

!¹¿ï¶µ¶í©ó¶}±ò©îÄö³¬Ää½tÄúµÆ¼òÀÀ¶\`à;C

Direct3D «ü©w¨ä D3D µwÁé¶[³t¬àµO²ºÄä¶Ü³¼¹¶¶±

¶dÀ³,Ó¶i¶H°ð;æ³»ÄlÄúµÆ©îÄä½tÄúµÆ;C!³¨Ç¹CÄ,µL²k¶¿½T;a¬d,ß D3D µwÁé@Ä¬à;A;ý¬O«o»Ý-
nÄä½tÄúµÆæä´©;C¿i³¼Ü!¹¿ï¶µ±N¶i¶H½T«O±z²º NVidia ¹í§¹³B²z³¼¹¶i¶H¶¿½T°ð;æ!¹Äp¹CÄ,;C

!¹¿ï¶µ®e³\±zÃö³-ÅX°Êµ{!;ªº·s DirectX ¥\`à;C

-Y`Ç,ûÂÂª©¥»ªº DirectX ½s¼gªº¹CÀ,;A¥i`-àµLªk°t|Xªw|w,Ëªº DirectXª©¥» 6 ©Í 7 ¯!;bÅX°Êµ{!;ªª
±Ò°Êªä´©¥\`àªº±;ªpªU¥¿±`°õ;æ;C¿i¼Ü!¹¿ï¶µ¥i±j`iÅX°Êµ{!;|b DirectX 5

-Û®e¼Ò!;ªU°õ;æ;A¥H«KÂÂª©¹CÀ,¥i¥H¥¿±`°õ;æ;C

!pªG±zn°õ;æ-Y`ÇµLªk¥¿±`±Ò°Ê©¹°õ;æªºÂÂª©¹CÀ,;A½D`Ï¥Í!¹¿ï¶µ;C

±j̄îµwÁé!Û°Ê±N̄ä Z ½w½Ä°î²` «x½Ö¾ã-°À³¥îµ{!; ©»Ý²²` «x;C
³q±` ;A±z·|±N!¿î¶µ«O«ù±Ö°Ê±-°A;A°£«D±z²²µu\$@½T¹ê»Ýn-YÓ`S©w²² Z
½w½Ä°î²` «x;C;p²G±zÄö³-µF!¿î¶µ;A«h¥ô!óµu\$@®É Z
½w½Ä°î²` «x»P¥Ø«eµwÁé²Ö²Aµ\$½w½Ä°î²` «xµ£-Û²Å²²À³¥îµ{!;§;±NµL²k°ð!æ;C

±Ò°Ê²` «×½w½Ä³B²z²º`ä¥LSp³N;C

³o¥i¥HÁýµwÁé`í¥í¥tα@Ó,Ë,m;b 16 |ìα,À³¥íµ{;πα¶i|æ²` «×½w½Ä³B²z;C±Ò°Ê!¹³]©w¥i¥H²£¥í§ó°²²º
3D ¼v¹³µÛ!â«~½è;C

±Ò°Ê Direct3D ¼¼ºº NVidia À²¼⁄Ð;C

|p²G±Ò°Ê¹³]©w;A|b°ð;æ Direct3D À³¥Îµ{;i®É;A;Ã¹ð¼U¼èºº"¼, "±N·|Åã¥Ü NVidia À²¼⁄Ð;C

±z²⁰ NVidia 1jſi³B²z³/₄¹ſiH!Ű°Ê³B²z MIP ¶K¹i;AſH´£°¶x¬y±Æ²⁰ſ÷½è¶K¹i¶Ç°e®Ä²v;A¨Ä
´£¨Ñſó°²⁰À³ſiµ{!;®Ä¨à;C

]ý¬O;A;B±Ò°Ê;Ű°Ê²£ſi²⁰ MIP ¶K¹i®É;A¶@¨ÇÄ³ſiµ{!;ſi¬àµL²kſ;½TÄãſŰ;Cnſóſ;|¹°ÝÄD;A½D
´iœÖ;Ű°Ê²£ſi MIP ¶K¹iµſ¨Ä²⁰/₄Æ¶q;A²½¨½v¹³ſiſHſ;½TÄãſŰ¬°¶i;C´iœÖ MIP

¶K¹iµſ¨Ä²⁰/₄Æ¶q³q±`ſiſH®°£ſ÷½è¶K¹i²⁰¶£¹i»ô©!;µe±½¹µð;v°ÝÄD;]ý¬O³o½⁴Ë«o·|°ſC®Ä¨à;^;C

®e³\±zjî¼Ü¹îšî³B²z³/4¹©Ò¥î²²ü°Ê³B²z MIP ¶K¹î²è!j;C

±z¥i¥H¿î³/4ÜÂù½u©Ê©Î 8 ¢ä½u«Dš;½è MIP ¶K¹î³B²z²è!j;A;ýÂù½u©Ê²è!j;³q±`¥i¥H
´£¨Ñšó°²²²@Ä`à;A;Ó«Dš;½è²è!j;«h¥i¥H²£¥šó°²²²¼v¹³«~½è!j;C

®e³\±z½Ö¾ä MIP ¶K¹î²º LODj]ºë²Ó«xj ^º¾@tjC

¸û\$Cºº¾@t±N·|´£¨Ñšó;nºº¼v¹³«~½è;A;Ó_ûºººº¾@t«h·|

´£ºÀ³¥íµ{|;ºº@Ä`à;C±z¥i¥H|b;u³|´¹¼v¹³«~½è;v»P;u³|´¹@Ä`à;v¥\$¶;ºººÓ¹w³]º¾@tÈºº¶¶i;æ;¾¼Ü;C

±zαwÀx;s²º;Ûq³]©wÈ;]©Î;u½Ö¾äÈ;v;^²M³æ;C¿i³¼Û!¹²M³æαα²ºα@Ó¶μ¥Ø±N·|±Ò°Ê³]©wÈ;C-
n®M¥î³]©wÈ;A½Ð¿i³¼Û;u½T©w;v©Î;u®M¥î;v«ö¶s;C

@e³\±z±N¥Ø«e³]©wÈj]¥]¬A;u¨ä¥L Direct3D;v¹i, Üæè¶¶ôææ²º³]©wÈ; ^Àx|s¬°;Ûq;u½Ö¾4ä-
È;v;CæwÀx|s²º³]©wÈ±N·|s¼W¨ì¬Û¾4F²º²M³ææW;C

!bšä¨ì`S©w Direct3D ¹CÀ, ²º³]¨î³]©wÈæ§«á;A½D±N³]©wÈÀx|s¬°;Ûq½Ö¾4äÈ;C³o¼È±z
´N¥i¥H|b±Ö°È¹CÀ, æ§«e¨³³t²ÖºA Direct3D;A;ÓµL»ÝæÀ§O³]©w¨CÓ¿i¶µ;C

§R°£¥Ø«e!b²M³æααjï©w²º!Ûq³]©wÈ;C

±N©Ò!³³]©wÈÁÙ;Ü¨ä¹w³]È;C

ÅäÿÜæ@Ó®e³\±z;Ûq"ä¥L Direct3D ³]©wÈªªı,Üæè¶ó;C

!²zï¶µ¶i¶HÄÜ§ó¶K¹ï¹³~À;]§÷½è¶K¹ï¶,~À;^²ºµwÁé§÷½è¶K¹ï©w§}¶è®×;C
öÜ§ó³o~ÇÈ±N·|ÄÜ§ó©w,¶q¶K¹ï¹³~À·½²º;ì,m;C¹w³]È»P Direct3D ³W®æ¶@P;C¹³~Ç³nÁé¶i~à·|
§Æ±æ;¶b§O³B©w,¶q¶K¹ï¹³~À·½;C;¶p²G«·s©w,¶q¶K¹ï¹³~À·½;A«h¹¹ÄpÀ³¶íµ{;ì²º;¼v¹³«~½è±N·|
´£º¶C±z¶i¶H~ï¶í·Æ´í±±~ï;¶b¶K¹ï¹³~À¶¶²¶W~¶»P¶¶¶;ì;ì,m¶§¶;ì½Ö¾ä¶K¹ï¹³~À·½;C

³º¼Ë°µ¥í¥HÁý¹í§í³B²z¾¹¥RαÀ;a±N«ü©w¼⁄Æ¶q²º°t²í°O¾⁄DÁé¥í©ó§÷½è¶K¹íÀx;s°í;j]Åã¥Ü¾¹¥¶±¥d¥»"-
|w,Ë²º°O¾⁄DÁé°£¥~;^;C

µù;G ¥í«O`d¥í©ó§÷½è¶K¹íÀx;s°í²º°t²í°O¾⁄DÁé³;¥j@e¶q;A-O@Ú¾⁄Ú±z¹q,£αW;w,Ë²º¹êÁé RAM
®e¶q`Óp²â²º;C`t²í RAM ¶V¥j;A±z¥í¥H³]©w²ºÈ´N¶V¥j;C

í¹³]©wÈ¶È®M¥í©ó PCI Åã¥Ü¾¹¥¶±¥d;j]©Í;b PCI -Û®e¼⁄Ò;αU°ð;æ²º AGP Åã¥Ü¾¹¥¶±¥d;^;C

žĩ¼Ü!¹žĩ¶μ¥i¥HÄö³¬««²½!P~B;C

¥çºÜ;uÄö³¬ VSYNC;v;A¥!@e³\¹q, £¥ß§Y±N¼v¹³

´yÄ,;bzÄ¹õαW;A!ÓμL»Ýμ¥«ÝÄã¥Ü¾¼¹²º¶P~B««²½!^±½°T,¹;C³o·|

“ĩ!|@Ø³t²vº²©óÄã¥Ü¾¼¹²º¶ó·s²v;A!ý¬O¥i¬à·²£¥!μøÄ±ºÆ§@¥!©M¹ĩ¹³;u¼¹μõ;v²ººÝÄD;A±q!Ó-

º§C¼v¹³«~½è;C

!¹jïµ®e³\±z\$PÂ_~S©w D3D À³¥íµ{!;ææïï¥í²º¥·Æ³B²z¼⁄⁄Æ¶q;C

¥·Æ³B²z~Oα@ºØ¥í©ó³ìαpαÆ!³®É·|¥X²{!;b 3D º«¥óÃä½ztαW²º;u¶¥

±è;v®ÄªGα\$S\$³N;C±z¥i¥H!;b\$¹¥bÃö³~¥·Æ³B²z»P;ï³⁄⁄Ü~S©wÀ³¥íµ{!;¥i~à²º³ìαj¼⁄⁄Æ¶qα\$¶!;¶i!æj³⁄⁄Ü;C

“İŸİ!¹çİŸİµŸİ!bæƒ²½±µæä´©Ÿ·Æ³B²z²ºÀ³Ÿİµ{!;ææ±j“î°ö!æŸ·Æ³B²z;C

½Đ²·N;A¬Y“ÇŸ¼©ú½T«üŸXŸİæä´©Ÿ·Æ³B²z²ºÀ³Ÿİµ{!;Ÿİ¬àµL²kŸç½TÅãŸÜ¼v¹³;A©İŸİ¬à´yÃ,æ
ƒ³W«h²º¼v¹³;A!;]¹;A½Đæpæß“İŸİ!¹çİŸİµ;C!p²G±z!b“İŸİæƒæä´©Ÿ-
·Æ³B²z²º¹CÀ,©İÅ³Ÿİµ{!;@É!j“İÅãŸÜ°ŸÃD;A½ĐÃö³¬!¹çİŸİµ;C

!1z"µ®e³\±z"î CPU ¥i¥H|b¹îšî'¹xù¶}©l³B²z±§«e·Ç³Æ²º¹î®Ø¼Æj]!b««²½!P"BAö³¬®É;^;C
|b¬Y"Ç±;²p±U;A®e³²º¹w¥ýµÛ!â¹î®Ø¼Æ¶Vº²;A|^À³·n±;B¹CÀ,¥x©ÍÁä½Lµ¥,Ë,m²º;u¿é±j©µ½w;v
'N¶V±[;C
!p²G±z;|b²±¹CÀ,®É;A³s±µ;Û±z²º¹q,£±§¿é±j,Ë,m³©úÅä|^À³©µ½w²º²{¶H;A½D'î±p|¹Ë;C

®e³\|b GL_KTX_buffer_region ©μ;ù¥\`à±ò°Ê®É`ï¥í¥»¾÷¼v¹³°O¾ÄÁé;C
|ý-O;A;p²G¥í¥í²º¥»¾÷¼v¹³°O¾ÄÁéαÖ©ó 8MB;A«h·|μL²k±ò°ÊÁù¥±©μ;ù¥\`à²ä´©;C
|p²GÃö³-²F²Wz;u±ò°Ê½w½Ä°ï©μ;ù¥\`à;v¿i¶|μ;A;¹³]©w±N²£°_s@¥í;C

®e³\šÖ³t½u©Ê MIP ¶K¹i½u©Ê¹LÂo¥\`à±N¥i¥H´£°²À³¥íµ{;i;²º®Ä`à;A;ý¬O«o·|°§C¤@`Ç¼v¹³«~½è;C
|b¤j|h¼Æ±;ªp¤U;A¼v¹³«~½è²º°§C`Ä¤£©úÅã;A;]!¹±z¥i`à·Qn³z¹L±Ò°Ê¹¥\`à`ÓÀò`úšó°²ºº®Ä`à;C

!1j"µ®e³\ OpenGL "ï¥í«D§;½è¹LÂo¥H'£°²¹/4v¹³«~½è;C

ÿÿ4Ü!¹ÿÿµ¥ÿ¥HÃö³¬ÅX°Êµ{;¹ÿ¬YÇ CPU ¹ÿÿâº¼W±j«¬«ü¥O²ºæä´©;C
¬YÇ CPU æä´©²p¥[²º 3D «ü¥O;A³oÇ«ü¥O¥ÿH»²§U NVidia ¹ÿÿÿB²z¼¹¬Ä´£º² 3D
¹CÄ, ©ÎÀ³¥ÿµ{;¹²º@Ä¬à;C¹ÿÿµ®e³\±z;bÅX°Êµ{;¹²º¬¹ÿ³oÇ²p¥[²º 3D «ü¥O²ºæä
´©;C³o;b¶ÿi;æ®Ä¬àæñ,û©Î¬G»Ü±Æ°£®É«Ü¹³¥ÿ;C

!1z"µ±N±ò°Ê OpenGL ÅX°Êµ{!iªº¥p¿Ã¹õ¥·Æ³B²z;C¥·Æ³B²z-Oα@ºØ¥Í©ó"µe±ααªºª«¥óÃä½t¥-
·Æ;A¥H'îαÖ!³®É·|¥X²{ªº¿÷¾!ª-;u¶¥±è;v®ÄªGα§§P³N;C

!1¿ï¶µ¥i¥H\$PÂ_¬O\$_À³,Ó;b OpenGL À³¥îµ{!;¤¤;A«ö·Ó¹w³]È"ï¥î~S©w|â±m²`«x²º\$÷½è¶K¹ï;C
"ï¥î@à±|â±m²`«x±N©I²x"ï¥î Windows @à±¥Ø«e¥¿|b°õ;æ²º|â±m²`«x¤\$§÷½è¶K¹ï;C
©I²x"ï¥î 16 bpp »P©I²x"ï¥î 32 bpp ¿ï¶µ±N±j"ï¥î~S©w|â±m²`«x²º\$÷½è¶K¹ï;A|Ó¤£|Ò¼{ @à±³}©w-
È;C

!¹¿î¶µ¥î\$PÂ_¥p¿Ã¹õ OpenGL À³¥îµ{;ªº½w½Ä°ÏÂ½¶¼Ò;¡;C
±z¥i¥H¿î¾Ü°î¶ô¶Ç°eæè;¡;BÂ½¶æè;¡;©Î;Û°Ê¿î¾Ü;C;Û°Ê¿î¾Ü@e³\
ÅX°Êµ{;¡;@Û¾Ü±zªºµwÅé²ÕºA°Ó¿î¾Ü³î°îæè;¡;C

!¹¿ïµ¥iÁý±z«ü©w|p|ó;b OpenGL ¢¢³B²z««²½|P¨B¡C

©I²×Ãö³¬±N|b©Ò|³ OpenGL À³¥íµ{¡¡;¢¢©I²×Ãö³¬««²½|P¨B¡C

«ö·Ó¹w³]ÈÃö³¬°£«DÀ³¥íµ{¡¡;©ú½Tn¨D±Ò°Ê««²½|P¨B¡A§_«h¥|±N«O«ùÃö³¬ª¬ºA¡C

«ö·Ó¹w³]È¶}±Ò°£«DÀ³¥íµ{¡¡;©ú½Tn¨DÃö³¬««²½|P¨B¡A§_«h¥|±N«O«ù±Ò°Êª¬ºA¡C

®e³\±z±N¥Ø«e³]©wÈÀx|s¬°;Ûq;u½Õ¾ãÈ;v;CαwÀx|s²º³]©wÈ±N·|·s¼W"ì-Û¾F²²M³æαW;C
|bšä"ì~S©w OpenGL À³¥íμ{;²º³}í³]©wÈα§«á;A½D±N³]©wÈÀx|s¬°;Ûq½Õ¾ãÈ;C³o¼È±z
'N¥i¥H|b±ò°Èμ{;jα§«e"³³t²ÕºA OpenGL;A;ÓμL»ÝαÀ§O³]©w"CO¿i¶μ;C

·Æ'í±±"î@e³\±z-°jï©w²º!â±mÀW¹D½Ö¾ã«G«x;B¹iñ«x©î!±º;È;C

!â±m,É¥¿±±"î¥i\$U±z|bÅã¥Ü,Ë,mαW½Ö,É"Ó·½¼v¹³»P"ä¿é¥Xα\$¶i²º¥ú«x@t²\$;C!¹¥\`
`à;b"î¥¼v¹³³B²zÀ³¥îμ{;i@É«D±`i³¥î;A¥i¥i¥H|bÅã¥Ü¾¼¹αWÅã¥Ü¼v¹³@É«s²£¥¼v¹³;|;p-Ûπù;^;A"Ã
´£"Ñ\$óºë½T²º!â±m;C

!Ó¥B;A«Ü|h"î¥í 3D ¥[³t¥\`à²º¹CÀ,μe±³£«Ü·t;C;b©Ò!³ÅW¹Dαα¼W¥[-Û!P²º«G«x©M;]©î!^!±º;È-
È±N¥i¥H"î³o"Ç¹CÀ,μe±\$ó«Gα@`Ç;A³o¼Ë±z'N¥i¥H²M·;¬Ý"£¹CÀ,μe±;A\$Ö¼Ö²º±¹CÀ,αF;C

© e³\±zjî¼Ü¥Ñ·Æ í±±´î²º!â±mÀW¹D;C±z¥i¥H±À§O½Ö¾ä-ö;â;B²ñ;â©îÂ!âÀW¹D©î!P©É½Ö¾ä³o±T-
ÓÀW¹D;C

±m!â!±½u^aîš!Ãã¥Ü;C!±!±½u±N·||b±z½Ö¾ã¹iãñ«×;B«G«×©!±º;È®ÉŞY®ÉÄÜşó;C

¿ï¼Ü!¿ï¶±N¥i¥H"ï"t¿!b«·s±Ò°Ê Windows ®É;Û°ÊÁÛi±z;b!¹³B©Ò§@²º!â±m½Õ³/4ã;C
μù;G |p²G±z²º¹q,£|b²ð,ð²W°ð;æ;A«h"t²Ï±N·||b±zμn²j Windows «á½Õ³/4ã!â±m;C

±zκwÀx!s²º!Ûq!â±m³]©wÈκ§²M³æ;C;ï³/4Û!¹²M³æκκ²ºκ@Ó¶μ¥Ø±N·|±Ò°Ê³]©wÈ;C

Áý±z±N¥Ø«e²⁰!â±m³]©wÈÀx|s-°!Ûq³]©wÈ;CæwÀx|s²⁰³]©wÈ±N·|·s¼W“ì-Û¾F²⁰²M³ææW;C

§R°£¥Ø«e!b²M³æαιï©w²º!Ûq!â±m³]©wÈ;C

±N©Ò!³!â±mÈÁÙ!;ÜμwÅé²²!¼t³]©wÈ;C

® e³\±zjî¾Ü±zÃã¥Ü¾¹ªºp®É¼Ò!j;G

!Û°Ê°»´ú®e³\ Windows ¾½±μ±qÃã¥Ü¾¹¥»´±μ|¬¥¿½Tªºp®É,ê°T;C|¹¬°¹w³]-
Ë;C½Ðª\·N;A¬Y´ÇÃÃ;¡Ãã¥Ü¾¹¥i¬à££ã´©!¹¥\`à;C

¤@`ëp®É¤½;¡©Í GTF ¬O¤j|h¼Æ,û·s;¡μwÃé´Ï¥îªº¼Ð·Ç;C

Ã÷´²Ãã¥Ü¾¹p®É©Í DMT ¬O¤@ªºûÂÂªº¼Ð·Ç;A;b¬Y´ÇμwÃé¤¤¤
´μM´Ï¥î¼¼Ð·Ç;C;pªG±zªºμwÃén´D´Ï¥î DMT;A½Ð±Ò°Ê;¹¿i¶;C

±N NVidia QuickTweak 1ÿÛ·s¼W!Û Windows µu\$@!C;C

!11ÿÛ@e³\±z³z¹Lx@Óxè«K²º§ÖÅã!;¿i³æ;A;u\$Ö³t;ajv®MÿÍ©Ò;³!Ûq Direct3D;BOpenGL ©!;â±m³]©w-
Ë;C!¹¿i³æÁÛ¥]stÿÍ©óÁÛ!¹w³]Ë»P!s"ú;uµº®e-ÅãÿÛ³/4¹;v¹i, Ûxè¶ô²º¶µÿØ;C

© e³\±z|b Windows xus@!CxW;Ajî³/4Ü¥î¥H¥N²í QuickTweak x½¥îμ{|;²º¹ï¥Ü;C
±q²M³æxjî³/4Ü±znÁǎ¥Ü²º¹ï¥Ü;CμM«ájî³/4Ü;u½T©w;v©Î;u®M¥î;v¥H\$ó·sxus@!Cxx²º¹ï¥Ü;C

Ãö³-¡¹¹j,Üæè¶ð"ÃÀx|s©Ò§@²ºÅÜ§ó;A¶H«K±z|b;u"ä¥Lαº®e;v¹i,Üæè¶ðææ
¿i³/4Ü;u½T©w;v©Í;u®M¶Í;v®É;A"Í³o"Ç³]©wÈ¥Í®Ä;C

Áý±zSPÂ_pπ@Ó·Æ¹««ö¶s·|;b³æ«öπu§@!C³ÏÿÜ®ÉÅãÿÜ¿i³æ;C

¶}±ò©îÃö³¬½T»{°T®§;C

|pªG±zæf·Q|b±qxu\$@|C¿ï³æ,üæ| 3D ²ÕªA®ÉÃã¥Ü½T»{°T®§;A½D®Ö¿!¿!¶µ;C

!p^aG±zn`ï¥í 3D ®Ä^aG`ÓÅã¥Üxu\$@!C¿i³æ;A½D¿i³4Ü!¹¿i¶µ;C

!b¥H§C©ó³ì°äæ´©,Ñ²R«x²²,Ñ²R«x°ö;æ®ÉjA³o`Ç¿i¶µ®e³\±zSPÂ_¼v¹³;b¥-
²OÄå¥Ü³/4¹xW²²Äå¥Ü;ì,m;C

½D“İŸî½bÀY«ö¶s½Ö¾äÅãŸÜ¾¼¹W²²@à±ÅãŸÜ;ı,m;C

® Ú¼Ú¥Ø«e²º, Ñ²R«x»P§ó·s²v;A±N®à±«³]!Ü"ä¹w³]!i,m;C

³o¨Çzï¶µ®e³\±zjï³¼Üzé¥XÅã¥Ü,Ë,m;J@Ú³¼ÚÁã¥Ü³¼¹¥¶±¥d©Òæä
´©²º,Ë,m;A±z¥i¥Hjï³¼ÜÁã¥Ü³¼¹;B¼Æ;ï¥ºOÁã¥Ü³¼¹©Î¹qmøj^;C

¶}±òæ@ó¥i|b"äææ-°²{¥í²ºÀä¥Ü,Ë,m!Ûq³]©wÈ²ºµøµj;C

ÅäÿÜÿí©ó¹qμø¿éÿXªºÿØ«e®æ|i»P°ê§O³]©wÈ;C

¶}±ò¤@ó¥|b"ä¤¤«ü©w˘S©w¹qμø¿é¥X®æ|j²ºμøμ;jC

!12M³æ®e³\±z®Ú¾4Ú!Ûπv©Ò©~!f²º°ê®a"Ózï¾4Û¹qmø¿é¥X®æ!j;C

μù;G !p²G±z©Ò!b²º°ê®a"§!¾!C!b²M³æππ;A±zÀ³,Ózï¾4ÛÂ÷!Ûπv©Ò!b!a°ï¾!²ñ²º°ê®a;C

“İjı©w²²@æııı”¬°ŋ}¾÷¹w³]ÈıC

ıp²Gıb±Ò°Ê¹q,ƒ®É¥uı³¹qμø³s±μıÜÄã¥Ü¾¼¹ıŋ±

¥dıAı¹ııŋıμıı½T«O±Ò°Ê¹Lμ{Äã¥Ü²²©Òı³ıÄ¹δ°T®§§ı¥H±z¹qμø©Òıä´©²²ıı½T®æııııé¥XıC

¥iÁý±z«ü©w¶Ç°e!Ü¹qμø²º¿é¥X°T,¹Ãþ«¬;C

!p²G±z¨ã!³¥¿½T²º³s±μ¾¹ÆI½u;A«h S μø°T¿é¥X³q±`¥iαñ½Æ;Xμø°T¿é¥X

´£¨Ñ§ó²²º¿é¥X«~½è;C!p²G±zμL²k½T©wÀ³,Ó«ü©w²º°T,¹Ãþ«¬;A½Ð¿i¾Ü!Ü°Ê¿i¾Ü³]©w;C

½Ð¨ÏÏ½bÄY«ö¶s½Ö¾ã¹qμøπW²º@à±ÅãÏÛ;ì,m;C

μù;G |p²G¹qμøμe±|]½Ö¾ã¹L«x|ÓÏX²{ÅãÏÛÂø¶Å©î²ÅÏÖ²º°ÝÃD;A±zÏu»ÝμÏ«Ý 10 -íÄÄ;Aμe±±N·|
|Û°Ê²ä;^¨ä¹w³J]ì,m;CμM«á;A±zÏiÏH«·s¶i;æ½Ö¾ã¹CÏ¿½T©w;ì@à±π§«á;A±zÏ²¶·|b 10
-íÄÄ²º«öπU;u½T©w;ìv©Í;u®MÏÍ;v«ö¶s;AÏHÄx;s_Ó³J©wË;C

© Ú¼Ú¥Ø«e²º, Ñ²R«x;A;b¹qμø±W±N©à±«³];Ü¨ä¹w³];ì,m;C

½Ð“İŸî³o“Ç±±“î½Õ³⁄₄ă¹qμø¹⁄₄v¹³²⁹«G«x»P¹j©M«xjC

½Ð“İŸî³o“Ç±±“î½Ö³/4ã¹qμø¼v¹³aº«G«x»P¹iãñ«x;C

½Ð“İŸİ!±±“İ½Ö¾än®MŸİ“İ¹qμø°T,¹æº°{Ã{¹LÂoμ{«×;C

|b“İŸİμwÂé,Ñ½X¾¹“Ó¼½©ñ DVD ¹q¼v®É;A«ØÄ³±z§¹ŸpÄö³¬°{Ã{¹LÂo;C

³]©w¿é¥X!Ü¹qμøªÁ¹õ,ÑªR«x»P!â±m²`«x¡C

½Ð“İŸİ³o“Ç±±“İ½Ö¾ã±zÅãŸÜ¾¼¹κW²º¼vκù©Í DVD ¼¼½©ñ«~½è;C

±zŸiŸHκÀŞO±±“İ«G«x;B¹iκñ«x;B;â-ÛκÎ¹;©M«x;AŸH;B±z¹q, fκW¼¼½©ñ¼¼vκù©Í DVD
¹q¼¼v®ÉÀð“ú³İ“İ²º¼v¹³«~½è;C

®e³\±z½Ö¾ã NVidia ¹İſ³B²z¾¹a⁹¥Dn»P°O¾4ĐÅé®ÉÄÄÀW²v;C

©w NVidia 1jŝi³B²z¼¹ºº¥Dn®ÉÄÁ³t«x¡C

¥H|Ê,U»® ÷ ¬°³æjî¥Ü¥Dn®ÉÄÁ³t«x¡C

³]©wÅãŸÛ³/4¹±¶±d±W²º°O³/4ÐÁé±¶±§®ÉÄÄ³t«x;C

!b®M¶í«e'ú,Ö·s®ÉÄÄÀW²v³]©wÈ²ºÃ©w©Ê;C

μù;G ±z¥²¶·¹i¥ô|ó»P»s³y¼t°Ó¹w³]Èæ£|P²º·s³]©wÈ¶i;æ'ú,Ö;AμM«áæ~¥i¥H±Næ\$¥Ãæ[|a®M¶í;C

¿ï³4Ü!¹¿ï¶µ±N½T«O;b Windows `C! , ±ò°Ê®É;A±z¹ï®ÉÄÄÀW²v©Ò§@ªº¥ò;óÅÜ\$ó±N;Û°Ê³Q®M¥í;C

µù;G ±z¥i¥H;b Windows ±ò°Ê®É«ö;í <Ctrl> Áä;A¥H;b±ò°Ê¹Lµ{x
²²¹L;Û°Ê®ÉÄÄ³]©w;C;pªG±zªº¹q, £³s½u;Ûºò, ô;A½Ð;bµn¶J Windows «á¥ß\$Y«ö;í <Ctrl> Áä;C

«³]©Ò!³®ÉÄÁ½Ö¾ä¥\`à;A`Ä;b¥i¥H«·s±Ò°Ê±±`î¤§«e±j`î«·s°´ú¹î§îµwÁé;C
«ØÄ³±z¥un`î¥î¤w§ó·s²º BIOS ¼v¹³`Ó§Ö°{§ó·sÁã¥Ü¾¼¹¤¶±¥d²º BIOS;A´N°õ|æ¤@|,«³]¾p§@;C

