftfjfbfs[fffBfXfN,đ□ufffBfXfPfbfg□v,Æ,à,ç,ç,Ü,·□B

ftfHf<f_


fffBfXfN□ä,Å 1 ,Â,İftfHf<f_ ,İftf@fCf<,Ü,½,İftfHf<f_ ,đ<L□q,·,éfffBf<EfNfgfŠfGf"fgfŠ.İfŠfXfg,Å\ □→,³,ê,Ü,·□BftfHf<f_ ,İ't,É,İ'¼,İftfHf<f_ ,đ"ü,ê,é,± ,Æ,ª,Â,«,é,İ,ÂftfHf<f_ ,İff□İf^ ,đŠK'w•Ö□→,Â,«,Ü,·□BfffBfXfN,İŠî-{fRf"fefi,İf<□İfgfffBf<EfNfgfŠ,Å, ,è <t<É"İ,ÉfffBfXfN□ä,İ,·,x,Â,İftfHf<f_ ,ª,»,±,É"ü,è,Ü,·□BWindows ,â¼,İ GUI ,İ%œ- É,ÂftfHf<f_ ,İftfHf<f_ ,İCE` ,đ,µ,½fAfCfRf" ,Å•\,³,ê,Ü,·□B

fcfŠ[]^ê—

fffBfXfN,if<[]fgfffBfCefNfgfŠ,đ<N“_É,·,éfffBfXfN[]ã,iftfHf<f_,ì•Ò□-□Bf<[]fgfffBfCefNfgfŠ,É,iftf@fC
f<,âftfHf<f_,^“ü,è,Û,·□B ,»è,¼,è,iftfHf<f_Ž©‘ì,É,iftf@fCf<,Û,½,í¼,iftfHf<f_,^“ü,è,Û,·□B
ftfHf<f_,ìŠK‘w,đ□□-·,·,é,±,ì•Ò□-□\ç,đftfHf<f_fcfcfŠ[][,Æ,ç,ç,Û,·□B Windows 95
,æ,è,à‘O,É,iftfHf<f_fcfcfŠ[][,đ□ufffBfCefNfgfŠfcfcfŠ[]□v,ÆCEÄ,Ñ,Û,μ,½□B

ftfHfAfOf%ofEf“fh

ftfHfAfOf%ofEf“fh, ĀŽĀ□s't, lfAfvfŠfP□[fVf†f“, lfAfNfefBfufEfBf“fhfE, É•\
Ž!,³, ê, Ū, ·□BffftfHf<fg, Ā, l□AftfHfAfOf%ofEf“fh, ĀŽĀ□s,³, ê, éfAfvfŠfP□[fVf†f“, lfRf“fsf...
□[f^, î^êŽYf^fXfN, Ā, , è□AŽc, è, lŽĀ□s't, lfAfvfŠfP□[fVf†f“, æ, è, à□, †“ä—, Ā CPU , l□^—
□ŽžŠŌ, đŽó, ~Žæ, è, Ū, ·□BfofbfNfOf
%ofEf“fh, ĀŽĀ□s't, Æ□l, l, ç, è, éŽc, è, lfAfvfŠfP□[fVf†f“, l□AftfHfAfOf%ofEf“fhf^fXfN, l□^—□, ì'â•”•a, a
—Ž, ž'..., Æ CPU , ©, ç, », lfAfef“fVf†f“, đŽó, ~Žæ, è, Ū, ·□B

 **Windows NT/2000:** ftfHfAfOf%ofEf“fh, ÆfofbfNfOf%ofEf“fh, lf^fXfN, ÉŠ,, è“ -
, Ā, é'S'î“l, É□^—□fAfef“fVf†f“, đ•l□X, Ā, «, Ū, ·□BWindows NT
, l□ê□‡, É, lfRf“fgf□□[f<fpf|f<, l□mfVfXfef€□n, Ā□mfptfH□[f}f“fX□nfy□[fW, đ•\
Ž!, μ, Ā□mfAfvfŠfP□[fVf†f“, l□^—□—D□æ“x□nfOf<□[fv, É, , éfXf
%ofCf_□[, đ“ @, ©, μ, Ā'²□@, μ, Ū, ·□BWindows 2000
, l□ê□‡, É, lfRf“fgf□□[f<fpf|f<, l□mfVfXfef€□n, Ā□m□Ú□x□nfy□[fW, đ•\
Ž!, μ, Ā□mfptfH□[f}f“fXf|fvfVf†f“(P)□n, đfNfŠfbfN, μ, Ū, ·□B

ftfH[f]fbfg

ŽŸ<CfffBfXfN (,Ü,½,í¼,ì·Šúff[f^<L%~"}ì),đŽg,í,é,æ,α
,É,·,é€"öBffBfXfN,ìftfH[f]fbfg,Æ,í'áfCfxf<ftfH[f]fbfgAfffBfXfN,ìfp[fe'fVf#f"•ªŠ,, (fn[fh
fffBfXfN ,ìê±,ì,Ý)A,fCfxf<ftfH[f]fbfg,É,Ç,ì'ì,Å,·B

4 • ũŒüŸ'è~A'zflffbfVf...

RAM ōã,ì"Á'è,ìêŸ,É, ,éff[f^,ðflffbfVf...,ì't,É, ,é 4 ,Â,ìêŸ,ì,Ç,±,©,ÉfRfs[.,,é,±
,Æ,É,æ,Á,ÄŽÀŒ»,³,ê,éflffbfVf...<ZpBflffbfVf...,^a 4 ,Â,ì—
ì^æ,Û,½,ÍZfbfg,É•^aŸ,,,³,êA,»,ê,¼,ê,ì—ì^æ,^aÆ—š,μ,½'¼Úf}fbfvfLffbfVf...,Æ,μ,Ä<@"\
,μ,Û,·B

'f•D%oo»

ftf@fCf<,đ\□-.,éff□lf^,afffBfXfN□ã,ì~A'±
,μ,É,ç□ê□Š,ÉŠi"[³,ê,é□ó'Ó□B,»è,¼,ê,ì'f•D,íftf@fCf<,ì^è•",ª"ü,Á,Ä,ç,é~A'±,μ,É,çfNf
%ofXf^,Ä,·□B'f•D%oo»,íftf@fCf<,ìì□-□A^Ú"®□A□í□œ,É,Ç'É□í,ì□-□'t,É<N,«,Ü,·□B'f•D
%oo»,μ,½□î•ñ,ì'f•D%oo»,μ,Ä,ç,É,ç□î•ñ,æ,è,à"Ç,Ý□',«fwfbfh,ì^Ú"®^ª½,-
,É,é•ª^¾,ffBfXfN,©,ç,ì"Ç,ÝŽæ,è,ÉŽŽŠÔ^ª,©,©,è,Ü,·□B'f•D%oo»,í□í□œftf@fCf<,đ
%oñ•œ,Ä,«,É,çCE^ö,É,à,É,è,Ü,·□B'f•D%oo»%ođ□Á,àŽQ□Æ,μ,Ä,,¾³,ç□B

GDI

Graphics Device Interface ,ì—ª□B

Windows 95/98/Me: ftfHf“fg□A•`%œ—v‘f□A□FŠÇ—□,đŽn,ß,Æ,·,é Windows ,ìfOf
%oftfBfbfN<@”\,đfTf□□[fg,·,éfCf“f^□[ftfF□[fX□BWindows ,É,ÍŽà,ÈfTfufVfXfef€,Æ,μ,ÁfJ□[flf<□AfOf
%oftfBfbfNfXfffofCfXfCf“f^□[ftfF□[fX□AUSER fŠfN□[fX,ì 3 Ží—p,ª, ,è,Û,·□B

GDI fšf\[]fX

Windows 95/98/Me: Windows ,ì [GDI](#) ,ÉŠ,,è“- ,Ä,ç,ê,½fšf\[]fX[]BGDI
,ÍftfHf“fg[]Afvfšf~fefBfu,ì[]Ä•`%œ[]A []F,ìŠÇ—[],ðŠÚ,ß,Ä Windows ,ìfOf%oftfBfbfN<@”\,ðfTf|
[]f[]g,μ,Û,·[]BWindows fTfufVfXfef€,Ífj[][]f[]f<[]AGDI[][AUSER fšf\\[\]fX](#),Å[]\[]- ,³,ê,Û,·[]B

fOf%oftfBfbfNfXfj[]fh

fffBfXfvfCefCffofCfX,ifOf%oftfBfbfN<@"\ (fffBfXfvfCefC,É,Ç) ,ðTfj|

[]fg,·,éŠg'£fj[]fh[]B[]ufffBfXfvfCefCfAf_fvf^[]v,Û,½,Í[]ufrfflfj[]fh[]v,Æ,à,ç,ç,Û,·[]B

fOj%oftfBfbfNfXf[]fNfXfe[]fVf#f“

fOf<□[fvf{fbfNfX

ŠÖ~A,·,éfRf“f|□[flf“fg,ðfOf<□[fv,É•ª,¯,éf_fCfAf□fOf{fbfNfX,ì GUI fRf“f|

□[flf“fg□BfOf<□[fvf{fbfNfX,í<«ŠE□ü,Æf^fCfgef<,Å□\

□¬,³,ê,Ü,·□BfOf<□[fvf{fbfNfX,ì†,Éf`fFfbfNf{fbfNfX,ÆflfvfVf†f“f{f^f“,ª“ü,Á,Ä,ç,é,±,Æ,ª,æ,, ,è,Ü,
·□B

fn [fhfffBfXfN

ff [f^, <L%¯, ÉŽg, í, è, éŽ¥<C”} ‘ì, ì 1 Ži [Bfn [fhfffBfXfN, íft [fbfs [fffBfXfN, Æ^Ù, È, è_ “i [«, ¢, È, -
Žæ, è, í, , 1, Û, 1, ñ [Bft [fbfs [fffBfXfN, æ, è, à ‘½, , iff [f^, ð • Û ‘¶, Å, « [A, Û, Æ, ñ, Ç, ìp [fjif <fRf “fsf...
 [f^, É, Æ, Á, Ä, Ì ‘Šú “i, Èff [f^ <L%¯, ìŽå—v ‘• u, Å, · [B

%oB,μ'®□«

,±,ìftf@fCf<'®□«,íffftfHf<fg,ÅfŠfXfg,É•\

Ž!,³,é,É,çfffBfCfNfgfŠfGf“fgfŠ,đŽ⁻•Ê,·,é,½,β,ÉŽg,í,è,Ü,·□B'Êí□A%oB,μftf@fCf<,â%oB,μftfHf<f_í

DOS fvff“fvfg,Å DIR fRf}f“fh,ìŽÀ□sŽž,É•\Ž!,³,é,Ü,¹,ñ□BfifvfVf†f“,Å Windows ,Ü,¹/₂,í DOS

fvff“fvfg,Å DIR fRf}f“fh,ìŽÀ□sŽž,É%oB,μftf@fCf<,â%oB,μftfHf<f_đ•\Ž!,·,é,æ,α,ÉŽw'è,Å,«,Ü,·□B

'·,çftf@fCf<-¼,đ•\·,fffBfCfNfgfŠfGf“fgfŠ,É,íf{fŠf...□[f€f%oofxf<'®□«□A%oB,μ'®□«□A“C,ÝŽæ,è□ê

—p'®□«,□A[VfXfef€'®□«,ìfZfbfg,^a, ,è,Ü,·□B,±,ìftf@fCf<'®□«,ì'g,Ý□‡,í,¹,í'·,çftf@fCf<-¼,É“Á—

L,Å,·□B

□,fCfxf<ftfH□[f]fbfg

~_—□fffBfXfN,đŽg,!,é,æ,α,É,·,é□€"ö,ì□^—□□BflfyfC□[fefBf"fOfVfXfef€
,āfffBfXfN,đfAfNfZfX,·,é,½,β,ÉŽg,αff□[f^□\‘¢,đ‘Ç%oÁ,μ,Û,·□B,±
,ì□€"ö,ì‘iŠK,ÅfffBfXfN□ā,ìftf@fCf<•Ö□~,ì~‘g‘g (fu□[fgfCfR□[fh□AFAT□Af<□[fgfffBfCfNfgfŠ)
,^a□ì□~,³,é,Û,·□B□,fCfxf<ftfH□[f]fbfg,đ□u~_—□ftfH□[f]fbfg□v□uf<ftfgftfH□[f]fbfg□v,Æ,à,¢,¢
,Û,·□B

□,fCfxf<ftfH□[f]fbfg,íŽ¥<CfffBfXfN,đŽg,!,é,æ,α,É□€"ö,·,éfXfefbfv,ì 1 ,Â,Â,·□B
fn□[fhfffBfXfN,đŽg,!,é,æ,α,É,·,é□€"ö,ì•"__
□ftfH□[f]fbfg□Afp□[fefBfVf#f"•^aŠ,,□A□,fCfxf<ftfH□[f]fbfg,ì□‡,É□i,β,Û,·□B

HMA

High Memory Area , à B [XMS](#) f f, fš, ì Å % , ì 64 KB B " Á • Ê , Ê f f, fššç — f f f g f E f f A, ð Ž g, ¢ , Æ ^ ê • " , ì f A f v f š f P [f V f f " , Å HMA , ð f R f " f x f " f V f f i f < f f . f š , Æ , µ , Ä Ž g, ì , Ü , · B

fcf[]fw

Norton Utilities ,ì Image fv[]fOf%of€
,³ffBfXfN,ìufXfjfbfvfVf‡fbfg[]v,đŽB,Á,Ä[]ì[]-,·,é“Á•Ê,Èftj@fCf<[]BffBfXfN,ìd—v,È[]î•ñ
([fu\[\]fgfCEfR\[\]fh\[\]AFAT\[\]Af<\[\]fg](#),ì[]î•ñ) ,ªŠi”[,³,ê,Ü,·[]B

INI ftf@fCf<

.INI ,Æ,ç,¤Šg'fŽq,^a•t,ftf@fCf< (INI ,í Initialization ,ì—^a,Å,.)□BINI ftf@fCf<,íft□[fU□[□Y'è,Æfvf□fOf
%of€,ì□%Šú□Y'è,É•K—v,É,»,'¼,ì□î•ñ,ðŠi"l,·,é,½,ß,É'½,,ì Windows 3.x fAfvfŠfP□[fVf#f" (.Æ
Windows 3.x Ž©'í) ,ÅŽg,í,ê,Ü,μ,½□B□Å<ß,ì Windows ,Å,í,±,ì□î•ñ,ì,Ü,Æ,ñ,Ç,^a Windows
,ìfCfWfXfgfŠ.ÉŠi"l,³,ê□AINI ftf@fCf<,íŽã,Æ,μ,ÄCEÄ,çfAfvfŠfP□[fVf#f" ,Å,ì,YŽg,í,ê,Ü,·□B

INT 13h

ftf[]fbfs[]lfffBfXfN,Æfn[]lfhfffBfXfN,Éî,.,éfZfnf^fÆfxf<,Å,ìfffBfXfN,ì“Ç,Ý[]’,«‘€[]ì,ù,Æ,ñ,Ç,ð^μ,π^
ê”Ê“i,È BIOS,ì Š,,è[]ž,Ý[]B

IDE

Integrated Drive Electronics , à—BfRf“fgf[]f%“dŽq<Z[]p, ðfhf
%ofCfufn[]fhfEfFfA, Æ“[][]‡, µ, ½fffBfXfNfRf“fgf[]f%ofCf“f^[]ftfF[]fX[]BIDE
, í, » , è, Û, ÅfRf“fgf[]f<fj[]fh, É'¼[]Ú“z'u, ³, è, Å, ç, ½%o%oŽZ, ðfhf
%ofCfu, É“[][]‡, µ, Û, µ, ½[]B, » , ÌE<%oÉ[]AIDE fhf%ofCfu, íf}fU[]f{[]fh []ã, ì IDE
fRfjNf^ , ðŽg, !, é, Ì, ÅfofXfXf[]fbfg, ²•K—v, , è, Û, ¹, ñ[]B

“à•”f□f,fŠfLffffbfVf...

80486 ^È□ă,ì CPU ,É“□□‡,³,ê,Ä,ç,éf□f,fŠfLffffbfVf...□B“à•”f□f,fŠfLffffbfVf...,í CPU ,^a RAM ,É—
v<□,·,é•p“x,^aÄ,à□,,çff□[f^,ðŠi”[,μ,Û,·□B“à•”f□f,fŠfLffffbfVf...,í RAM ,Û,½,ÍŠO•”f□f,fŠfLffffbfVf...
,æ,è,à,·,î,â, CPU ,Éff□[f^,ð’—,é,î,ÅfRf“fsf...□[f^,î□^—□’→“x,^a”ò-
ô“l,ÉŒü□ă,μ,Û,·□B“à•”f□f,fŠfLffffbfVf...,ð□u^êŽžfLffffbfVf...□v□ufŒfxf< 1 fLffffbfVf...□v□uL1
fLffffbfVf...□v,Æ,à,ç,ç,Û,·□B

Š,,èž,Ý

CPU ,ÉŒ»Ÿ,ìì<Æ,ð'tŽ~,^{3,1}MŸt,^aŽw'è,·,é"Á•Ê,Ê-½—ß,ðŽÀŸs,^{3,1}éfn[fhfEfFfAfffofCfX,Ü,½,ÍŸ
ftfgfEfFfA,É,æ,Á,Ä'—ŸM,³ê,éŸMŸtŸB

IO.SYS

Windows 95/98/Me: DOS , [\ffofCfXfhf%ofCfo](#), ì“ü,Á,½vfXfef€ftf@fCf< [\MSDOS.SYS](#)
, àŽQ Æ, μ, Ä, , ¾, ³, ¢ B

IRQ

“üo—Í|[]fg[]AfL[]f{[]fh[]AfffBfXfnfhf%ofCfo,È,Ç,ìfffofCfX,^a [CPU](#) ,ÉfT[]frfX ([Š,èŽ,Ý](#)) ,ì—
v<[],đ’—[]M,·,éfn[]fhfEfffA,ì%oňü[]B

ISA

Industry Standard Architecture , ì—ª, Å□ufAfCfT□v, Æ"‰¹, μ, Ü, ·□B8 frfbfg, Ü, ½, Í 16
frfbfg, ìfj□□fh, ðŠg' £fXf□fbfg, É□·, μ□ž, p, ±, Æ, É, æ, Á, Ä, ³, Ü, ´, Ü, ÈfffofCfX, Ì'□□Y, ð‰Å" \, É, ·, éRf"fsf...
□[f^fofX□YÇv, ì—Ž ©, Å, ·□BEISA , àŽQ□Æ, μ, Ä, , ¾, ³, ç□B

fLOI

fŠfXfgf{fbfNfX

'l'ðžž,ìfìfvfVfþf",ìfŠfXfg,ð•\Žì,·,é GUI fRf"fj|

□[fj"fg□Bfhf□fbfvf_fEf"fŠfXfg,Æ^Ù,È,è□AfŠfXfgf{fbfNfX,ì□€-Ú,í•K,·\

Žì,³,è,Û,·□BfŠfXfgf{fbfNfX,ÉfìfvfVfþf",ð•\Žì,μ,«,è,È,ç□ê□#□AfŠfXfg,ì%o; ,ÉfXfNf□□[f;fo□],^a•\

Žì,³,è□AfŠfXfgfEfBf"fhfE,ìŽì—p,É,æ,Á,Ä□ã%o°,Û,½,í□¶%oE,ÉfìfvfVfþf",ð^Û"® ,Å,«,Û,·□B

LAN

Local Area Network, ĩ—ª□B"äŠr"ICEÀ,ç,ê,½"Í^"à (,½,Æ,ı,Î 1 ,Â,İCEŠ•""à)
,É•ŽU"z'u,³,ê,éfRf"fsf...□[f^,ÆfffofCfX,İfof<□[fv□B'É□MfŠf"fN,Å'ŠCEÝ,É□Ú'±,³,ê,Ü,·□BLAN
,İfffofCfX,İ□Ú'±,³,ê,Ä,ç,é'¼,İfffofCfX,Æ'İ~b,Å,«,Ü,·□B
'É□í□ALAN ,É,Í<α'É,É•K—v,Èfvf□fOf%of€,âff□[f^,ð□ê-å,ÉŠi"l,·,éftf@fCf<ft□[fo□l
(,Ü,½,Í'P,É□ufT□[fo□[□v) ,ÆCEÀ,İ,ê,éfRf"fsf...□[f^,ª, ,è□Afİfbfgf□□[fNft□[fU□[ª,±,İ□î•ñ,ð—
v<□,·,é,Æ□v'¬,É%ž"š,μ,Ü,·□B

LAN

~_—[]ffjBfXfN

'•,çftf@fCf<-¼

DOS (,Æ Windows 3.x) ,iftf@fCf<-¼,ì•t,¯•û,É,í 8 fhfbfg 3 (,Â,Û,è 8 •¶Žš,Û,Â,iftf@fCf<-¼,Æ 3
•¶Žš,Û,Â,ìŠg'£Žq,ðfsfŠflfh,Å<æ∅,é) ,Æ,ç,æ∅\$ÆÀ,ª, ,è,Û,µ,½∅B'•,çftf@fCf<-¼,iftf@fCf<-¼,ð
255 •¶Žš,Û,Â'•,,Å,«,é Windows ,ì<@"\,Å,∅B'•,çftf@fCf<-¼,É%∅Å,ì,Å∅A∅Å∅Vfo∅[fWf#f",ì
Windows ,í^È'O,Éftf@fCf<-¼,ì†,ÉŽg,æ,Æ•s∅³,¾,Å,½•¶Žš ("¼Šp,ìfvf
%∅fX•,,∅†∅Afff"f}∅AfZf~fRf∅f"∅AfZf~fRf∅f"∅A"™ ∅†∅A∅¶∅%∅E,ìŠpfjfbfR∅AfXfy∅[fX) ,ðfTf|
∅[fg,µ∅A'•,çftf@fCf<-¼,ì'å•¶Žš,Æ∅¬•¶Žš,ì<æ•É,ð"½%∅f,µ,Û,∅B'•,çftf@fCf<-¼,ì [Unicode](#)
•¶ŽšZfbfg,ðŽg,ç,Û,∅B

8 fhjbfjg 3

fXfgfNf%oXf^

ff[f^,ª“ü,Ä,Ä,ç,é,ªftf@fCf<,Ü,½,ÍttHf<f_,ÅŽg,í,ê,Ä,ç,È,çfNf%oXf^,ðŽ!,· FAT ,ì†,ìfGf“fgfŠB

'áfĈfxf<ftfH[]f}fbfg

ff[]f^,đš"l,Å,«,é,æ,ɹ,ÉŽŷ<CfffBfXfN,Ü,½,í¼,ì'Šúff[]f^<L%o~"}'ì,ì•\-Ê,đ€"ö,·,é^—

□□B'áfĈfxf<ftfH[]f}fbfg,íqf%oofbfN□AfZfNf^□AfffBfXfN,ìff[]f^<L%o~—í^æ,đ—

ÖŠsĈ`□-,·,é,½,β,É•K—v,É,»,í¼,ìpf%of[]f^,đ'è<,μ,Ü,·□B□,fĈfxf<ftfH[]f}fbfg,đ□u•"—

□ftfH[]f}fbfg□v□ufn□[fhftfH[]f}fbfg□v,Æ,à,ç,ç,Ü,·□B

fn□[fhfffBfXfN,đŽg,ì,é,æ,ɹ

,É,·,é€"ö,í'áfĈfxf<ftfH[]f}fbfg□Afp□[fefBfVf#f"•ªŠ,,□A□,fĈfxf<ftfH[]f}fbfg,ì□‡,É□i,β,Ü,·□B'Ê□í□

Aftf□fbfs□[fffBfXfN ,í'áfĈfxf<ftfH[]f}fbfg,í□,fĈfxf<ftfH[]f}fbfg,Æ"—Žž,É<N,«,Ü,·□B

ŽŕCffBfXfN

ŽŕŠE,đŽg,Á,Äff[f^,đŠi"[.,éffBfXfN□B□Á,à^è"Ê"l,ÈŽí—
p,ìŽŕCffBfXfN,ífn□fhffBfXfN,Æft□fbfs□lfffBfXfN,Á,□Bff□[f^<L%o¯,ÉŽg,í,é,é¼4,ìŽí—
p,íffBfXfN (CD-ROM ,È,Ç) ,à, ,è,Ü, ,ª□AŽŕCffBfXfN,Æ,ç,ª—
pCEè,í'Ê□í,í'P,É□uffBfXfN□v,Æ"¯<,ÁŽg,í,é,Ü,□B

topic.

MAPI

Mail Application Programming Interface, je sada B "džqf" [f<, džTf] [fg, ., é API Bf} fCfNf fA
ftfg, É, æ, Á, ÄŠ", ³, ê DLL, Æ, μ, ÄŽÀÆ», μ, Ü, μ, ½ B

fVfXfef€ É MAPI DLL, ², ¶ Ý, ., é, ±

, Æ, ð" FŽ", ., é fAfvfŠfP [fVf+f", Å, í A "džqf" [f<, ð'¼ Ú fAfvfŠfP [fVf+f", ©, ç' — M, Å, «, Ü, · B

f}fXf^[]fu[]fgfCFR[]fh

fn[]fhfffBfXfN,ifzfNf^,É“ü,Á,Ä,ç
,é[]î•ñ[]Bf}fXf^[]fu[]fgfCFR[]fh,ífffBfXfN,ìfp[]fefBfVf#f“fe[]fuf<,đŠi”[,μ,ÄfffBfXfN,ìfAfNfefBfu,É
fp[]fefBfVf#f“ (fifyfCE[]fefBf“fOfVfXfef€,đf[]fh,·,é,½,ß,ÉŽg,xfp[]fefBfVf#f“)
,đŽ·É,μ,Û,·Bf}fXf^[]fu[]fgfCFR[]fh,ífffBfXfN,đfp[]fefBfVf#f“•ªŠ,,,·,éŠÖ,É[]î[]-,³,è,Û,·[]B

MFT

Master File Table ,ì—ª[]B

Windows NT/2000: NTFS —p,ÉftfH[]f}fbfg,³,è,½fffBfXfN[]ã,ìftf@fCf<<L
%o~^æ,đ•Ò[]-,·,é,½,ß,ÉŽg,í,è,éfe[]fuf<[]BMFT ,ìftf@fCf<,É,Á,ç
,Ä,ì[]î•ñ,ìfŠfCE[]fVf#fif<ff[]f^fx[]fX,Ä[]î[]-,³,è,Û,·Bfe[]fuf<,ì[]s,ífffBfXfN[]ã,ìÈÄ[]X,ìftf@fCf<,É'í
%ož,μ[]A—ñ,ìftf@fCf<,ì'®[]«,É'í%ož,μ,Û,·[]B,±
,ì•ùŽ® ,Ä,ífffBfCFNfgfŠ,ìftf@fCf<,Æ,μ,Ä^μ,í,è[]Aff[]f^ftf@fCf<,Æ,í'®[]«,ª^Û,È,è,Û,·[]B

□''!%o%oŽZfRfvf□fZfbfT

•,“@□-□”“_□”,đŽg,Á,Ä□''!CevŽZ,đ,·,éfvf□fZfbfT,Å□Af□fCf“ CPU ,Æ<æ•Ê,³,ê,Ü,·□BfCf“fef<,ì
i486DX ,Ü,½,íf,fgf□□lf%o,ì 68040 ^È'O,ì CPU ,đŽg,Á,½fpfVfRf“ ,Å,Í□A□''!%o
%oŽZfRfvf□fZfbfT,đ'□□Ý,·,é,Æ□"ŠwŠÖ□",âfOf
%oftfBfbfNfXŠÖ□",ì'-“x,^aCEù□ă,μ,Ü,·□Bi486DX□A68040 ,Æ,»,ê^È□~,ì CPU f,fff<,Å,Í□Af□fCf“
CPU ,É□''!%o%oŽZfRfvf□fZfbfTŠÖ□",^a'g,Ý□ž,Ü,ê,Ä,ç,Ü,·□B

□Å'â%»

fEfBf"fhfE,ð□Å'â,İfTfCfY,Ü,ÅŠg'â,·,é,±,Æ□B□Å'â

%»f{f^f",ðfNfŠfbfN,·,é,ÆfEfBf"fhfE,ª□Å'â,É,È,è,Ü,·□B(,·,Å,É□Å'â,É,È,Á,Ä,ç,é□ê±□A□Å'â

%»f{f^f",í•\Ž|,³,ê,Ü,¹,ñ□B'â,í,è,ÉƐ³,É-β,·f{f^f",ª•\Ž|,³,ê,Ü,·□B)

□Å□-%»³,ê,½fEfBf"fhfE,ð□Å'â%»·,é,É,í□Af^fXfNfo□[É, ,éfAfCfRf",ð

%»EfNfŠfbfN,μ□AfRf"fgf□□[f<f□fjf...□[,ì□m□Å'â%»(X)□n,ðfNfŠfbfN,μ,Ü,·□B

MCI

Media Control Interface ,ì—ªBWindows fAfvfŠfP[fVf†f“,ª%º¹ºº,Æ
%ºf'º,ìÄºº,â<L~^,ðŠÜ,ß,Äf}f<f`fºffjBfAfffofCfX,ðº\$CEä,Å,«,é,æ,¼,É,·,éº,º...
º€fCj“f^º[ftfFº[fxºB

”}’ì<L□qŽqfofCfg

fffBfXfN,ìfu□[fgfEjR□[fh’t,É, ,Á,ÄfffBfXfN,ìŽí—p,ðŽì,· 1 fofCfg,ìî•ñ□Bftf□fbfs□[fffBfXfN,ìŽí—p
(,½,Æ,ì,î□A1.44 MB ,ì 3.5 fCf“f` ,ìftf□fbfs□[fffBfXfN)
,âfn□[fhfffBfXfN,ì<æ•Ê,ðŽì,μ,Û,·□B”}’ì<L□qŽq,í FAT ,ì 1 fofCfg-Ú,É,àŠi”[,³,è,Û,·□B

f f, fš

ff[f^, aŠi"[, 3, êA, » , iŠi"[, 3, ê, ½ff[f^, ðCEÿ[ð, Å, «, éfRf"fsf...[f^fn[fhfEjFfA[B^è"Ê, Éf[f, fŠ, Æ, ç
, x—pCEê, í [RAM](#) , ðŽw, μ, Ü, ·BfAfvfŠfP[fVf#f" , ðŽÀ[s, μAfvf[fOf%of€
, iŽÀ[s+^êŽž"l, Éff[f^, ðŠi"[, ·, é, ½, ß, ÉŽg, í, ê, Ü, ·B

f f, fŠf Afhf fX

fRf“fsf... [f^, if f, fŠ, ì'†, ì“Á'è, ìêŠ, đŽ!, ·d•; ì, È, †Ž“•Ê”Ô† B [CPU](#), Íf f, fŠf Afhf fX, đŽw'è, ·, é, ±, Æ, É, æ, Ā, Āf f, fŠ, ì“Ç, Ý, «'€ì, đŽĀs, μ, Ů, ·B

f□f,jŠ□í“fv□fOf%of€

f f f f ...

f f v j v f f f " , l f Š f X f g B f f f f ... [, É , , é f l f v j v f f f " , đ f N j Š f b f N , · , é , Æ A " ® ì , a Ž À s , ³ , ê , Û , · B

fifj...fo

'ÉifEjBf"fhfE, àÅã•", É, ,é'.•ûCE`, ifo, Å\¬,³,ê,é GUI fRf"fi[fif"fgBfifj...fo, ífifj...
[.ifŠfXfg, ð%o; É•Å, x, Ä, É•\Ž, µ, Ü, ·Bft[fU, [fifj...fo](#), Å 1
, Ä, ð'l'ð, ·, é, ÆA, »ê, ÉŠÖŒW, ·, éfjfvfj+fj", ð•\Ž,³,ê,Ü, ·B

f□fbfZ□[fW

fAfvfŠfP□[fVf†f“,ÆfAfvfŠfP□[fVf†f“,ª□ì□¬,·,éEfBf“fhfE,ª□î•ñ,ð“` ,¡,é,½,ß,ì^èŽŸ“l,ÈŽè'i□B,½,Æ,l,î
□Af{f^f“,ðfNfŠfbfN,·,é,½,Ñ,Éf{f^f“,ªfNfŠfbfN,³,è,½,±,Æ,ðŽl,·f□fbfZ□[fW,ªfAfvfŠfP□[fVf†f“,É’—
,ç,é,Ü,·□B

MIDI

Musical Instrument Digital Interface , ì—ª, Å□uf~fffB□v,Æ"‰¹,µ,Û,·□BfRf“fsf...
□[f^□Afvf“fZftfCfU□AŠyŠí,ì□î•ňĀđŠ·,đ‰Å“\,É,·,éj\ftfgfEjFfA,Æfn□[fhjEjFfA,ì•W□€□B

□Å□¬%»

fEjBf“fhfE,đf^fXfNfo□[,İfAfCfRf“,É□k□¬,·,é,±,Æ□BfAfvfŠfP□[fVf†f“,Í‘¼,İ□ì<Æ,đ,μ,Ä,¢
,éŠÖ,ÉfobfNfOf%ofEf“fh,Åfvf□fOf%of€,đŽÀ□s,·,é,½,ß,É•p”É,É□Å□¬
%»»,³,é,Û,·□BfEjBf“fhfE,İf^fCfGf<fo□[,Å□Å□¬%»»f{f^f“,đfNfŠfbfN,·,é,Æ□AfEjBf“fhfE,đ□Å□¬
%»»,Å,<,Û,·□B□Å□¬%»»,μ,½fAfvfŠfP□[fVf†f“,đCE³,İfTfCfY,É-
ß,·,É,İf^fXfNfo□[,Å,»,İfAfvfŠfP□[fVf†f“,İf{f^f“,đfNfŠfbfN,μ,Û,·□B

f}fU[f{[fh

fRf“fsf...[f^“à•”,ižâ%ñ~HŠî”Â□BCPU□Af□f,fŠf`fbfv□AfofXfRf“fgf□□[f%□A,»),ì¼,ì
%ñ~H,ª”z’u,³,è,éŠî”Â□BŠg’£f{□[fh,È,Ç,ì¼,ìŠî”Â,àf}fU□f{□[fh,É□Ú’±,Å,«,Ü,·□B

f}fEf“fg

- —□ffjBfXfN□Af{fŠf...□[f€□Afe□[fvfhf%ofCfu,đfRf“fsf...□[f^,ìtf@fCf;fvfXfef€
,ÉfAfNfZfX,Å,«,é,æ,α,É,·,é,±,Æ□B

MPC fCExfx< 2

fp[]f\vfif<fRf"fsf...[]f^—p,ì•W[]€f}f<f`f[]fffBfA<@"\,ð<L[]q,·,é,½,ß,É Software Publishers Association ,ì PC []ì<ÆfOf<[]fV,ª'è<`·,·éŽd—l[]B

MPC fCEfxf< 2 •W[]€,É[]€<',·,éjVfXfef€,íŽŸ,ì<@"\,ð"ð,ì,Ü,·[]B

- 25 MHz 486SX ^È[]ã,ìf}fCfNf[]fvf[]fZfbfT
 - 4 MB ,ì RAM[]i[],,[]\$,ì 8 MB[]j
 - []F[]" 64KB ^È[]ã[]A%øð'œ"x,u,f,`[]i640[]~480[]j ^È[]ã,ìfrfffIfffBfXfvfCEfC'•'u
 - ½<ì,S,O,Of~fŠ•b^È%øø,ìfV[]fNŽžŠÔ,ì 2 "{'-[]i2X[]j CD-ROM fhf
- %ofCfu[]Af}f<f`fZfbfVf+f[]AftfHfg CD <@"\•t,«
- 16 frfbfg%ø¹[]ø<@"\

MSDOS.SYS

Windows 95/98/Me: DOS ,ìj] [flj<,ª“ü,Á,Ä,ç,é [VfXfefçtf@fCf< BIO.SYS](#) ,àŽQ Æ,μ,Ä,-
,¾,¾,ç BDOS ,â%Šú,ì Windows ,Á,±,ìtf@fCf<,ìfjyfÇ [fefBf“fOfVfXfef€ ,ìAfNfefBfufRf“fj
 [flf“fg,Á,μ,½ B Á<ß,ì Windows ,Á,íÝ’ètf@fCf<,Á,·B

f}f`f^fXfN

1 'ä,lfRf"fsf...[f^,Å•i□",lfvf□fOf%of€,"~Žž,ÉŽÀ□s,Å,«,é,æ,α,É CPU ,δ<α—L,·,é,± ,Æ□Bf}f`f^fXfN,Í^ê©,·,é,Æ•i□",l□^—□,ª"~Žž,É<N,«,Ä,ç,é,æ,α,É©,!,Ü,·□BŽÄ,í-{"- ,É•i□",lfvf□fOf%of€,"~Žž,ÉŽÀ□s,Å,«,é,!,i□",l CPU ,Æf}f`f^fXfN,δTf| □[fg,·,élfvf□[fefBf"fofVfXfef€ (Windows NT/2000□AUNIX□AOS/2 ,É,Ç) ,δ"ö,!,½fRf"fsf... □[f^,!,Y,Ä,·□B'P^ê,ì CPU fvfXfef€,lf}f`f^fXfN<Z□p,δ<ìŽg,μ,Äf}f`f^—□,ì-í,í,δ,μ,Ä,ç ,Ü,·□Bf}f`f^fXfN<Z□p,ì 2

,Ä,Æ,μ,Äfvf□Gf"fvfefBfuf}f`f^fXfN,Æ<!'²"l,Éf}f`f^fXfN,ª, ,è,Ü,·□B

Windows ,í'¼,ì Windows fvf□fOf%of€,Æ,ìÉÝŠ·□«,δ•Û,Ä,½,ß,É 32 frfbfgfAfvfŠfP□[fvf†f",Æ DOS VM ,Å"®□ì,·,é DOS fAfvfŠfP□[fvf†f",Éfvf□Gf"fvfefBfuf}f`f^fXfN,δŽg,ç□AWindows 3.x (16 frfbfg) fAfvfŠfP□[fvf†f",É<'²"l,Éf}f`f^fXfN,δŽg,ç,Ü,·□B

fifbfjff

f+[]fU[]ŠŌ,Åî•ň,Æfn[]fhfEjFfA,ð<α—L,·,é-Ú“i,ÅA'ÊM%oňü,Ü,½,í,»,'¼,ìžè'i,Å'ŠŒÝ,ÉÚ'±
,³,ê,½fRf“fsf...[]f^,ÆŠŌ~Afn[]fhfEjFfA,ìOf<[]fv[]B

f l f b f g f [] [] f N f C f " f ^ [] f t f F [] f X f j [] f h

f!fbfgf[]fNfT[]fo[]

f!fbfgf[]fN[]ã,ì¼,ìRf“fsf...[]f^,³ftj@fCf<,ÉfAfNfZfX,Å,«,é,æ,α,É,μ[]A,»,ê,ç,ìRf“fsf...
[]f^,É[]W'+CE^,ì<α—LjT[]fjfX,ð (fvf[]fOf%of€[]A<L%oo^-æ[]A'É[]M,ðŠÜ,β,Ä) 'ñ<ÿ,·,éfRf“fsf...
[]f^[]B

NIC

Network Interface Card , ì—ª□BfRf“fsf...□[f^, ð [LAN](#) , É□Ú'±, ·, é, Æ, «, ÉŽg, í, ê, é%ñ~HŠî”Â□B

NMI

Non-Maskable Interrupt, [ifCxf"fg,đ,·,®](#), [É^—,·,é,½,β,ÉŽg,í,è,éŠ,èŽ,ÝBCPU](#)
,É, ,é"Á•Ê,Ê NMI fsf",É'¼ÚÚ'±,³,ê,Ä,ç,Ú,·B

•sŠö”◻◻f◻f,fš

“dĈ¹,ð∅,Á,Ä,àff◻f^,ð•Û,Ä,éŽí—p,}fRf“fsf...◻[f^f◻f,fš◻[BROM](#)◻[AEPROM](#)◻[AEEPROM](#)◻Aftf
[%o_bfVf...f◻f,fš](#),l•sŠö”◻◻f◻f,fš,Å,·◻B

NTFS

NT File System, à Windows NT fílyfĀ[fefBf“fOvfXfef€—p,ÉŠJ”-
,³,ê,½ftf@fCf<fvfXfef€ĀBNTFS, í FAT ftf@fCf<fvfXfef€,æ,è,àĀø—|“l,É‘â—e—
Ēfn[fhfffBfXfN,Āftf@fCf<,đTf|f[f,g,μ,Û,·ĀBNTFS,É,ífnfCfGf“fh,ìŠé<ĀĀü,`ftf@fCf<fvfXfef€
,É,à“KĀ‡,·,é‘½,,ì<@”\,ª‘Ç%Ā,³,ê,Ā,ç,Û,·ĀB

- ‘g,ÝĀž,Ýff[f^fZfLj...fŠfefB
- “ñĀdff[f^Ši”[<@”\,É,æ,é-â‘è,ì<—eĀ<,Āff[f^%ñ•œ
- ff[f^³Āk
- ,æ,èĀø—|“l,Ēff[f^Ši”[,Ā‘â—e—Ē,ìfffBfXfN,âftf@fCf<,ì“Ç,ÝĀž,Ý

flfufWfFfNfg

□^—□□A[XfEfbfh□Aftf@fCf<□A□f□f.S,lfZfNfVf#f“□A•” —□fffofCfX,È,C□A<α—L%oÅ”\,ÈfVfXfef€fŠfA
□[fX,ð•\,· Windows NT/2000 ,í•W□€ ,iff□[f^è^□BfŠfA□[fX,íè^,²,Æ,É 1
,Å,lfifufWfFfNfgè^,Å<L□q,³,è,Ü,·□BfŠfA□[fX,ð•\,·flfufWfFfNfg,²•K—
v,É,É,é,Æ□Aflfyfè□[fefBf“fOfVfXfef€
,í“K□Ø,ÈflfufWfFfNfgè^,lfCf“fXf^f“fX,ð□ì□¬,μ,Ü,·□BflfufWfFfNfg,í Windows
,lfifufWfFfNfgf}f□[fWfffRf“f□[flf“fg,É,æ,Å,Ä□ì□¬,³,è□A-¼‘O•t,¯,³,è□AŞÇ—□,³,è,Ü,·□B

llyfCEllfBf"foVfXfe€

fRf"fsf...llf^ž©'ì,đ"®,©,·Šì-{}§CEä\ftfgfEjFfA□BfRf"fsf...llf^,ì<N"®Žž,É□Å□%
,É□f.fš,Éf□□lfh,³êfRf"fsf...llf^,ìŽÀ□s't,Éf□f,fš□ã,ÉŽc,éfvf□fOf%of€□BfllyfCEllfBf"foVfXfe€
,lfRf"fsf...llf^,lfVfXfe€fšf□lfX (CPU ,ì□^—□ŽžŠŎ□A□f□f,fš□AfffBfXfN—e—
É□Afvfšf"f^,âfffBfXfvfCEfC,É,Ç,ìŽü•Ŏ<@Ší) ,ìŽg,ç•û,ÆŠ,,,è"—
,Ä,đ□§CEä,μ,Û,·□B,·,×,Ä,lfAfvfšfP□lfVf†f",lflyfCEllfBf"foVfXfe€,Æ'í~b,μ,ÄfvfXfe€fšf\
□lfX,Ŏ,lfAfNfZfX,đŽæ"³/₄,μ□A,·,×,Ä,lfAfvfšfP□lfVf†f",ì<@"\,ì□YCEv'í□Û,lflyfCEllfBf"foVfXfe€
,É,æ,Ä,Ä□§CEÄ,³,è,Û,·□B

OEM

Original Equipment Manufacturer, $\int_{-\infty}^{\infty} B(x) dx = \int_{-\infty}^{\infty} \frac{1}{2} f(x) dx$ (•K—
v,É%ž,¶,ÄŽè'¼,µ,µ) fpfbfP[fW,ðì,è'¼,µ,Ä"ì" „,·,éCE`Ô,Û,½,Í,»,ì»•iB“⁻,¶—pCEê,ðf
ftfgfEjFfA,É,Â,ç,ÄŽg,±,±,Æ,à, ,è,Û,·B

fy[]fWftf@fCf<

fy[]fW^—[]

Windows NT/2000: Windows ,í,Ç,ì[]^—[],É,à 4 GB ,ì%¼'zfAfhfCefX<óŠÔ ([]^—
[],Æ,»,íXfCfbfh,žg,í,éfAfhfCefX<óŠÔ) ,đ<-%%Â,μ,Û,·[]B,μ,©,μ[]A,Û,Æ,ñ,Ç,ìfRf“fsf...
[]f^,žZ[]Û,É“<[]Ú,μ,Ä,ç,é•—[]f[]f,š (RAM) ,í 4 GB -ç-ž,Å,·[]B—~—p%%Â“\,È RAM ,ž,ç,Á,í,ç
,l,Æ,«[]AWindows ,ìff[]f^,ì^è•”,đ^èžž“l,È RAM ,©,çfffBfXfN,É^Ú“®,μ,Äf[]f,š,đ<ó,~,Û,·[]B,±
,ìff[]f^,ì%¼'zf[]f,šDEF_VIRTUAL_MEMORY,Éš,,,è“-,Ä,ç,è,½,±,Æ,É,È,è,Û,·[]B
fffBfXfN,É^Ú“®,³,è,½[]î•ñ,đ[]^—[],Û,½,ífXfCfbfh,žfAfNfZfX,μ,æ,α,Æ,·,é,Æ[]AWindows ,í—
v<[],³,è,½ff[]f^,ðfffBfXfN,©,ç RAM ,É-β,μ,Û,·[]Bff[]f^,ì[]ufy[]fW[]v,ÆCEÄ,í,è,é,©,½,Û,è,Æ,μ,Ä
RAM fffBfXfN,ìŠ,đ^Ú“®,·,é,í,Å[]A,±,ì[]^—[],ð[]ufy[]fW^—
[]v,Û,½,ì[]ufy[]fWf“fo[]v,ÆCEÄ,Ñ[]A^èžž“l,Éff[]f^,ž“ü,éfffBfXfN[]ă,ì“Á•Ê,Èftf@fCf<,ðfy[]fWf“fo
ftf@fCf<,Æ,ç,ç,Û,·[]B

fpfŒfbfg

%œ-Ê,ìF•t,̄,ÉŽg,κF,ìfZfbfgB

fp [fefBfVf#f#

flfyf [fefBf"foVfXfef€

, 'P^ê, l' • 'u, /E, µ, Å^µ, x fn [fhfffBfXfN, l) • " • a B' Ê i Af ffBfXfN, lfp [fefBfVf#f#, lfhf% ofCfu-¼, l %opŽš, ÅŽ- • Ê, ³, ê A, » , ê, ¼, ê, ð Û, Ê, éftf@fCf<, âflfyf [fefBf"foVfXfef€ — p, ÉftfH [f}fbfg, Å, <, Û, • B

Windows NT/2000 , l, æ, x, Ê^ê • " , lfyf [fefBf"foVfXfef€, l^ Û, Ê, é • " — fffBfXfNfhf % ofCfu ä, l • ; [, lfp [fefBfVf#f# , ð (%opŽš 1 • ¶ Žš, Å, lfhf% ofCfu-¼, ÅŽ- • Ê, • é) 'P^ê, lfffBfXfNf{fŠf... [f€, /E, µ, Å^µ, l, Û, • B, » , x, • , é, ±, /E, Åftf@fCf<fAfNfZfX, ð [, ' - % » , Û, ½, lftfH [f<fgfgf€f% of" fX (1 'ä, lfn [fhfffBfXfN, aEi á, µ, Å, àVfXfef€, l' â Ž ~ , ð - h, ® • û Ž ®) , ð Ž Å € » , Å, <, Û, • B

, Ç, lfu [fg% Å" lfn [fhfffBfXfN, É, à" C^ Ó, lfyf [fefBf"foVfXfef€ — p, l 1 , Å, lfp [fefBfVf#f# , a , è AfRf" fsf... [f^ , l<N" ® , É Ž g, x lfyf [fefBf"foVfXfef€, ð, » , ± , É Š i" l, µ, Û, • B lfyf [fefBf"foVfXfef€, Å' P^ê, lfn [fhfffBfXfN, ð • i [, l ~ _ = fffBfXfN, /E, µ, Å^µ, l, é, æ, x, É, • , é, É, l Af n [fhfffBfXfN, É u Š g' ffp [fefBfVf#f# [v, a • K — v, Å, • B Š g' ffp [fefBfVf#f# , l 23 E Å, Û, Å, l' Ç % Å, l ~ — fffBfXfN, É % o o ^ É • a Š , , Å, <, Û, • B

FDISK (Windows NT/2000 , lfffBfXfNŠÇ — ft [fefBfŠfefB) , lfp [fefBfVf#f# , /E ~ — fffBfXfN, ð [i - , • , é, ±, /E, É, æ, Å, Åfn [fhfffBfXfN, ð Ž g, l, é, æ, x, É [€ " ð, • , éfvf [fOf% of€ , Å, • Bfn [fhfffBfXfN, ðfp [fefBfVf#f# , É • a Š , , • , é, /E f } fXf^ [fu [fgf€fR [fh, /E ffp [fefBfVf#f# fe [fuf< , a [i - , ³, ê, Û, • B ft [fbfs [fffBfXfN, Éfp [fefBfVf#f# , l • K — v, , è, Û, ¹, ñ B

fn [fhfffBfXfN, ð Ž g, l, é, æ, x, É, • , é [€ " ð, l • " — [ftfH [f}fbfg Afp [fefBfVf#f# • a Š , , A [f € f x f < f t f H [f } f b f g , l [# , É [i , B, Û, • B

fp [fefBfVf#f"fe [fuf<

• " — fffBfXfN, ì } fXf^ [fu [fgfCfR [fh, ì †, É, , é î • ñ B • " — fffBfXfN, ð f l f y f C [f e f B f " f O f V f X f e f €
, É • \ C e » , · , é , ½ , ß , É 1 , Â ^ É ã , ì f p [f e f B f V f # f " , ð ' è < ` , μ , Û , · B

fpfX

fffBfXfN,iftfHf<f_cjŠ□□,ì†,É,“,̄,é“Á`è,iftf@fCf<,Ü,½,iftfHf<f_ì□è□Š□Bftf@fCf<,Ü,½,iftfHf<f_ì□â`îfp
fX,íf<□□f□ffffBfCfNfgfŠ.©,çŠJŽn,μ□A,»,ì%°^É,É, ,éftfHf<f_ì-¼‘O,đ□‡,É—ñ<L,μ□Aftf@fCf<-
¼,Å□,í,éC`Ž®,Å,·□B

PATH ,íflyfC□□[fefBf“fOfVfXfef€,ìŠÂ««•ï□”,ì-¼‘O,Å,à, ,è,Ü,·□BPATH ŠÂ««•ï□”,í•K—
v,Èftf@fCf<,ªC»□Ý,iftfHf<f_É,É,ç,Æ,«,ÉflfyfC□□[fefBf“fOfVfXfef€
,ªCÿ□đ,·,éftfHf<f_ìfŠfXfg,đ<L□q,μ,Ü,·□BPATH
ŠÂ««•ï□”†,iftfHf<f_ì□‡□~,íflyfC□□[fefBf“fOfVfXfef€,ªCÿ□đ,·,é□‡□~,É,È,è,Ü,·□B

PC fJ[fh

PC fJ[fhfXf[fbfg,ÉŽù,Ü,é,æ,α,ÉŸŒv,³,ê,½f,fff€[Afn[fhfffBfXfN[Aff[f^<L
%~fffofCfX,É,Ç,lfRf“fsf...[f^,ìŽü•Ó<@Ší[B‘Éí,lf|f^fuf<fRf“fsf...[f^,ÉŽg,í,ê,Ü,·[BPC
fJ[fh,ìc%:jTfCfY,lfNfŒfWfbbfgfJ[fh,Æ,Ù,Æ,ñ,Ç“~,¶,ÅŒú,³,í,ç,ë,ç,ë,Å,·[BPC
fJ[fhfCf“f^ [ftfF[fX,í PCMCIA (Personal Computer Memory Card International Association)
,Å‘è<,³,ê,Ü,·[B^È‘O,í PC fJ[fh,ì,±,Æ,đ[uPCMCIA fffofCfX[v,ÆŒÄ,Ñ,Ü,μ,½[B

fvf%ofOfAf“fhfvfCfC

fRf“fsf...[]f^,ìžü•Ó<@Ší,ðflfyfC[]lfeBf“fOfVfXfef€,É,æ,Á,ÄŽ©“®“l,É[]Y’è,Å,«,é<ÆŠE•W[]€
,l<@[]\[]Bfvf%ofOfAf“fhfvfCfC,ª, ,é,Æfn[]fhfEjfFA,ð’g,Ý[]ž,p,Æ,«,ÉfWfff“fp,â,»,ì¼,ì[]Y’è,ðŽè“®,
Å•ì[]X,·,éžèŠŌ,ª[]É,[]Afn[]fhfEjfFA,ì•ì[]XCEã,É (,½,Æ,ì,ì[]APC fj[]fh,ð’}“ü,μ,½,è|
[]f^fuf<fRf“fsf...[]f^,ðfhfbfLf“fOfXfe[]fVf#f“,É,Å,È,°,½CEã,Å) fRf“fsf...[]f^,ð[]Å<N“®,·,é•K—
v,ª,É,,È,è,Ü,·[]Bfvf%ofOfAf“fhfvfCfC,lfVfXfef€<K-ì,ì[]Y’è,ð“®“l,É•ÚŽç,·,é,±
,Æ,É,æ,Á,Ä[]A[]V,ì[]î•ñ,ð’È[]M,Å,«,é BIOS ,âfvf%ofOfAf“fhfvfCfCfn[]fhfEjfFA,ðfTf|
[]lfg,·,élfyfC[]lfeBf“fOfVfXfef€,Æ~ACEg,μ,Ä“,«,Ü,·[]B
Windows 95/98/Me ,É,ì’g,Ý[]ž,Ýfvf%ofOfAf“fhfvfCfCfTf|[]lfg,ª, ,è,Ü,·[]B,±,ì<@“\
,ì[]Å[]V,ì[]Y’è[]î•ñ,ðfCfWfXfgfŠ,ÉŠì“[μ[]A[]Y’è,É•ì[]X,ª<N,«,é,Æ,ç,Å,Å,à,»,è,ð[]X[]V,μ,Ü,·[]Bfvf
%ofOfAf“fhfvfCfC,ðfTf|[]lfg,·,éfAfvfŠfP[]fVf#f“,lfVfXfef€[]Y’è,É•ì[]X,ª, ,é,Æ,ç,Å,Å,à Windows
,É,æ,Á,Ä’È’m,³,è,Ü,·[]B

•"–ffBfXfN•Ò–

ffBfXfN\ç,ðà-¾,·,éêç,ÉffBfXfNã,É•"–"I,É'¶Y,·,é,à,ì,ðŽw,μ,Û,·B,Û,½,íA1 ,Â,ì•"–
"I'P^Ê,Â, ,éffBfXfN'S'ì,ðŽw,·êç,à, ,è,Û,·B~–ffBfXfN•Ò–,Æ"äŠr,μ,Â,,¾,¾,çB

f|f_g

ff[f^,^fRf"fsf...[f^,Éo"ü,è,·,é,Æ,«,É'Ê%oß,·,éRf"fsf...
[f^,Ü,½,ífn[fhfEfFfAfffofCfX,ì^è•"BfRf"fsf...[f^,Íf]
[fg,ð'É,μ,ÄfvfŠf"f^AfffBfXfvfCfC Af,fff€,ÆÚ'±,μ,Ü,·B

f}f^f^fXfN

f}f^f^fXfN, à èž í BfIfyfCE [fefBf“foVfXfef€, a CPU, ì^ — ŽžŠÔ, ðfRf“fsf...
 [f^, ÅŽÅs+t, ìfXfCEfbfh, ÉŠ,, è“- , Ä, Ü, · BfVfCEfGf“fvfefBfuf}f·f^f^fXfN, ìfXfCEfbfh, É^È‘¶, ·, é, ±, Æ, È, CPU, È-¾, ~“n, ·, Ì, ÅA1, Â, ìfAfVfŠfP [fVf+f“, ðfVfXfef€, ð“Æè, ·, éŽ-Ô, ð-h, °, Ü, · B, ±, è, Æ‘îÆ“l, È, ì, a<!’2“l, Èf}f·f^f^fXfN, Å, · B

Windows, Ì CPU ŽžŠÔ, ðuf^fCfEfXf%ofCfXv, Ü, ½, ÍuŽžŠÔ—Èv, Æ, ç, x—
 £ŽU“l, ÈŽžŠÔ’P^È, ÅŠ,, è“- , Ä, Ü, · B, ±, è, ç, ÌŽžŠÔ’P^È, ðfXfCEfbfh, Ì’Š’l, È—Dæ“x, ÉŠî, Å, ç, ÆfXfCEfbfh, ÉŠ,, è“- , Ä, Ü, · B—Dæ¶^È, Í—
 v^ö, ì“, É^È‘¶, µ, Ü, · BfXfCEfbfh, ìfIfyfCE [fefBf“foVfXfef€, È, æ, Á, Ä~A’±“l, ÈÄ—
 Dæ¶^È·t, ~, ³, è, Ü, · B

Windows, Ì¾, Ì Windows fvf [fof%of€, Æ, ÌEÝŠ·¶«, ð·Ü, Â, ½, ß, È 32 frfbfgfAfVfŠfP [fVf+f“, Æ DOS VM, Å @, ·, é DOS fAfVfŠfP [fVf+f“, ÈfVfCEfGf“fvfefBfuf}f·f^f^fXfN, ðŽg, ç [Windows 3.x (16frfbfg) fAfVfŠfP [fVf+f“, È<!’2“l, Èf}f·f^f^fXfN, ðŽg, ç, Ü, · B

f}fEfX,ì¶f{f^f“

GUI ,ì‘€ò,ÅÅ,à,æ,Žg,xf}fEfXf{f^f“□B

•W□€,ì%oE—~,«—p,lf}fEfX,ì¶f{f^f“,ð¶f—~,«ft□[fU□[,É□#,x,æ,x,É Windows
,lfRf“fgf□□[f<fpflf<,Å•ì□X,Å,«,U,·□Bf}fEfX,ì%oEf{f^f“,àŽQ□Æ,μ,Ä,,¾,¾,ç□B

^êŽŸfEjBf“fhfE

fAfvfŠfP□[fvf†f“,lŽâ—v,ÈfEjBf“fhfE□B□u^êŽŸ□v,Æ,ÍfAfvfŠfP□[fvf†f“,É,“,̄,éfEjBf“fhfE,ì<@“\ ,òŽw,μ□A•K,„,μ,à 1 ,Â-Ú,Û,½,Í—B^ê,lfEjBf“fhfE,Æ,ç,α^Ó-¡,Å,Í, ,è,Û,¹,ñ□B

□^—□

“Á'è, ìf^fXfN, ð□<□s, ·, éfvf□fOf%of€□A, Ü, ½, ìfvf□fOf%of€, ðŽÀ□s, ·, é^ê~A, ìfXfefbfv□B

Windows NT/2000 ŠÂ««, Å, Í□A□^—□, ìfvf□fOf%of€, ì, ½, ß, ìfŠf□[fXŠ,, è“- , Ä, ÌŠî- { 'P^Ê, Å, ·□B1 , Å, ì□^—□, É, Í 1 , Å, ìfvf□fOf%of€Ž©'ì (fXfefbfv, ì□W, Ü, è, Æf^fXfN, ð□<□s, ·, é, ½, ß, É•K—

v, Èff□[f^)□Afvf□fOf%of€, ðf^fXfN, ð□<□s, ·, é, ½, ß, ÉŽg, Ì, éf□f, fŠfAfhf€fX<óŠÔ□Afvf□fOf%of€, É•K—v, È, »), Ì' ¼, ìfvfXfef€fŠf□[fX, Å, ·□Bfìfyf€□[fefBf“fOfVfXfef€, Ì'¶□Y, ·, é□^—□, ÉŠî, Å, ç

, Äf^fXfN, ð•Ò□—, µfŠf□[fX, ðŠ,, è“- , Å, Ü, ·□B

, Ç, ì□^—□, É, à□Á'á 1 , Å, ÌŽÀ□s, ìfXf€fbfh, ð, , è, Ü, ·□B, »), µ, ÄfvfXfef€fŠf□[fX, ð□Á, àCø—! “ì, ÉŽg, µ, ½, ß, É□A, Ü, Æ, ñ, Ç, Ì 32 frfbfg□^—□, É, Ì•i□”, ìfXf€fbfh, ð, , è□A□^—

□, ÌŽÀ□s, É, Å, è, ÄfXf€fbfh, ð□ì□—, ð, è□í□œ, ð, è, Ü, ·□B

fvf□f“fvfgf{f^f“

fhf□fbfvf_fEf“fŠfXfg,Ü,½,Ífhf□fbfvf_fEf“fRf“f{f{fbfNfX,ì%oE,É•\Ž|,³,ê,é%oo-î^ó,ª•t,ç
,½□¬,³,çfAfCfRf“□BfNfŠfbfN,·,é,Æ□A'I'đfŠfXfg,ª-¼'O□‡,Ü,½,Í“ú•t□‡,É%oo•ûŒü,É•\Ž|,³,ê,Ü,·□B

fvf[]fpfefBfV[]fg

flufWfFfNfg,lfvf[]pfefB,Ü,½,Ílfv[]Vf+f“,ð[]Ý’è,Å,«,éf_fCfAf[]fOf{fbfNfX[]B

fvbfVf...f{f^f“

RAM

Random Access Memory, $\dot{\iota}$ — CPU

, $\text{AE}^{\frac{1}{4}}$, $\dot{\iota}$ fn \square [fhfE fF fAfffofCfX, a^{C} , Y \square ', \ll , A , \ll , $\text{e}^{\frac{1}{4}}$ " \pm ' $\dot{\iota}$ fx \square [fX, $\dot{\iota}$ Ž a^{L} $\%_{\text{o}}$ \square f \square f, fŠ \square BRAM, $\dot{\iota}$ fRf " f sf...

\square [f \wedge , $\dot{\iota}$ \square \ll AE f \square f, fŠ, δ \square \square \rightarrow , μ \square AfRf " f sf... \square [f \wedge , A " Žž, E Ž A \square s, A , \ll , e f v f \square f O f $\%_{\text{o}}$ f €

, $\dot{\iota}$ fTfCfY, AE E A \square " \square A \square u Žž, E \square \wedge \square , A , \ll , e f f \square [f \wedge , $\dot{\iota}$ — E , $\dot{\iota}$ RAM, $\dot{\iota}$ — e — E , E , ae , A , A E \wedge , U , e , U , \cdot \square B

(fn \square [fhfffBfXfN, $\dot{\iota}$, ae , x , E) Ž Y C " } $\dot{\iota}$, U , $\frac{1}{2}$, $\dot{\iota}$ PROM, E Š i " [e , e , e f f \square [f \wedge , AE \wedge U , E , e RAM

f \square f, fŠ, $\dot{\iota}$ f f \square [f \wedge , $\dot{\iota}$ \square u Š o " \square \ll v , A , \cdot \square B, A , U , e \square AfRf " f sf... \square [f \wedge , $\dot{\iota}$ " d E E \square \emptyset , e , e , AE RAM

, E Š i " [\square $\dot{\iota}$, Y , $\dot{\iota}$ f f \square [f \wedge , $\dot{\iota}$ \square A Ž, \cdot , μ , U , \cdot \square B

RAM, $\dot{\iota}$ " Žž, E Ž A \square s, A , \ll , e f Afv f Š f P \square [f v f f " \square E A \square " \square , δ \square , a , $\%_{\text{o}}$ $\frac{1}{4}$ ' z f \square f, fŠ, $\dot{\iota}$ \cdot a \ll , A , e , \pm , AE , a , ae , \cdot , e , U , \cdot \square B

, U , AE , n , C , $\dot{\iota}$ PC, A , $\dot{\iota}$ Ž a^{L} $\%_{\text{o}}$ RAM, $\dot{\iota}$ DRAM f f b f v, E , ae , A , A — p O E , e , U , \cdot \square B' E \square \square APC

, $\dot{\iota}$ f \square f, fŠ f AfNfZfX, δ e e , \cdot , e , $\frac{1}{2}$, B , E CPU Ž e e e e , e " a \cdot " f \square f, fŠ f L f f f b f v f... a SRAM

f f b f v, δ Ž g, x SO \cdot " f \square f, fŠ f L f f f b f v f... δ " a \cdot , μ , U , \cdot \square B

æ“Ç,ÝfLffbfVf...

ffBfXfNfLffbfVf..., ÅffBfXfN, ©, ç, ìî•ñ, ìŽæ, èo, µ, ð'¬, -
, ·, é, ½, ß, Ê^ê”Ê, ÊŽg, í, é, éfLffbfVf... <ZpB, ±, ì<Zp, ðŽg, Á, ÄfRf“fgf[f%o, í CPU, a—
v<, ·, éŽŸ, ìff[f^, ð—\’ª, µ, æ, æ, Æ, µA’O, à, Á, Äff[f^, ð (’Êí, í CPU, afAfCfhf<ó’Ô, ÌŠÔ, É) RAM
, É”]’—, µ, Û, ·BRAM, ©, çff[f^, ðŽæ, èo, ·, ì, ìffBfXfN, ©, ç“Ç, Ýž, p, æ, è, à’¬, ç, ì, ÅfLffbfVf...fqfbfg
—, ìCE<%oÊ, ìfVfXfef€, ì^—’¬“x, ìCEüã, É, Á, Ê,ª, è, Û, ·BVCACHE, ÆCEÁ, Ì, é, é Windows
, ìffBfXfNfLffbfVf..., ìæ“Ç, ÝfLffbfVf..., Å, ·B

“Ç,ÝŽæ,èé—p’@«

,±,ìftf@fCf<’@«,íä’,«AííœA^Ú”@,Å,«,È,çftf@fCf<,ðŽˆ•Ê,μ,Û,·B

’·,çftf@fCf<-¼,ð·\,·ffBfœfNfgfŠfGf”fgfŠ,É,í{fŠf...í{f€f%ofxf<’@«A%B,μ’@«A“Ç,ÝŽæ,èé
—p’@«,AíVfXfef€’@«,íZfbfg,^²,è,Û,·B,±,ìftf@fCf<’@«,ì’g,Ýí,í^¹,í’,çftf@fCf<-¼,É“Á—
L,Å,·B

“Ç,Ý”,«fwfbfh

Ž¥<CfffBfXfN,ífffBfXfN•\–Ê,É’í,µ,Äff□[f^,ð“Ç,Ý□’,«,.éfffBfXfNfhf%ofCfu,ì□\□–•”•i□B–¹/₄–
Êftf□fbfs□[fffBfXfN,lfhf%ofCfu,É,ífffBfXfN,ì 2 ,Ä,ì“Ç,Ý□’,«fwfbfh,^a, ,è□AfffBfXfN,ì•\,Æ
– ,ÉŽg,í,ê,Û,·□Bfn□[fhfffBfXfNfhf%ofCfu,ìê□‡,É,í’É□í,í¹/₂,,ì“Ç,Ý□’,«fwfbfh,^a, ,è□A%oo~”Ö,²,Æ,ì\,
Æ– ,ÉŽg,í,ê,Û,·□B

fšfAf·f,[]fh

Intel CPU ,ì“®[]f,[]fh,ì 1,Â[]B8086 CPU ,ì,½,ß,É[]',©,ê,½fvf[]fOf%of€ ,đ 80286 ^È[]ä,ì CPU ,ÅŽÅ[]s,Å,« ,é,æ,æ,É,· ,éf,[]fh[]BfšfAf<f,[]fh,ÅfAfhfCEfXŽw'è,Å,« ,éf[]f,fš,í 1 MB ,ì,Ý[]ACPU ,ª“~žž,ÉŽÅ[]s,Å,« ,é[]^—[] ,ìCEÅ[]” ,í 1 ,Å,¾, -,Å,·[]B%oo¼'zf[]f,fš,Ö,lfAfNfZfX,âf}f<f`f^fXfN<@“\,É·K —v,É[]ö[]Y“l,Éf[]f,fš·ÜCEì<@“\,í ,è,Ü,¹,ñ[]BDOS ,lfšfAf<f,[]fh,lflyfCE[]fefBf“fOfVfXfef€ ,Å,·[]Bfvf[]fefNfgf,[]fh,àžQ[]Æ,μ,Å,,¾,¾,¾,ç[]B

fœfwxf^

^èŽž“l,Éff[]f^<L%o¯—p,É [CPU](#),ª“à’ ,.é[],’—f[]f,fš,ì—ì^æ[]BCPU ,É,í,ç,-
,Ä,à,ìfœfwxf^,ª, ,è,Ü,·[]B,ç,ìfœfwxf^fgfš,à 2 fofCfg ,© 3 fofCfg,ìff[]f^,ì,ý,đš“l,μ,Ü,·[]B

fCfWfXfgfŠ

fVfXfef€,âfAfvfŠfP[fVf+f“,ì<N“@AŸ’èA,»,ì¼,ìî•ñ,ìW’t“l,É<L%o-,·,é Windows
,lff[f^fx[fXfBfCfWfXfgfŠ,í,·,x,Ä,ì’g,Ÿž,Ÿi,Ÿfn[fhfEjFfA,Æ Windows
flfyfC[fefBf“fofVfXfef€—p,É-¾Ži“l,ÉŸCv,¾,é,½fCf“fXfg[f<i,ŸftfgfEjFfA,É,Ä,ç
,Ä,ìî•ñ,ðŠi“[μ,Û,·BfCfWfXfgfŠ,í Windows,Äfvf%ofAf“fhfvfCfC,ðfTf][fg,Ä,«,é,æ,æ
,É,·,é,½,ß,lfRf“f][f+f“fg,ì 1,Ä,ÄAfCfWfXfgfŠfL[ÆCÄ,ì,é,éj]fefSfŠ,É•O-,¾,é,Û,·B
fCfWfXfgfŠ,í^È’O,É [AUTOEXEC.BAT](#) [ACONFIG.SYS](#) [AWIN.INI](#) [ASYSTEM.INI](#)
,ÆCÄ[X,lfAfvfŠfP[fVf+f“,ì [INI.ftf@fCf<](#),º%oÉ,½,μ,½ Windows 3.x,ì<@“\,ì¼,ð’ă,í,è,É
%oÉ,½,μ,Û,·B,±,é,ç,lfTf@fCf<,í^ê•”,lfn[fhfEjFfA,Û,½,lf
ftfgfEjFfA,ÄŽg,í,é,é,ì,ÄCä•ûCEŸŠ,ì,½,ß,É,Û,¾ Windows,É’ŋŸ,·,é,±
,Æ,ª,è,Û,·BfCfWfXfgfŠ,ìî•ñ,í SYSTEM.DAT,Æ USER.DAT,Æ,ç,æ 2
,Ä,lfofCfifŠftf@fCf<,ÉŠi“[¾,é,Û,·BSYSTEM.DAT,lfRf“fsf...
[f^SÖ~A,ìÄVff[f^,ð•ÛŽç,μAUSER.DAT,í^Û,È,éft[fU[Û,Û,½,í-
Û“l,ì,½,ß,É•i[“,lfVfXfef€Ÿ’è,ð•ÛŽç,Ä,«,Û,·B

fWfXfgfŠfL

Windows ,ifWfXfgfŠ.ÉŠi”[,³,ê,Ä,ç

,éi•ñ,lfjfeSfSfBfWfXfgfŠfL[,lfWfXfgfŠ.ÉŠi”[,μ,Ä, ,éff[f^,ðCf“ffbfNfX•t, ,Ü,½,Í•Ò[-,·

,é,½,ß,ÉŽg,αŽè’i,Å,·BfWfXfgfŠfL[,É,Í¼,lfL[(fTfufL[)

,âff[f^,ðŠi”[,Å,«,é,ì,ÅAfWfXfgfŠ,ÍŠK’w[‘ç,ðC[-,μ,Ü,·i

Äj}bfv

f f, fŠfAfhfCfX, ðÄ, ÑŠ,, è -, Ä, é, ±, ÆB, ½, Æ, i, î Af f, fŠŠÇ— fVtfgfEjFfA, ífffofCfXfhf
%oCfo, ðfRf“fxf“fVf#fif<f f, fŠ, ©, ç UMA
, ÉÄj}bfv, µ, ÄfRf“fxf“fVf#fif<f f, fŠ, ðfAfvfŠfP[fVf#f“, ÅŽg, i, é, æ, x, É%øð•ú, Å, <, Ü, ·B

%EfnfŠbfN

f}fEfX,ì%Ef{f^f“,đfNfŠbfN,·,é,±,Æ□BfftfHf<fg,Å,í□Af}fEfXfj□[f\ f,afCf“f^□[ftfF□[fX,ífífufWfFfNfg□ă,É, ,é□ó’Ô,Å%EfnfŠbfN,·,é,ÆfRf“fefLfXfgf□fjf...□[,^a\ Ž!,³,ê,Ü,·□BfRf“fefLfXfgf□fjf...□[,É,ífífufWfFfNfgCEÅ—L,ífífvfVf#f“,^a—p^Ô,³,ê,Å,ç ,Ü,·□B□¶,«,«,ìft□[fU□[.í,½,ß,Éf}fEfXf{f^f“,ìŠ,,,è” - ,Ä,đ□Ø,è’Ô,!,é,Æ□Af}fEfX,ì□¶f{f^f“,đfNfŠbfN,μ,½,Æ,«,ÉfRf“fefLfXfgf□fjf...□[,^a\ Ž!,³,ê,Ü,·□B

ROM

Read-Only Memory, i.e. BROM, YZæ, è%oÂ" \, Å, «ž, Y<ÖŽ~, i"¼" ±'if, fš BROM f`fbfv, É, ívf fOf %of€ Af f^A, Ü, ½, í, » , i-¼•û, a"ü, Ä, Ä, ç, é, ±, Æ, a, , è, Ü, · BROM , É, í^ê"Ê, É PROM f`fbfv, Æ CD-ROM , i 2 Ží—p, a, , è, Ü, · BROM , í^ê"Ê, É •sŠö" f, fš, Ä, · BfvfXfef€ BIOS -½—ß, ì, Ù, Æ, ñ, Ç, í ROM f`fbfv (ROM-BIOS) , ÉŠi" [, ³, è, Ü, ·, a AWindos , É, í, ç, , Ä, ©, ì ROM BIOS f< f` f" , É'ã, í, éCEÅ— L, íf< f` f" , a—p^Ó, ³, è, Ä, ç, Ü, · B

f<[]f9

f<[]fgffBfCefNfgfŠ,í~_—[]ffBfXfN,ìtf@fCf<<L%o~[]\`¢
,ì“y’ä,Å,·[]Bf<[]fgffBfCefNfgfŠ,É,ìffBfXfN[]ã,ÉŠi”[,³,è,é[]Å[]ã^Ê,ìtf@fCf<,âftfHf<f_,ì,½,ß,ìffBfCefN
fgfŠfGf“fgfŠ,ª, ,è,Û,·[]B

RS-232C

VfŠfAf'ÉMÚ'±,ÉŠÖ,·,é<ÆŠE<KŠiBfffofCfXŠÔ,ìVfŠfAf<ff[f^"\'—,ð\$Eä,·,é,½,ß,ÉA"Á'è,ì
%ñü (Ú'±fCf,,) ,ÆM"Á«,^aZg,í,ê,Û,·B

fXfPfwf...[f%o

'¼,ì^— (fXfEfbfh“™) ,Æf^fXfN,đŠÇ—,·,élfyfCE[fefBf“fOfVfXfef€,ì^—B

fXfNf[]f<fo[]

•¶,Ü,½,ÍŠfXfg,ðA,»,ê,ð•Ž,·,éEfBf“fhfE,É%ž,¶,Ä^Ú“®,Å,«,é GUI fRf“fj
[]fif“fg[]BfXfNf[]f<fo[],í'Éí[]AfEfBf“fhfE,âfŠfXfgf{fbfNfX,ì%oi,Ü,½,Í
%oo,ì•”•ª,ÉCE»,ê,é,¼,Ü,½,Í...•½,ìfo[],Å,·B

ufXfNf[]f<f{fbfNfXv,ífXfNf[]f<fo[]ã,É•Ž!,³,ê[]Afo[],É%oo^,Á,Äf}fEfX,Åfhf
%ofbfO,µ,ÄEfBf“fhfE“à,ÅfefLfXfg,ð^Ú“®,Å,«,Ü,·B

ufXfNf[]f<î^óv,ífXfNf[]f<fo[],ì—¼',É•Ž!,³,ê[]AfNfŠfbfN,·,é,ÆfefLfXfg,ð,µ,¾,¯
(‘ÉífefLfXfg 1 []sª) fXfNf[]f<,Å,«,Ü,·BfXfNf[]f<f{fbfNfX,ÆfXfNf[]f<-
î^ó,İÖ,ðfNfŠfbfN,·,é,Æ[]AfefLfXfg,ð^å•,É (‘Éí[]A1 fy[]fW•ª,Ü,½,ì,»,ífEfBf“fhfE,ìfefLfXfg‘Š“-
ª) ^Ú“®,Å,«,Ü,·B

fXfNf□□[f<f{fbfNfX

SCSI

Small Computer System Interface , ì—ª, Å□ufXfjfw□[□v, Æ”%º¹, µ, Û, ·□BfRf“fsf...

□[f^, ðfn□[fhfffBfXfN□AfvfŠf“f^□ACD-ROM fhf%ºfCfu, È, Ç, ìfffofCfX, É□Ú’±

, ·, é, Æ, «, ÈŽg, í, ê, é•W□€fCf“f^□[ftfF□[fX, ì^êŽí, Å, ·□B, Û, Æ, ñ, Ç, ì SCSI

fAf_fvf^fj□[fh, Ì□Ú’±□æ, ìfffofCfX, ÌŽí—p, ð’m, ç, È, , Å, à□Ú’±, Å, «, Û, ·□B□Ú’±□æ, É•K—v, È□ðœ□, Ì

SCSI , Ì•W□€, É□€<’, ·, é□Ú’±, Å, , é, ±, Æ, Ì, Ý, Å, ·□B7 ‘ä, Û, Å, Ì SCSI fffofCfX, ð’ŠœÝ, É□Ú’±

, µ□A, »), è, ðfRf“fsf...□[f^, Ì SCSI f□[fg, É□Ú’±, Å, «, Û, ·□B, ±, Ì, æ, x, È□□¬, ð□ufffCfW□[f`fF□[f“□v, Æ, ç

, ç, Û, ·□B

f}fEfX,ì%oEf{f^f“

Žg,æ%oñ□,ª□,È,ç•û,ìf}fEfXf{f^f“□Bf}fEfX,ì%oEf{f^f“,ðfNfŠfbfN,·,é,±,Æ,ð%oEfNfŠfbfN,Æ,ç,ç□A'½,,ì□ê□#fRf“[fefLfXfgf□fjf...□□](#),ª•\Ž,³,è,Û,·□B

%oE—,«—p,ìf}fEfX,ì%oEf{f^f“,ð□¶—,«ft□[fU□[,É□‡,æ,æ,É Windows,ìfRf“fgf□□[f<fpf|f<,Å•ì□X,Å,«,Û,·□Bf}fEfX,ì□¶{f^f“,àŽQ□Æ,µ,Ä,,¾,¾,ç□B

“ňŽŸfEjBf“fhfE

^è”Ê,É^êŽŸfEjBf“fhfE,É”ä,x,Ä□¬,³,<@”\,à’á,čfAfvfŠfP□[fvf‡f“fEjBf“fhfE□B

fZfNf^

fffBfXfN,ì•—□“l,È<L%~ì□Å□—P^Ê□B1 ,Â,ìfZfNf^,ífffBfXfN□ã,É, ,éff□[f^<L
%~^æ,ìCEÊ,ìCE` ,ð,μ,½•”•ª,Å,·□BfffBfXfN,ì<L%~—ì^æ,íZŸ,ì,æ,α,É•Ö□—,³,è,Ü,·□B

• fffBfXfN•\—Ê,ìŠe—Ê (□ã%~º)

(fn□[fhfffBfXfN,É,í 3 ,Â^Ê□ã,ì—Ê,ª, ,è,Ü,·)

• fgf%~ofbfN (ŽŸ<CfffBfXfN,ì•\—Ê,É“~□S%~□ó,ì—Ö,Æ,μ,Ä□®—ñ,μ,Ü,·□BCD-ROM ,ìfgf
%~ofbfN,ífffBfXfN,ì[,©,ç’t□S,É,ç,¹,ñ□ó,É’±,’P^êfgf%~ofbfN,Å,·)

• fZfNf^ (fgf%~ofbfN,ì 1 ,Â,ìCEÊ,ìCE` ,ð,μ,½•”•ª,ð□è,ß,Ü,·)

ff□[f^<L%~^æ,ì 1 ,Â,ìfZfNf^,ífffBfXfN□ã,Åfgf%~ofbfN,ì 1 ,Â,ìCEÊ,ìCE` ,ð,μ,½•”•ª,ð□è,ß,Ü,·□B
1 fZfNf^,ìTfCfY (fofCfç□”) ,ílfyfCE□[fefBf“fofVfXfef€ ,É,æ,Á,ÄCE^,Ü,è,Ü,·□B

fZfCefNf^

Windows 95/98/Me: CPU ,^afvf^{efNfgf.}lfh,Å“@ì,μ,Ä,ç,é,Æ,«,ìfZfOf^{fg} fCfWfXf^,ì“à—
eBfZfCefNf^,ìf^f,fS,ì“Á“è,ìfZfOf^{fg},ð'è` ,.é<LqZqfe^{lfuf}<,ìfGf“fgfS,ðZ~•É,μ,Ü,·B

fZfpfCE[f^ü

1 ,Â,ifffj...[.đŠÖ~A,.éffjf...[[€-Ú,²,Æ,ifOf<[fv,É•^aŠ,,.é...•¹/₂,lüüB

fVfŠfAf'ÊM

ff[f^,ð~A'±,·,éfrfbfg,Æ,μ,Ä^ê"x,É 1 ,Â, ,Â 1 -{,ì%ñü,ð'Ê,¶,Ä'—M,·,éRf"fsf...
[f^ŠÖ,Ü,½,ífRf"fsf...[f^,ÆŽü•Ó'•'uŠÖ,iff[f^"'—B

fVfŠfAf·fCf“f^[]ftfF[]fX

fRf“fsf...[]f^,ÉfVfŠfAf<’Ê[]M<@”\,đ—

^,ı,éfCf“f^[]ftfF[]fX[]B’Ê[]í[]AfVfŠfAf·fCf“f^[]ftfF[]fX,í}fU[]f{[]fh,É·,μž,ρŠg’£f{[]fh,Å\
[]→,³,êfVfŠfAf<f[]fg,àŠÜ,Ü,ê,Ü,·[]B

fVfŠfAf·f|[]fg

fVfŠfAf<ÉM, ð, ·, é, ½, ß, ðfRf"fsf...[]f^, ð"üo—ÍÚ'±[]B, fVfŠfAf<fCf" f^[]ftfF[]fX, ÉÚ'±,³,êA'Éí
RS-232C Æ^fRf|fNf^, Å, ·[]B

fVf#[]fgjfbfgfL[]

f}fEfX,žg,Á,Äf[]fj...[]€-Ú,đ'ı'đ,μ,È,-


,Ä,àfL[]f{[]fh,©,ç"Á'è,ıRf}f"fh,đŽÄ[]s,Å,«,éL[][,ı'g,Ý[]#,ı,¹[]BfVf#[]fgjfbfgfL[],^a, ,éf[]fj...[]€-
Ú,ı[]ê[]#[]A[]f[]j[]f...[][]ã,Å[]€-Ú-¼,ı%°E,ÉfVf#[]fgjfbfgfL[],ı'g,Ý[]#,ı,¹,^a·\Žı,³,ê,Ü,·[]B

SIMM

Single Inline Memory Module , à B1 , à SIMM , à i , à [DRAM](#) f`fbfv, ð“<Ú, , éx’·, ç
%oñ~HŠî”Ö, Å, ·B

fXf%oofbfN

fIfyfCE[]fEfBf"fofVfXfef€ ,íftf@fCf<,ì,½,ß,ì-ì^æ,ðfNf%ofXf^,ÆCEÄ,î,ê,é-fŽU"l,È
%oò,Æ,μ,ÅŠ,,è"-,Ä,Û,· (-\-ñ,μ,Û,·)B,μ,©,μA,Û,Æ,ñ,Ç,íftf@fCf<,áfffBfXfN[]ã,Å• " -[]"l,É[]è,ß,é
-ì^æ,íIfyfCE[]fEfBf"fofVfXfef€ ,^a-\-ñ,μ,½,æ,è,à[],É,ç-e-É,Å,·[]BfXf
%oofbfN,Æ,íftf@fCf<,íff[]f^,É[]è-L,³ê,É,ç-V,Ñ,íXfy[]fX,Å,·[]BCEÄ[]X,íftf@fCf<,ì,½,ß,É,ç
,Ä,½,ñŠ,,è"-,Ä,ç,ê,½fffBfXfN-ì^æ,í[]A,Û,©,ì,Ç,ñ,É-U"l,É,àŽg,í,ê,Û,¹ñ[]B,Ä,Û,è[]AfXf
%oofbfN,ífffBfXfN[]ã,ì,p,^¾,É-ì^æ,Å,·[]B

 FAT32 ftf@fCf<fvfXfef€,í,æ,è[]-,³çfNf%ofXf^,ðŽg,x,±,Æ,É,æ,Ä,ÄfffBfXfN,íXf%oofbfN-e
-É,ð[]Å[]-CEA,ÉCE, ,ç,μ,Û,·[]B

<N"@ftj@fCf<

fXfe[f^fXfo]

^—A<@”\A‘I’đ,μ,½€-Ú,É,Â,ç,Ä,ìî•ñ,đ•Ž!,·,é GUI fRf“f]

[fjf“fgB’ÉíAfXfe[f^fXfo][,ÍEjBf“fhfE,Ü,½,Í_fCfAfOf{fbfNfX,ì%°•”,É•Ž!,³,ê,Ü,·B

fXfefbfv

CPU f`fbfv, ì%°^ÊfŠfrfWf†f“, ðŽw'è, ·, é, ½, ß, ÉŽg, í, ê, é'P^Ê□B, ½, Æ, í, î□APentium fXfefbfv 5 , Æ, ç, ðŽw'è, ïf`fbfv, í Pentium fXfefbfv 4 , æ, è, à□, μ□X□V, °, ê, ½f`fbfv, Å, ·□B

Super VGA

SVGA

fp[]\fifjRf“fsf...[]f^,ÅŽg,í,ê,éfrffjlfAf_fvf^f{[]fh,ì 1 Ží[]BPC ,ìfrffjlfjffBfXfvfCefC•W[]€,ì”-
“W,É,“,ç,Ä SVGA ,í VGA ,ìĀě,ÅŠj”,³,ê,Û,μ,½[]BSVGA fj[]fh,í VGA fj[]fh,æ,è,à[],“x,È,ç,,Ä, ©,ì
%øð’œ“x,ð”ð,ì,Ä,ç,Û,·[]B

fXf fbfvtf@fCf<

Windows ,^a%_o¼'zf f, fŠ, Æ, μ, ÄŽg, x%_oB, μ ftj@fCf< BfXf fbfvtf@fCf<, í RAM
, ©, ç, ì, ï, ñ, ð, ê, ž, ž, "l, ÉŠi"l, μ, Ä'¼, ìfAfvfŠfP [fVf#f",^a RAM , ðŽg, ì, é, æ, x, É, μ, Ü, · BWindows
95/98/Me , ìfXf fbfvtf@fCf<, í WIN386.SWP , Æ, ç, x-¼'O, Å, · B

Windows NT/2000

ŠÂ<<%_oº, Å, ìfXf fbfvtf@fCf<, ð ufy [fWf" fOf tf@fCf< v, ÆCEÄ, Ñ APAGEFILE.SYS , Æ, ç, xftj@fCf<-
¼, ^a•t, ç, Ä, ç, Ü, · B

fVfXfef€—ì^æ

fIfyfCE[fefBf"fofVfXfef€

,âffBfXfN,âffBfXfN,ÉŠi"[,³,ê,½ftf@fCf<,ÉfAfNfZfX,·,é,Æ,«,ÉŽg,αî•ñ,ª"ü,Á,Ä,ç,éffBfXfN,ì—
ì^æBffBfXfN,ìfVfXfef€—ì^æ,É,ífu[fqfCFR[fhAFATAf<[fgî•ñ,ª"ü,Á,Ä,ç
,Ü,·B,Ü,Æ,ñ,Ç,ìfn[fhfffBfXfN,ìfVfXfef€—ì^æ,É,ífp[fefBfVf#f"fe[fuf<,à, ,è,Ü,·B

fVfXfef€'®□«

,±
,[ìftf@fCf<'®□«](#),ìfvfXfef€ŠÖŒW,ìfffBfŒfNfgfŠfGf"fgfŠ,đŽ`•Ê,µ,Û,·□BfvfXfef€'®□«,đ"đ,ì,½ftf@fCf<,ì—á,Í IMAGE.IDX (Norton Utilities),ì Image fvf□fOf%of€,É'®,·,éftf@fCf<) ,Æ IO.SYS (fìfyfŒ□[fefBf"fOfVfXfef€,ìftf@fCf<) ,Å,·□BfvfXfef€'®□«,đ"đ,ì,½ftfHf<f_ì—á,Í Windows ,ì,²,Ý" ,â FONTS ftfHf<f_Å,·□B
'·,çftf@fCf<-¼,đ·\,fffBfŒfNfgfŠfGf"fgfŠ,É,ìf{fŠf...□[f€f%ofxf<'®□«□A%B,µ'®□«□A"C.ÝŽæ.è□ê—p'®□«,□AfvfXfef€'®□«,ìZfbfg,^a, ,è,Û,·□B,±,ìftf@fCf<'®□«,ì'g,Ý□‡,ì,¹,ì',çftf@fCf<-¼,É"Á—L,Å,·□B

fVfXfef€LjffbVf...

fVfXfef€ftf@fCf<

fRf“fsf...[]f^,đ<N“® ,μ,½,è Windows
,đ<N“® ,μ,Ä[]Ý'è,·,é,Æ,«,ÉŽg,í,é,éftf@fCf<,lfOf<[]fv[]BWindows 95/98/Me
,É,íŽÝ,lf@fCf<,ª, ,è,Ü,·[]B

- [AUTOEXEC.BAT](#)
- [CONFIG.SYS](#)
- [WIN.INI](#)
- [SYSTEM.INI](#)
- [SYSTEM.DAT](#)
- [USER.DAT](#)

,±,é,ç,lf@fCf<,đ[]u<N“®ftf@fCf<[]v,Æ,à,ç,ç,Ü,·[]B

fVfXfef€f[]jf...[]

fVfXfef€f^fCf}[]f|[]fg

fVfXfef€f^fCf}[] (, Û, ½, ÍVfXfef€fNf[]fbfN) ,Æ'¼[]Ú'Ê[]M, ,é, ½, ß, ÉŽg, í, ê, éfn[] [fhfEfFfA, ì] []fg, Å[]AŽå, Éf^fCf}[] [Š, , è[]ž, Ý' – "x, ð•Í[]X, ,é, ½, ß, ÉŽg, í, ê, Û, ·[]B

fVfXfef€ VM

Windows fAfvfŠfP[fVf#f“,a“@i,.,é%¼'zf}fVf“BfvfXfef€ VM
,ífvf}fefNfjg.f.fh,Å“@i,μ,Û,·B32 frfbfg,ì Windows fAfvfŠfP[fVf#f“,í,»,è,¼,è,afVfXfef€ VM
ã,Åê—p,íf,fS—ì^æ,ðS—L,μfvfEfGf“fvfefBfuf}f`f^fXfN,Å^—,³,è,Û,·B16 frfbfg,ì
Windows fAfvfŠfP[fVf#f“,ífVfXfef€ VM ã,Å^P^è,íf,fS—ì^æ,ð<α—L,μ<'²“l,Èf}f`f^fXfN,Å^—
³,è,Û,·BDOS VM ,Æ”äŠr,μ,Ä,,¾,¾,çB

SYSTEM.DAT

Windows 95/98/Me: ftfU[,Æ,É•İ,í,é,±,Æ,ì,È,çfVfXfef€ŠÖŒW,İfŒfWfXfgfŠî•ñ,ª“ü,Á,Ä,ç,éftf@fCf<BfŒfWfXfgfŠî•ñ,ª“ü,Á,Ä,ç,éŽå—v,ÈfVfXfef€ftf@fCf<Í SYSTEM.DAT ,Æ [USER.DAT](#),Ä,·B

SYSTEM.INI

fVfXfef€CEĀ—L,lfhf%ofCfo,ÆŸ'èŋ•ñ,ª"ü,Á,Ā,ç,é Windows ,ì<N"®ftf@fCf<BWindows 3.x ,ì
SYSTEM.INI ,ÉŠi"l,³,ê,Ā,ç,½ŋ•ñ,ì,Û,Æ,ñ,Ç,í Windows
fCfWfXfgfŠ.ÉĀ"z'u,³,ê,Û,μ,½B,½,¾,μACEĀ,çfAfvfŠfP[fVf‡f",Æ,ìCEŸŠ·«,â Windows
,ì^ê•",ì<N"®^—,ì,½,β,É SYSTEM.INI ,ì,Û,¾'ŋŸ,μ,Û,·B

fefLfXfgf{fbfNfX

fvf[]Of%of€ ,É•K—v,È 1 []s (,Ü,½,Í•i[]"[]s) ,ì[]î•ñ,ð“ü—Í,·,é'•û€` ,ì GUI fRf“f[]lfif“fg[]B[]%o,ß,Ä•\
Ž,³,ê,é,Æ,«[]AfefLfXfgf{fbfNfX,Í'½,,ì[]ê[]‡,Í<ó”',Å,·,ª[]AfefLfXfg,ª“ü,Á,Ä,†,é,±,Æ,à, ,è,Ü,·[]B

fXfCEfbfh

"äŠr"l'â<k-Í,È□^—□,Ü,½,Ífvf□fOf%of€,ì^ê•"□B

•i□",ÍfXfCEfbfh,Í□e□^—□,ÉŠ,,,è"-,Ä,ç,ê,½fAfhfCEfX<óŠÔ,ÆfŠf\□[fX,ð<α—L,μ,Ü,·□B□^—
□,²,Æ,É□Á'á 1 ,Â,ÍfXfCEfbfh,ð□□—,μ□A,Ü,Æ,ñ,Ç,Í□^—
□,É,Í•i□",ÍfXfCEfbfh,ª, ,è,Ü,·□BfXfCEfbfh,Í□e□^—□,ÌŽÀ□s't,É•K—v,É
%ož,¶,Ä"®"l,É□□—,³,ê□í□œ,³,ê,Ü,·□B

fXfCEfbfh (□^—□'S'ì,Ä,í,È,,»,ì^ê•") ,ÍfÍfyfCE□[fefBf"fofVfXfef€,ÅŠÇ—

□,³,ê□Af}f<f`f^fXfN,ÌŽA'•,É," , ,é CPU ŽžŠÔ,ÍŠ,,,è"-,Ä,ÍŠî-{,Ä,·□BWindows ,ì [32](#)

[frfbfgfAfvfŠfP□\[fvf†f"](#),í½,,ÍfXfCEfbfh,ðŽg,!,Ü,·□B,Ç,ì 32 [frfbfgfAfvfŠfP□\[fvf†f"](#),à□e□^—□,ÉŠ,,,è"-

,Ä,ç,ê,½f□f,Š,ð<α—L,μ□AfXfCEfbfh,ÍfvfCEGf"fvfefBfuf}f<f`f^fXfN,Å□^—□,³,ê,Ü,·□B [16](#)

[frfbfgfAfvfŠfP□\[fvf†f"](#) (Windows 3.x ,Æ DOS ,ÍfAfvfŠfP□[fvf†f") ,ÉfXfCEfbfh,í 1 ,Ä,,Ä,μ,©,È,-

□A,±,è,ç,ÍfXfCEfbfh,Í<:'²"l,Éf}f<f`f^fXfN,Å□^—□,³,ê,Ü,·□B

f^fcf}[]Š,,èž,Ý

PC ,ìfvfxfef€fnf[]fbfnf`fbfv,ÉŠÖ~A,·,éŠ,,èž,Ý,í 2 ,Â, ,è,Û,·[]BINT 8h ,Æ INT 1Ch
,Å[]Af^fCf}[][Š,,èž,Ý,Æ'[][]ì,³,è,Û,·[]B\ftfgfEfffA,af^fCf}[][,ÉŠÖ~A,μ,½'€[]ì,ð—
v<[],·,é[]ê[]#[]A'É[]í INT 1Ch ,É,Â,È,¬,Û,· ([]L,ç^Ó-j,Åft[]fU[]['€[]ì,ð-
Ú"l,Æ,μ,½Š,,èž,Ý,ÆCE©,É,³,è,Û,·)[]BINT 8h ,É,Â,È,®,±
,Æ,à, ,è,Û,·,³CE«,ç'l'ð,Æ,íCE©,É,³,è,Û,¹,ñ[]B

fvf[]fOf%of€ ,É,æ,Á,Ä,í[]AfVfxfef€fnf[]fbfnf`fbfv,ª,±,è,ç,ìŠ,,èž,Ý,ð[]¶[]¬,·,é'¬"x,ð·ì[]X,·,é,±
,Æ,ª, ,è,Û,· (ffftfHf<fg,í 1 •bŠÖ,É 18.2 %oñ,Å,·)[]B·ì[]X,·,é[]ê[]#[]AfVf[]fOf%of€
,íffftfHf<fg'¬"x,ìfGf~f...fCE[]fVf#f",ð^ÛŽ[],·,é•K—v,ª, ,è,Û,·[]B·ì[]X,μ,È,ç[]ê[]#[]AfVfxfef€Žž[][],í[]³
Šm,ÉŽž,ð[][],Û,È,,È,è[]A,»,ì¹¼,ì'€[]ì (fffBfXfn,ì"ü[]o—í,È,Ç) ,ÍŽ, "s,μ,Û,·[]B

f^fCfgrfo

f^fCfgrfo, íEjBf"fhfE, Ü, ½, íf_fCfAfOf{fbfNfX, ìã•", É•\

Ž!,³, êAfeBf"fhfE, ÅŽÀs't, ìAfvfŠfP[fVf#"-¼, Ü, ½, íf_fCfAfOf{fbfNfX-¼, ð•\

Ž!, μ, Ü, ·BfeBf"fhfE, Æ^ê•", ìf_fCfAfOf{fbfNfX, ìf^fCfgrfo, É, íRf"fgf[f<fj...], ÆÅ-
%»AÅ'â%»ACE³, ìTfCfY, É-ß, ·f{f^f",^a, , è, Ü, ·

BfAfNfefBfufEfBf"fhfE, ìf^fCfgrfo, ìF, í"ñfAfNfefBfufEfBf"fhfE, ìf^fCfgrfo, ìF, Æ^Ü, È, è, Ü, ·B

fgfOf<

“®ŽĀ,Æ,μ,ÄŽg,⊗ê⊕⊗A”~,¶fRf“fgf□□f<,Ü,½,í“®□ì,É,æ,Á,Ä 2 □ó’ÔflfufWfFfNfg
(f`fFfbfNf{fbfNfX,È,Ç) ,ì□ó’Ô,ð•í,ì,é,±,Æ□B
-¼ŽĀ,Æ,μ,ÄŽg,⊗ê⊕⊗A”~,¶‘€□ì (flfufWfFfNfg,ìfNfŠfbfN,È,Ç) ,Å 2
,Ä,ì□ó’Ô,ð□ø,è’Ô,ì,Ä,«,éflfufWfFfNfg□B

fc[f<fo

fAfvfŠfP[fVf#f“fEfBf“fhfE,É 1 —ñ,É•\Ž,³,è,éŠG•¶Žš,ìRf}f“fhf{f^f“B’ÉifEfBf“fhfE,ìfifj...
[fo],ì^%º,É, ,è,Ü,·Bfc[f<fo[,íEfBf“fhfE,Ü,½,íAfvfŠfP[fVf#f“Á—
L,ìfifvVf#f“ ,Ü,½,ìRf}f“fh,Éf}fEfX,Å,·,î,â,fAfNfZfX,Å,«,Ü,·B

fgf%oofbfN

fffBfXfN•\-Ê,î•" —□ftfH□[f}fbfg,î^ê•"□BfffBfXfN,î<L%~—î^æ,íŽŸ,ì,æ,α,É•Ò□¬,³,ê,Ü,·□B

- fffBfXfN•\-Ê,îŠe-Ê (□ã%oo°)
(fn□[fhfffBfXfN,É,í 3 ,Á^È□ã,ì-Ê,ª, ,è,Ü,·)
- fgf%oofbfN (ŽŸ<CfffBfXfN,î•\-Ê,É"~□S%o~□ó,ì—Ö,Æ,μ,Ä□@—ñ,μ,Ü,·□BCD-ROM ,ìfgf%oofbfN,ìfffBfXfN,ì[,©,ç't□S,É,ç,¹,ñ□ó,É'±,'P^êfgf%oofbfN,Å,·)
- fzfNf^ (fgf%oofbfN,ì 1 ,Á,ìCEÊ,ìCE` ,ð,μ,½•"•ª,ð□è,ß,Ü,·)

“]’—’¬“x

“]’—’¬“x, í 1 •bšÔ,ÉfffBfXfN,©,ç“Ç,ÝŽæ,Á,ÄfRf“fsf...

□[f^,ìf□f,fš,É”z’u,Å,«,éfofCf□”,đŽw’è,μ,·□B,±,ì’a’èšî€ ,ífffBfXfNfhf%oofCfu,ì^—□’¬“x,đ•]‰
¿,·,é,½,ß,ÉŽg,í,ê,Ü,·□B

TSR

Termonate-and-Stay-Resident ,ì—ªBTSR fvf¶fOf%of€ ,đ¶uf¶f,fŠ¶í“¶vfvf¶fOf%of€,Æ,à,¢,¢
,Ü,·¶B

fRf“fsf...¶[f^,ì RAM ,Éf¶¶[fh,³,è¶AŽÀ¶s't,Å,È,,Ä,àf¶f,fŠ¶ă,ÉŽc,é DOS fvf¶fOf%of€¶BTSR ,í
Windows NT/2000 ,ìfRf“fsf...¶[f^¶ă,Å,Í“,«,Ü,¹,ñ¶B

□í“fvf□fOf%of€

UART

fAf“fhfDftf@fCf<

Norton Disk Doctor ,³ffBfXfN,ð□C•œ,;,é'O,É□i□-,;,éftf@fCf<□BNorton System Doctor ,Í•K—
v,², ,ê,Î□AfAf“fhfDftf@fCf<,É,æ,Ä,Ä•İ□X,ðCE³,É-ß,¹,Ü,·□B

Unicode

Windows 95/98/Me , à ç ã @ f ç k - ¼ , Æ Windows NT/2000 , Å Ž g , í , ê , é • ¶ Ž š f Z f b f g □ BUnicode
• ¶ Ž š f Z f b f g , í 16 f r f b f g (2 f o f C f g) , ì f f □ [f ^ , ð Ž g , Á , Ä 1 • ¶ Ž š , ð • \ Ç » , . , é , ì , Å □ A65,536 (2 , ì 16 □ æ)
• ¶ Ž š , Û , Å , ì □ d • ; , ì , È , ç f R □ [f h , ^a — p ^ Ó , ³ , ê , Û , . □ B

UNC

Universal Naming Convention , à—Bflfbfgf[]fN, ÅÚ'±,³,ê,é (ftf@fCf<,³f[]fjff<fRf“fsf...
[]f^[]ä,É'¶[]Ý,µ,È,ç,±,Æ,ª, ,é) fRf“fsf...[]f^,ðfTf|[]fg,·,é,½,ß,É[]^Ä,³,ê,½ftf@fCf<-¼,ì•t,¯•û,ì-
ň'©[]B,±,ì•ûŽ®,Å,ìfhf%ofCfu-¼,ÆfpfX,Æftf@fCf<,Å,í,É,[]AfpfX ,Æftf@fCf<-
¼,ì'O,Éftf@fCf<,ª“ü,Á,Ä,ç,éflfbfgf[]fN,ì-¼'O,Æ 2 ,Ä,ì%~<L[]† (\\) ,ð•t,¯,Û,·[]B

UMA

Upper Memory Area ,i—^a BfRf“fxj“fVj#jif<f[]fŠ^[]ã,©,çŽn,Ü,è 1 MB ,Å[]i,í,é 384KB ,jRf“fsf...
[]f^,ì RAM[]B

UMB

Upper Memory Block ,ì—ª□B

Windows 95/98/Me: [UMA](#) ,í 640KB ,©,ç 1MB ,Ü,Å,ì [RAM](#) ,Å□\□¬,³,ê,Ü,·□BUMB ,í UMA ,ì^ê•”,Å,·□BUMA ,ì~A'±,·,é-çŽg—p—ì^æ,É,í,ç,,Å,à,ì UMB ,ª, ,è,Ü,·□B

80836 ^È□ã,ì CPU ,đ“<□Ú,·,éfRf“fsf...□[f^,ífRf“fxf“fvf#fif<f□f,fŠ (RAM ,ì□Å□%o,ì 640KB)

,đ<ó,¬,é,½,ß,Éf□f,fŠŠÇ—□f\ftfgfEjFfA,đŽg,Å,ÅfRf“fxf“fvf#fif<f□f,fŠ,ì—ì^æ,©,ç UMB

,É□î•ñ,đfRfs□[,Å,«,·□B'½,,ì□é□#□ACEÁ,çfvf□fOf%of€,đŽÁ□s,·,é,É,ífRf“fxf“fvf#fif<f□f,fŠ,ì<ó,«,ª•K—v,Å,·□B

UMB

USER fšf\fx

Windows 95/98/Me: Windows User f,fWf... [f<-p,É-\\-ñ,³,ê,½ RAM ,ì-ì^æ BUser f,fWf...
 [f<,íEjBf“fhfEŠÇ- ,ì-â'è,đ^ - ,μ Af_fCfAf fOf{fbfNfX,â,»,ì'¼,ì GUI fRf“f| [fj“fg,đ^ -
 ,μ,Ü,· BWindows ,ì 3 ,Â,ìŽâ-vfTfufVfXfef€,íj [fj< AGDI AUSER fšf\fx,Â,· B

USER.DAT

Windows 95/98/Me: ftf@fCf<BfCfWfXfgfŠî•ñ,ª“ü,Á,Ä,ç,é Windows
,ìftf@fCf<BfCfWfXfgfŠî•ñ,ª“ü,Á,Ä,ç,éZâ—v,ÉfvfXfef€ftf@fCf<,Æ,μ,Ä USER.DAT ,Æ
SYSTEM.DAT ,ª, ,è,Û,·B

VGA

Video Graphic Array , à—^a Bfp [fififRf“fsf... [f^ , ÅŽg, í, è, éfrffifAf_fvf^f{ [fh, ìŽí—b BPC
, ìfrffifffBfXfvfCfC•W [€, ì”“W, É, “, ç, Å VGA , í EGA , ìCã, ÉŠj” ,³, è, Û, μ, ½ BVGA fj [fh, É, í, ç, -
, Å, ©, ìfrffif, [fh, ^a, , è, Û, ,^a AfOf%oftfBfbfN, ÆfefLfXfg, É, Å, ç, Å, í 256 [F, Æ, ç, x \$CÈÀ, ^a, , è, Û, , [B

fjffjfh

VRAM

frfffi%oñ~H,É,æ,Á,Ä, '¬¼ÚfAfNfZfX,ª,Å,«,é“Á•Ê,ÈŽí—p,ì [DRAM](#) BVRAM f`fbfv,í'Êí,ì DRAM
f`fbfv,æ,è,à,%,¿,Å,·B

VIM

Vendor-Independent Mail, ì—ª□Bf□□[f^fXŽĐ,É,æ,Á,ÄŠJ”,³,ê□ADLL,Æ,μ,ÄŽÀŒ»,³,ê,½ API□B
fVfXfef€,É VIM DLL,ª‘¶□Ý,·,é,±
,Æ,ð”FŽ˘,·,éfAfvfŠfP□[fVf#f“,Á,í□AfAfvfŠfP□[fVf#f“,©,ç’¼□Úf□□[f<,ð’—□M,Å,«,Ü,·□B

%o¼'zffofCfXfhf%ofCfo

• i□", i%o¼'zf}fVf", ðfRf"fsf...□[f^, ÅŽÀ□s, Å, «, é"Á•Ê, ÈŽí—p, ðffofCfXfhf%ofCfo□B
VxD ,ª 80386 fRf"fsf...□[f^, ð Windows ,É"±"ü,³,ê,½,Æ,«,"-□%o, ð<@"\, Í•i□", i%o¼'zf}fVf", ðfTf|
□[fg, ·, é, æ, x, É Windows ,ðŠg'£, ·, é, ±, Æ, Å, µ, ½□BÆ»□Ý□AVxD , ðffofCfX,ªÆ—š, Å, «, é, æ, x
, Éfn□[fhfEfffAfffofCfX,²,Æ, ð, ½, ß, É<α'Ê, ð<@"\fZfbfg, ð—p^Ó, µ, Å□A, æ, è""□"I, ÈffofCfXfhf
%ofCfo, ð—ðŠ,, ð%oÊ, ½, µ, Ü, ·□B

fffBfXfvfÆfC, È, Ç, ð'P^êfŠ\□[fX, ðŠÇ—□, ·, é, ½, ß, É□ÝÆv,³,ê,½fRf"fsf...□[f^fR□[fh, ðf, fWf...□[f<□B32
frfbfg, ðfvf□fefNfgf, □[fh, Å"®□i, µ, Ü, ·□BVxD ,Æ, à, ç, ç, Ü, ·□BVxD , Í, ç, -
, Å, à, ðfXfÆfbfh, ð""Žž, ÉŽÀ□s, Å, «, é, ð, Å VxD ,ª , é, ÆfŠf\□[fX, ð<α—L, Å, «, Ü, ·□BVxD , ðf\
ftfgfEfffA, à□\$Cä, µ, Ü, ·,ª, Ü, Æ, ñ, Ç, ðê±, É□\$Cä, ·, é, ð, ðfn□[fhfEfffA, Å, ·□BVxD ,Æ, ç, α—
pCè, ð'è"Ê, É%o¼'zffofCfXfhf%ofCfo, ðŽw, ·, ½, ß, É, æ, Žg, ç, Ü, ·□B

VxD

VFAT

ftf@fCf<,ì“ü□o—í“®□ì,ð□^—□,·,é DOS ,ìTfufVfXfef€,ðŠg'£,·,é Windwos 95 ,ì<@“\□BDOS ,Æ“~,¶,æ,æ,É VFAT ,í FAT □\ç,ðŽg,ç,Ü,·,ª□ADOS ,Æ,í^Ü,È,è VFAT ,í·,çftf@fCf<-¼,ðfTf| □[fg,μ,Ü,Æ,ñ,Ç,ívf□fefNfgf.□lfh,Å“®□ì,μ,Ü,·□B

%0¼'zf}fVf"

fn[]fhfEjFfAfffofCfX,ðfVf~f...fCE[]fg,·,éftfgfEjFfA,É,æ,Á,Ä,ç,ê,éRf"fsf...
[]f^,ìŠÀ<<[]BWindows ,Á,í[]A%0¼'zf}fVf",í"Æ—§,μ,½fRf"fsf...[]f^,ðfVf~f...
fCE[]fg,μ[]A,» ,è,¼,è,ªf[]f,ŠfŠf\[]fX[]Aftf@fCf<fVfXfef€fT[]fRfX[]AfffofCfXfhf
%0fCfo,[]AŽü•Ö<@Sí,Ö,lfAfNfZfX,È,Ç,lfTf[]fgfT[]fRfX,ð"ö,ì,Ü,·[]BWindows ,É,ífVfXfef€ VM ,Æ
DOS VM ,Æ,ç,ªŠí-{"ì,È 2 Ží—p,ì%0¼'zf}fVf",ª, ,è,Ü,·[]BfVfXfef€ VM ,í Windows
fAfVfŠfP[]fVf#f",ÉŽg,í,è,Ü,·[]BDOS VM ,í Windows ,ì DOS fEfBf"fhfE,ÅŽÀ[]s,·,é DOS
fAfVfŠfP[]fVf#f",²,Æ,ì,½,ß,É 1 ,Á, ,Á[]-³,è,Ü,·[]B
Windows ŠÀ<<%0,Á%0¼'zf}fVf",í%0¼'zf[]f,Šf}f[]fWff,É,æ,Á,Ä[]-³,è,Ü,·[]B[]-³,è,é
%0¼'zf}fVf",ì 1 ,Á,í Windows Ž©'ì (fVfXfef€,ì%0¼'zf}fVf") —p[]A1 ,Á,í 16 frfbfg,ì Windows
fAfVfŠfP[]fVf#f"—p[]A1 ,Á,í"ñ Windows fAfVfŠfP[]fVf#f"—p,Á,·[]B
DOS fAfVfŠfP[]fVf#f",í%0¼'z 8086 f,[]fh,ðŽg,Á,Ä%0¼'zf}fVf",ÅŽÀ[]s,³,è,Ü,·[]B,±
,lf,[]fh,Á,í[]AfAfVfŠfP[]fVf#f",ífŠfAf<f,[]fh,ÉŠÖEW,·,é,·,x,Á,lf[]f^
(fAfhfCEfX<óŠÔ[]AŠ,è[]ž.YfxfNfgf<fe[]fuf<[]AROM BIOS[]ADOS[]ATSR[]AfffofCfXfhf
%0fCfo,Ö,lf}fbfbsf"fO,È,Ç) ,lfRfs[][.ðŽó,~Zæ,è,Ü,·[]B

%o¼'zf□f,fŠf}f□[fWff

%¼'zf,fš

fvfOf%€ÉŽg,í,éf,fš,ì—e—Ê,ð,â,·,½,ß,ì<ZpBfnfhffBfXfNä,ì—ì^æ,ðŽg,Á,Ä [RAM](#)
,ðVf~f...fC[f,g,μ,Ü,·B,±,ì—ì^æ,^a Windows ,ìXfìbfvftf@fCf<,Á,·B

u%¼'zf,fšv,Æ,ç,κ—pCê,íufXfìbfvftf@fCf<v,Æ“~<,ÁŽg,κ,±,Æ,^a,è,Ü,·BRAM

,ÉfjyfC[fefBf“fOfVfXfef€,ÁfvfOf%€

,ðŽÁs,·,é,½,ß,ÉŽg,κffBfXfN,ðŠÜ,ß,½ì<Æf,fš,ì±Cev,ðŽw,·^Ó-ì,ÁŽg,κ,±,Æ,à,è,Ü,·B

• i” , ì DOS fvf fOf %of € , ð “ ~ Ž Ž , É (, ½ , © , à , » , ê , ¼ , ê , ð “ Æ — § , μ , ½ fRf “ fsf ... [f ^ , Å “ ® [i , , é , æ , π , É)

Ž Ā [s , Å , « , é , æ , π , É , , é Intel CPU , ì “ ® [i f , [fh [B
%¼ ‘zf , [fh , í Š f Af < f , [fh , ð Š J Ž n , μ , Û , , ð Ž Ā [Û , É , í v f [f e f N f g f . [fh , Å , · B Windows 95/98/Me , í
%¼ ‘zf , [fh , ð Ž g , Å , Ā DOS f Af v f Š f P [f v f # f “ , ð Ž Ā [s , μ , Û , · B %¼ ‘zf , [fh , ð [u %¼ ‘z 8086
f , [fh [v [u %¼ ‘zf Š f Af < f , [fh [v [u V86 f , [fh [v , Æ , à Ā , Ō , ± , Æ , à , , è , Û , · B

VMM

Virtual Memory Manager (%0¼'zf}fšf}f[]fWff) ,ì—ªBWindows 95/98/Me:

%0¼'zf}fVf“ ,đ\$Œä,·,é Windows flfyfŒ[]fefBf“foVfXfef€ ,ìžå—v,ÉfRf“f[]fj“fg[]BWindows flfyfŒ[]fefBf“foVfXfef€,É—p^Ó,³,ê,Ä,ç,éT[]fxfX,ì”¼•ª^É[]ä,í VMM ,É,æ,Á,ÄŽÀŒ»,³,è,Û,·[]B,± ,è,ç,ìfT[]fxfX,í (%0¼'zf}f,š,đŠÛ,ß,Ä,ì) f[]f,šŠÇ—[]Af}f<f^fXfN,ì,½,ß,ìXfŒfbfh,ì— D[]æ“xŒ^è[]Afn[]fhfEjfFAfffofCfX,ìŠÇ—[],É,Ç,ì'áfŒfxf<,ìfyfŒ[]fefBf“foVfXfef€<@”\,đ^µ,ç ,Û,·[]B

Windows NT/2000: Windows ,í,Ç,ì[]^—[]DEF_PROCESS ,É,à 4 GB ,ì%0¼'zfAfhfŒfX<óŠÔ ([]^— [],Œ,» ,ìXfŒfbfh,ªžg,ì,éfAfhfŒfX<óŠÔ) ,đ<-%0Ä,µ,Û,·[]B,µ,©,µ[]A,Û,Œ,ñ,Ç,ìfRf“fsf... []f^ ,ªŽÀ[]Û,É“<[]Û,µ,Ä,ç,é•—[]f[]f,š (RAM) ,í 4 GB -ç-ž,Å,·[]B—~—p%0Ä”\,É RAM ,ª,ç,Á,ì,ç ,ì,Œ,«[]AWindows ,ìff[]f^,ì^è•”,đ^èžž“ì,É RAM ,©,çfffBfXfN,É^Û“® ,µ,Äf[]f,š,đ<ó,~,Û,·[]B,±,ì[]^ —[],í VMM ,ª[]Œä,µ,Û,·[]B

fffBfXfN,É^Û“® ,³,è,½[]î•ñ,đ[]^—[],Û,½,ìXfŒfbfh,ªfAfNfZfX,µ,æ,x,Œ,·,é,Œ[]AWindows ,ì— v<[],³,è,½ff[]f^,đfffBfXfN,©,ç RAM ,É-ß,µ,Û,·[]Bff[]f^,ì[]ufy[]fW[]v,ŒŒÄ,ì,è,é,©,½,Û,è,Œ,µ,Ä RAM fffBfXfN,ìŠÔ,đ^Û“® ,·,é,ì,Å[]A,±,ì[]^—[],đ[]ufw[]fW[]^— []v,Û,½,ì[]ufy[]fWf“fo[]v,ŒŒÄ,Ñ[]A^èžž“ì,Éff[]f^ ,ª“ü,éfffBfXfN[]ä,ì“Á•È,Èftf@fCf<,đfy[]fWf“fo ftf@fCf<,Œ,ç,ç,Û,·[]B

Šö”□◀f□f,fš

“dCE¹,^a∅,è,é,Æff□[f^,^□ÁŽ,,:éRf“fsf...□[f^,ìf□f,fš,ìŽí—p□BDRAM f`fbfv (PC ,ìŽâ<L%o` RAM)
,Æ SRAM f`fbfv,ìf□f,fš,ÍŠö”□◀f□f,fš,Å,·□B

f{fŠf...[f€

fRf“fsf...[f^,iff[f^,đŠi”[.,é,½,ß,ÉŽg,í,ê,éééŠ□B,Ç,lf{fŠf...[f€,É,àRf“fsf...
□[f^,ªŽ~•É,.,é,½,ß,ì□d•j,ì,É,çf%oofxf<,ª•t,«,Ü,·□B

1 ,Â,lf{fŠf...[f€,í 1 ‘ä,iffBfXfN□A1 ‘ä,iffBfXfN,ì^ê•”□A•j□”,iffBfXfN,ì^ê•”□A1 -
{,lfe□[fv,É,Ç,l,ç,,ê,©,Â,□B’â—e—Ê,lf□[fhfffBfXfN,ì,ç,,Â,©,ì•”•ª,É•ªŠ,,,·,Â,«,Ü,·□B,»,x
,.,é,Æ□A,½,Æ,ì““,¶•” —□fffBfXfN,Éff□[f^,ª, ,Á,Á,àRf“fsf...[f^,ª•j□”,ì•ÉCEÁ,lf{fŠf...[f€
,Æ,μ,Ä^μ,ç,Ü,·□B,±,ê,lf|fbfgf□□[fN,Å<α—L,³,é,é’âCE^fhf%oofCfu,É,æ,CE©,ç,ê,Ü,·□B“—
l,É□A^ê•”,lf|fyfCE□[fefBf“fOfVfXfef€,í•j□”,lf□[fhfffBfXfN,ì,ç,,Â,à,lf□[fefBfVf#f“,đ (%opŽš 1
•¶Žš,lfhf%oofCfu-¼,ÄŽ~•É,Â,«,é) ‘P^ê,lf{fŠf...[f€,Æ,μ,ÄCE<□‡,μ□AŠg’£□«,ì□,,çftfH□lf<fgfgfCEf
%oof“fX (1 ‘ä,lf□[fhfffBfXfN,ªCEì□á,μ,Ä,àVfXfef€,ì^âŽ~,đ-h,®•ûŽ®) ,đŽÀCE»,Â,«,Ü,·□Bf{fŠf...
□[f€,đ□uffBfXfNf{fŠf...[f€□v,Ü,½,ì□u~ —□fffBfXfN□v,Æ,à,ç,ç,Ü,·□B,Ç,lf{fŠf...[f€,É,à“Æ—
š,μ,½fu□[fafCEfR□[fh□Af<□[faffBfCEfNfafŠ□AftfHf<f_fcfs□□.ª, ,è,Ü,·□B

f{fŠf...[f€f%ofxf'®□◀

,±,ìftf@fCf'®□◀,ĩ~_—fffbfXfN,ì-¼'O,đŠi"l,μ,ÄfffbfCefNfgfŠfGf"fgfŠ,đŽ^-Ê,μ,Ü,·□B,½,Æ,l,î□A1
'ä,ìfn□[fhfffBfXfN,í 2 ,Ä^Ê□ä,ĩ~_—fffbfXfN,Ä,Ü,èf{fŠf...[f€É•ªŠ,,Ä,«,Ü,·□BfRf"fsf...[f^,í,±
,è,ç,ìf{fŠf...[f€ÉŽ©"®"l,Éfhf%ofCfu-¼,đŠ,,è"-,Ä,Ü,·ª□Af{fŠf...[f€
,đ<æ•Ê,·,é,½,ß,É,à,Ä,Æ□à-¾"l,Éf{fŠf...[f€f%ofxf<,đŠ,,è"-,Ä,½,ç□ê□‡,ª, ,è,Ü,·□B
'·,çftf@fCf<-¼,đ•\·fffbfCefNfgfŠfGf"fgfŠ,É,ìf{fŠf...[f€f%ofxf'®□◀□A%oB,μ'®□◀□A"C,ÝŽæ.è□ê
—p'®□◀,□A[VfXfef€'®□◀,ìZfbfg,ª, ,è,Ü,·□B,±,ìftf@fCf'®□◀,l'g,Ý□‡,í,¹,í',çftf@fCf<-¼,É"Á—
L,Ä,·□B

"gCE`

"g, ì U • □, a Ž Ž Š Ô, É, Â, ê, Ä • Ĩ % » , ·, é — I Ž q, ð, ç, ç, Ü, · □ B

WIN.INI

fVfXfef€Ÿ'è,ÆfAfvfŠfP[fVf#f",lfvfCEftf@fCEf"fx,ü,Á,Ä,ç,é Windows
,ì<N"®ftf@fCf<BWindows 3.x ,ì WIN.INI ,ÉŠi"[,³,ê,Ä,ç,½,Ü,Æ,ñ,Ç,ìî•ñ,Í Windows
,ìfCEfWfXfgfŠ.ÉÄ"z'u,³,ê,Ü,μ,½B,½,¾,μACEÄ,çfAfvfŠfP[fVf#f",Æ,ìCEŸŠ·«,Æ^ê•",ì Windows
,ì<N"®^—,ì,½,β,É WIN.INI ,í,Ü,¾'¶Ÿ,μ,Ü,·B

fEjBf“fhfE

ff□[f^,đ•\Ž!,μ□Aft□[fU□[,³fAfvfŠfP□[fVf†f“,Æ’î~b,Å,«,—ì^æ,đ’ñ<Ÿ,·,é GUI fRf“f□[fjf“fg□B
fAfvfŠfP□[fVf†f“,ì’t,Å,ì<@\,É,æ,Á,Ä□AfejBf“fhfE,í’â,«, 2 Ží—p,É•²,©,ê,Ü,∴

• [^êŽŸfEjBf“fhfE](#)

• ,ù,Æ,ñ,Ç,ì□î•ñ,â•\

Ž!,³,é,fAfvfŠfP□[fVf†f“,ìf□fCf“fEjBf“fhfE□B^êŽŸfEjBf“fhfE,í’Ê□í,í•¶□’fEjBf“fhfE,Å,·□B

• [“ñŽŸfEjBf“fhfE](#)

•

[fvf□fpfefBfV□\[fg□Af_fCfAf□fOf{fbfNfX□Af□fbfZ□\[fW,Ü,½,ÍfpfCEfbfg,È,Ç□AfvfŠfP□\[fVf†f“,²Žg,κ](#)

•â□•fEjBf“fhfE□B

fEfBf“fhfEfR□[fi□[

fEfBf“fhfEftf□[f€, ì 4 ,Â, ÌŠp□B”C^Ó, ìfEfBf“fhfEfR□[fi□[, ðfNfŠfbfN, μ, Ä' ð, μ, Ä, ©, çf} fEfX, Åfhf %oofbfO, ·, é, ÆfEfBf“fhfE, ìfTfCfY, ð• ÌX, Å, «, Ü, ·□B

fEjBf“fhfEftfCE[]f€

fEjBf“fhfE,đ^í,p×,ç~güüBftfCE[]f€,ì^è•Ó (fEjBf“fhfEjR[]fi[]ŠÔ)

,đfNfŠfbfN,μ,Ä'í'đ,μ,Ä,©,çf}fEjX,Åfhf

%ofbfO,·,é,ÆfEjBf“fhfE,ì,³,Ü,½,í•,đ•ĩX,Å,«,Ü,·BftfCE[]f€,ìŠp (fEjBf“fhfEjR[]fi[])

,đfNfŠfbfN,·,é,Æ[]AfEjBf“fhfE,ì,³,Æ•,đ“~Žž,É•ĩX,Å,«,Ü,·B

fNfXfeVfj

'½,,Í UNIX flfyfC[fefBf"fofVfXfef€,ª" @ì,.,é<—Í,ÈfVf"fof<ft[fU[fRf"fsf...
[f^Bf[fNfXfeVfj",íŽå,É,"x,ÈfOf%oftfBfbfNfX,âfRf"fsf...[f^Žx%o†—
pÝCevfAfvfŠfP[fVfj",ÉŽg,í,è,Û,·BufOf%oftfBfbfNfXf[fNfXfeVfj"v,Æ,à,ç,ç,Û,·B
Å&A,±,ì—pCè,ífbfqf[fN,É•t'®,.,éfbfqf[fNfT[fo],Å,í,È,çfRf"fsf...[f^,ÉŽg,í,è,Û,·B

□', «-β, μfLffffbfVf...

^è•", ì"à•" f□f, fŠfLffffbfVf..., ÆŠO•" f□f, fŠfLffffbfVf..., ÅŽg, í, è, éfLffffbfVf... <Z□p□BfRf" fsf... □[f^, ìŽâ<L
%o- RAM , Ö, Ì□', «□ž, Ý'Ö, žff□[f^, í^êžž<L%o-^æ, ÉŠi"[, ^3, ê□ACPU , ^fAfcfhf<□ó'Ö, ì, Æ, «, É, Ì, Ý RAM
, É□', «□ž, Ü, è, Ü, ·□B, ±, ÌŽí—p, ìfLffffbfVf..., í Pentium f□f, fŠfLffffbfVf... fTfuVfXfef€ , ÅŽg, í, è□Af
%ofCqfXf<□[fLffffbfVf..., æ, è, àÆø—! "i, Å, ·□BĚã□', «fLffffbfVf..., í□', «-β, μfLffffbfVf..., ÉŽ—, Å, ě
, Ü, ·, ^fffBfXfNfLffffbfVf..., ÉŽg, í, è, Ü, ·□B

f%ofCfgyXf<[]LffffbVf...

ff[]f^,^fLffffbVf...,É[]',«[]ž,Ü,è,é,Æ"~Žž,ÉffffBfXfN (ffffBfXfNfLffffbVf...,ì[]ê[]#) ,Ü,½,í RAM
("à•"f[]f.fSfLffffbVf...,ÆŠO•"f[]f.fSfLffffbVf...,ì[]ê[]#)
,É[]',«[]ž,Ü,è,éLffffbVf...<Z[]p[]Bff[]f^,^,Ü,¾fLffffbVf...,ì'†,É, ,éŠÔ,É•K—
v,É,È,é,Æ[]A,»,ìff[]f^,ìffffBfXfN,Ü,½,í RAM ,©,çŽæ,è[]o,·[]ê[]#,æ,è,à,·,î,â,Žæ,è[]o,¹,Ü,·[]B,±
,ìfLffffbVf...<Z[]p,íCEä[]',«fLffffbVf...,Ü,½,í[]',«-ß,µfLffffbVf...
,æ,è,à,æ,è'P[]f,À^À'S,À,·,³[]Aff[]f^,ì[]',«[]ž,Ý,í CPU ,ìfAfCfhf<ŽžŠÔ,É<N,«,È,ç,ì,À[]^—
[]'¬"x,í,»,è,Ü,ÇCEü[]ä,µ,Ü,¹,ñ[]B

fu [fgfEjBf<fX

fn [fhfffBfXfN,Æftf [fbfs [fffBfXfN,ifu [fgfCEfR [fhfvf [fOf
%of€ [Afn [fhfffBfXfN,lf}fXf^fu [fgfCEfR [fhfvf [fOf%of€,ÉŠ´ [ö,.,éfEjBf<fX [Bfu [fgfEjBf<fX,í
DOS ,æ,è,à [æ,Éf [f,š,Éf [[fh,³,ê,ÄfRf“fsf...
 [f^,ð [§CEä,μ [AfAfNfZfX,·,é,·,×,Ä,lf [fbfs [fffBfXfN,ÉŠ´ [ö,μ,Ü,· [Bfu [fgfEjBf<fX,ÉŠ
´ [ö,·,é,Æ [AS´ [ö,μ,½fffBfXfN,©,ç,lfRf“fsf... [f^,ð,Ü,Ä,½,<N“® ,Ä,«,,É,,É,é,±,Æ,^a, ,è,Ü,· [B

Š'öftj@fCf<

fEjBf<fX,ªN"ü,µ,½ftj@fCf<

•i□‡Š´□öŒ^fEfBf<fX

fvf□fOf%of€,Æfu□[fgftf@fCf<,ì—¼•û,É%oe<¿,μ□A, ,éŽí—p,ìftf@fCf<,©,ç•Ê,ÌŽí—
p,ìftf@fCf<,É“`□ö,·,éfEfBf<fX□B

'½Ĉ`'ÔfEfBf<fX

∅<',É,È,éfR[fhfZfOf"fg,đ•ĪX,μ,ÄAŠ'öftf@fCf<,É,æ,Á,ÄĈY,č

,É^Ù,È,éfEfBf<fX,ÉĈ©,!,é,æ,ɹ,É,μ,Ä,μ,Û,ɹŽí—p,lfEfBf<fX,ÅA,»,ì,½,ßĈÿo,ª,æ,èč"i,Å,·B

fvf fOf% f€fEjBf<fX

ŽÀs%oÂ"fvf fOf% f€ftf@fCf<,ÉŠ'õ,·,éfEjBf<fX,ÅA'½,-
,ìê# .COMA.EXEA.OVLA.DRVA.SYSA.BIN ,ì,ç,,ê,©,ìftf@fCf<Šg'£Žq,^a•t,«,Û,·Bfvf fOf
%f€fEjBf<fX,ífvf fOf% f€ŽÀsCEä,àfRf"fsf...[f^,ì"dCE¹,ðØ,é,Û,Åf,f,Šã,ÉŽc,é,±,Æ,^a,è,Û,·
B

fXfef·fXCE^fEfBf<fX

Œ©,Â,̄,É,,ç,æ,π,É□İ<É“l,ÉŽp,ð%°B,»π,Æ,μ□AŽ©•ª,đ•ª□í,â□í□œ,μ,æ,π,Æ,·,é,à,ì,©,çŽ©ŒÈ-h
%°q,·,éfEfBf<fX,Ā,·□B

fgfC,ì-Ø"n

-ð,É—š,¿,»,,¼,Á,½,è (fQ[f€,ì,æ,α,É) -Ê"»,»,α,É©,!,é,ªAfrf"fsf...[f^,ì"®i't,É
%B,è,Åftj@fCf<,ð¹,μ,½,èÁ<Z,μ,½,è,·,éfvfOf%œ,Å,·BfgfC,ì-Ø"n,ÍfEfBf<fX,Å,í, ,è,Ü,¹,ñ
B

fEfBf<fX'è<`ftf@fCf<

fEfBf<fX'è<`ftf@fCf<,É,ÍfEfBf<fX,É,Â,ç,Ä,ìî•ñ,^aü,Á,Ä,ç,Ü,·B,±,ìî•ñ,đŽg,Á,Ä Norton AntiVirus
,É,Ç,ÍfVf}}f“febfN»•i,ÍfEfBf<fXŠ´õ,đCEŸo,âC•œ,μ,Ü,·Bç,ì†,Á,íVŽí,ÍfEfBf<fX,^a-^“ú,ì,æ,κ
,É”CE©,³,ê´±,¯,Ä,ç,é,ì,ÄAí,ÉfRf“fsf...[f^ã,ÍfEfBf<fX'è<`ftf@fCf<,đÄV,É•Ü,Á,±,Æ,^ad—
v,Ä,·B

fVf}}f“febfNŽĐ,íV,μ,çfEfBf<fX'è<`ftf@fCf<,đ'èŠú“l,É—p^Ó,μ,Ü,·B—
p^Ó,³,ê,½V,μ,çfEfBf<fX'è<` ,đft[fU[,í LiveUpdate <Zp,đŽg,Á,ÄfVf}}f“febfNŽĐ,ì Web
ftfCfg,Ü,½,í•Ä' Symantec ŽĐ,ì BBS ,©,çŽ©“®“l,Éf_fEf“f[fh,Á,«,Ü,·B

fEfBf·fX

^«^Ó,ì, ,éfvf[]fOf%of},É,æ,Á,Ä[]',©,ê,½Ž©CEÈ•i[]»fvf[]fOf%of€[]B[]ufRf“fsf...
[]f^fEfBf·fX[]v,Æ,à,ç,ç,Ü,·[]BfEfBf·fX,Ít[]fU[][,ª<C,Á,©,É,ç,α,ζ,É<-%oÁ,É,frf“fsf...[]f^,ì“®[]i,ð
%oü•İ,μ,Ü,·[]BfEfBf·fX,ÍŽ©CEÈ,ð'¼,İfvf[]fOf%of€ftf@fCf<,É•t'...,·,é,æ,α,ÉYCEv,³ê[]A•t'...
,μ,½fvf[]fOf%of€,İŽÄ[]sŽž,ÉŠ^“®,μ,Ü,·[]BŠ^“®+ÉfEfBf·fX,İffBfXfN[]ã,ì'¼,İfvf[]fOf%of€
,ÉŽ©CEÈ,ðfRfs[][,μ,Ä'[][]B,μ,Ü,·[]B

fhfbfLf“fO

Norton System Doctor ,đfhfbfLf“fO,·,é,Æ Windows fffXfNfgfbfv,ìä%°¶%E,ì[,ì,ç,.,ê,©,É
(Windows ,ìf^fXfNfo[ì,ì,æ,æ,É) fo[ì,Æ,μ,Ä•\Žì,³,ê,Ü,·BfhfbfLf“fN,μ,½ Norton System Doctor
,đfhf%fbfO,·,é,ÆfffXfNfgfbfv,ì,Ç,ì',É,Ä,à^Ú“® ,Ä,«,Ü,·B

• fffXfNfgfbfv,đL,Žg,æ,½,ß,ÉAfhfbfLf“fOŽž,É,Í Norton System Doctor ,đŽ©“®”ñ•\
Žì,É,Ä,«,Ü,·B

Ž©“®”ň•\Ž!

Ž©“®”ň•\Ž! ,ífhfbfLf“fO.É Norton System Doctor ,đ×,čü,Ék→,μ,ÄffXfNfgfbfv,đó, ,é<@\ ,Ä,·B,±,ìü,Éf}fEfXf|fCf“f^,đ‡,í,é,ÆANorton System Doctor ,ÍŠg‘â,μ,Ä,·,×,Ä,lfZf“fT[,đ•\ Ž!,μ,Ü,·Bfj[|f<,đ—£,·,ÆfEfBf“fhfE,Íü,É-β,è,Ü,·B

• Norton System Doctor ,Æ Windows ,lf^fXfNfo[,ì—¼•û,đ%æ-Ê,ì“ ,¶[,ÉŽ©“®“I,É %B,·,±,Æ,Í,Ä,«,Ü,¹,ňB

ffXf^f€Y'è

Norton System Doctor ffXf^f€Y'è, í"Á'è, ìfzf"FT[. ìfCfCfAfeFg (Norton System Doctor
fEfbf"fhfE, É•\Ži, ., éfzf"FT[. ìŽí—p, Æ[ñ[~) , ðŠi"[. μ, Û, .□B2
, Á^É□ă, í'í□Ù, ðŠĂŽ<, ., é, ½, ß, É•i□", ìffXf^f€Y'è, ð□i□→, μ, Ā•Ů'¶, Ā, «, Ů, .□Bft□[fU□[. í, †, Ā, Ā, à
Norton System Doctor , ð^Ů, É, éY'è, É□Ø, è'Ů, , Ā, «, Ů, .□B

• Norton System Doctor , ìffXf^f€Y'è, í Norton System Doctor , ì•
[Ži•ŮŽ@, Æ, í^Ů, É, è, Ů, .□B](#)

•\Ž!•ûŽ®

Norton System Doctor ,ì\

Ž!•ûŽ® ,ìfZf“fT[] ,ìfTfCfY[]A[]F[]AftfHf“fg[]A”wCei,ÉŽg,í,ê,éfrfbfgf}fbfv,ìfZfbfg,ðŠi”[.,μ,Û,·[]B•\

Ž!•ûŽ® ,ì,ç,,Á,Á,à[]i[]¬,Á,«[]A,ç,Á,Á,à[]Ø,è’Ö,!,Á,«,Û,·[]B

• Norton System Doctor ,ì\Ž!•ûŽ®,í Norton System Doctor

,ìfXf^f€[]Ý’è,Æ,í^Ù,È,è,Û,·[]B

fXf} [fgfhf%ofCfu

SMART ,đftf| [fg, .éfhf%ofCfu BSMART ,í Self-Monitoring, Analysis and Reporting Technology ,ì—^a, Å VCE ^ ,ìfn [fhfffBfXfNfhf%ofCfu, É'g, Yž, Ü, è, Å, ç, é<Z p, Å, · BfXf} [fgfhf %ofCfu, íŽ © CEÉ, í“ @ ì, đŠ ĀŽ<, μ, Āfhf%ofCfu, ìfn [fhfEjFfA, ìCE ì á, ^a<N, «, é'O, É, Ü, Æ, ñ, Ç, đ—\^a, μ, Ü, ·; Norton System Doctor ,ìfffBfXfNfXf} [fgfZf“ft [í“ --É, ìfffBfXfN, ì-â'è, É, Å, ç , ÅCEx [μ, μ ACE ì á, ^a<N, «, Āff [f^, ^a ĀŽ, ·, ·, é'O, Éft [fU [, ^aftf@fCf<, ìfofbfNfAfbfv, đ ì ñ, μ, ½fhf %ofCfu, đCE đŠ ·, Ü, ½, ì C—, Å, «, é, æ, x, É, μ, Ü, ·;

Ž©ÆÈŠĂŽ<,Æ•ň□□,ì<Z□p

fCf<fhfj[fh

•ŕŽš—ň't,ì" C^Ó,ì•ŕŽš,đ•\,•½,ß,ÉŽg,í,ê,é"Á•Ê,È•ŕŽš□B^ê"É,É□A<^â•,, (?)
,ìfCf<fhfj[fh,í'P^ê,ì•ŕŽš□AfAfXf^fŠfXfN (*) ,ìfCf<fhfj[fh,í" C^Ó,ì•ŕŽš□",ì•ŕŽš—ň,đ•\
,μ,Û,•□B,½,Æ,ì,î□Aftf@fCf<-¼,đŽw'è,•,é,Æ,«,É myfile.n?? ,Æ"ü—í,•,é,Æ
myfile.n01□Amyfile.new ,È,Ç,É^ê'v,μ□Amyfile.* ,Æ"ü—í,•,é,Æ myfile. ,É" C^Ó,ìŠg'£Žq,^a•t,-
¼'O,É^ê'v,μ,Û,•□B

fjf...[fšXfefBbfN

fRf“fsf...[f^fvf[]fOf%of€É,Â,ç,Ä,±,ì—pCEê,ðŽg,α,Æ,«É,ÍA[]uCEoCE±,©,ç“±,ç,½<K'¥[]v,ð“K—
p,μ,Ä•jŽG,È-â'è,ð[]v'¬,É%øð,fAf<fSfšfyf€,ð^Ó-ì,μ,Û,·[]Bfjf...[fšXfefBbfN,ª[]í,É[]Å“K,É
%øðCE^[]ò,ð[]¶,p,Æ,ÍCEÀ,è,Û,¹ñ,ª[]A[]uftf@fW[][~—[]v,^a—v<[],³,é,é-â'è,ì%øð-¾[]A,Â,Û,è-
â'è,É,Í,·,é%øñ“š,^{a-¾}Šm,É'è<^,³,é,É,ç[]ê-È,Å,æ,Žg,í,ê,Û,·[]B

f}fNfEfBf<fX

fRf“fsf...[f^fEfBf<fX,ì^èŽíBf[]fvf•¶[]Afef“fvfĈ[]fgA•\ĈvŽZf[]fNfv[]fg,È,Çf}fNf<@”\ ,^à, ,éff[]f^ftf@fCf<,ÉŠ´[]ö,μ,Û,·[]B

