

⌘Ø³ãªéµÑÇàÀ×Í;¹Öéà¾¼×èÍ;ÓË¹´ãËé;ÒÃ´´ÓÃÍ§ fog table ·Ó§Ò¹ËÃ×ÍäÁè·Ó§Ò¹
Direct3D ´´ÐÃÐºØÇèÒÍÐ´´»àµÍÃì;ÒÃÁË´§¼¼Å¹ÖéËÒÁÒÃ¶ãªéàÃè§⌘ÇÒÁàÃçÇ;ÒÃÁË
´§¼¼Å¶Í§ÌÒÃì´´áÇÃì Direct3D â´´ÁÁË´§¼¼Åä´´é·Ñé§´ºº vertex fog ËÃ×Í table fog
à;ÁºÒ§»ÃÐàÀ·ãÁèËÒÁÒÃ¶¹Ó⌘ÇÒÁËÒÁÒÃ¶´´Òì;ÒÃì´´áÇÃì Direct3D ÁÒãªéä
´´éàµçÁ»ÃÐËÒ· ÒÁÒ¾¼áÅÐµéÍ§ãªé table fog à·èÒ¹Ñé¹
ìÒÃàÀ×Í;µÑÇàÀ×Í;¹Öé´´ÐªèÇÃãËé⌘Ø³ÁÑè¹ã´´ã´´éÇèÒ
à;Á¹Ñé¹ÁÑ¹º¹ã»Ãà«Ëà«ÍÃì;ÃÒ¿Ò; NVIDIA ä´´éÍÃèÒ§¶ÙìµéÍ§

μÑÇàÀ×Í;¹ÖéªèÇÃãĚéªØ³ÊÒÁÒÃŦĤĤ;àĀÔ;ĭ;ÒÃãªéªØ³ÊÁºÑμÔ DirectX
àÇÍĀìªÑè¹ãĚÁèæ ã¹ă´ĀàÇÍĀìă´é

à;ÁºÒ§»ÃĐàÀ·.ÖèàŦÖĤ¹ŦÖé¹à¾×èÍãªé;Ñº DirectX àÇÍĀìªÑè¹;èÍ¹æ
ÍŦªăÁè·Ó§Ŧ¹ŦĚŦªØ³μŦ´μÑés DirectX àÇÍĀìªÑè¹ 6 ĚĀ×Í 7 äÇé
ĭŦĀàÀ×Í;μÑÇàÀ×Í;¹Öéà»ç¹;ŦĀ;ŦĚ¹´ãĚéĀĐºº·Ó§Ŧ¹ă¹ăĚĀ´ DirectX 5
à¾×èÍãĚéà;ĀĀØè¹à;èŦĚŦĀŦĀŦ·Ó§Ŧ¹ă´éÍĀèŦ§ŦŦŦ;μéÍ§

ãªéμÑÇàÀ×Í;¹ÖéĚŦ;ªØ³μéÍ§;ŦĀĀÑ¹à;ĀĀØè¹à;èŦºŦ§ĀØè¹·ŦèăÁè·Ó§Ŧ¹ĚĀ×Í·Ó§Ŧ¹
ăĀè»ĭμŦ

ãĚéîÒÃì´ áÇÃì»ÃÑºðèÒðÇÒÁĀÖ;ϕÍ§ Z-buffer ãĚéμÃ§μÒÁ·Ōèáí»¾ĀŌàðªÑ¹μéÍ§;ÒÃ
â´Â»;μŌ ðØ³ðÇÃ;ÓĚ¹´ ãĚéμÑÇàĀ×Í;¹Ōé·Ó§Ō¹ Â;àÇé¹ã¹;Ã³Ō·ŌèμéÍ§;ÒÃ;ÓĚ¹
´ðÇŌÁĀŌ; Z-buffer àÍ§ ĚŌ;ăĀè;ÓĚ¹´ ãĚéμÑÇàĀ×Í;¹Ōé·Ó§Ō¹
â»Āá;ĀĀáí»¾ĀŌàðªÑ¹·Ōèăªé Z-buffer «Ōè§ăĀèμĀ§;Ñº·Ōèă´é;ÓĚ¹
´ðèŌð¹¿Ō;ăÇé`Đ·Ó§Ō¹ăĀèă´é

ÊÒÁÒÃ¶àÀ×Í;ãªéà·¤¹Ô¤ÊÓËÃÑºÑ¿à¿ÍÃì;ÒÃáÊ´§ÀÒ¾ 3 ÁÔµÔã´é
¤Ø³ÊÁºÑµÔ¹Õé·ÓãËéÎÒÃì´áÇÃìÊÒÁÒÃ¶ãªé;ÒÃ·Ó§Ò¹µèÒ§æ
ÊÓËÃÑºÑ¿à¿ÍÃì;ÒÃáÊ´§ÀÒ¾ 3 ÁÔµÔã¹áí»¾ÃÒà¤ªÑ¹ 16 °Ôµ
à¾¾×èíãËéÊÃéÒ§ÀÒ¾ 3D ä´éÃÕ»ÃÐÊÔ·ÔÀÒ¾ËÛ§ÃÔè§¢Öé¹

ãªé;ÓĚ¹´ãĚéáĚ´şâÂâ;é NVIDIA ã¹ Direct3D

ıÒÃãªéµÑÇàÅ×Í;¹Ŏé´Đ·ÓãĚéâÂâ;é NVIDIA »ÃÒı¯·ŎèÁØÁ´éÒ¹ÅèÒşŦİŞĚ¹éÒ´Í
ã¹Ŧ³Đ·ŎèÃÑ¹áÍ»¾ÅÔàªªÑ¹ Direct3D

â»Ãà«Êà«ÍÃî;ÃÒ¿Ô; NVIDIA ÊÒÁÒÃ¶ÊÃéÒ§ÁÔ»áÁç»â
´ÁÍÑµâ¹ÁÑµÔà¾×èlà¾ÔèÁ·Ñé§»ÃÐÊÔ·ÔÁÔ¾ã¹;ÔÃÊè§¢éÍÁÙÂ;ÔÃÊÃéÒ§¾×é¹¼
ÔÇ¹¼èÔ¹⁰ÑÊáÃÐ»ÃÐÊÔ·ÔÁÔ¾ã¹;ÔÃ·Ô§Ô¹¢Í§áÍ»¾ÃÔàªÑ¹

ÍÃèÒ§äÃ;çµÒÁ â»ÃájÃÁáÍ»¾ÃÔàªÑ¹⁰Ò§»ÃÐàÀ·ÍÒ·ÃÔ;ÔÃáÊ
´§¼Ã·ÔèäÃè¶Û;µéÍ§ÊÔ;ÔÊ¹·ãÊéãªéªØ³ÊÁ°ÑµÔÁÔ»áÁç»ÍÑµâ¹ÁÑµÔ;ÔÃájé»ÑËÒ
ãÊéªØ³Ã·ÃÐ·Ñº;ÔÃÊÃéÔ§ÁÔ»áÁç»Ã§¹;ÇèÒ·ÐáÊ´§¼Ã¶Û;µéÍ§;ÔÃÃ·ÃÐ
´ÑºÁÔ»áÁç»·ÐÊÒÁÔÃ¶ájé»ÑËÒ;ÔÃÇÒ§µÓáÊ¹è§¾×é¹¼ÔÇãÊé "äÃèÃÔÃÍÃµéÍ"
(áµè·Ð·ÔãÊéªØ³ÃÒ¾¢Í§;ÔÃáÊ´§¼ÃÃ·Ã§´éÇÃàªè¹;Ñ¹)

ãĚéϣØ³ÊÒÁÒÃŲàÀ×ÍÇÔ,ŎÁÔ»áÁÇ»ÍÑμâ¹ÁÑμÔ·Ŏèâ»Ãà«Êà«ÍÃìÃÔ¿Ôì·Đãé
ϣØ³ÊÒÁÒÃŲàÀ×ÍÇÔ,ŎìŎÃÁÔ»áÁÇ»áºăºẢÔà¹ŎÃÃì ĚÃ×Íáº 8-tap anisotropic â
´Â·ŎèáºăºẢÔà¹ŎÃÃì·ĐãĚé»ÃĐÊŎ,ŎẢÔ¾·Ŏè´ŎìÇèŎ ã¹ϣ³Đ·Ŏèáº anisotropic
·ĐÊÒÁÒÃŲáÊ´ŞẢÔ¾ă´éϣÁªÑ´ìÇèŎ

ãĖé¸Ø³ÊÒÁÒÃŒ»ÃÑº¸èÒä°áíÊ LOD (Level of Detail) ã¹;ÒÃÁÔ»áÁç»ä´é

¸èÒä°áíÊ·ÕèµèÓ·Ð·ÓãĖé¸Ø³ÀÒ¾¼ŒÍ\$ÀÒ¾¼´ÕŒÖé¹

ã¹Œ³Ð·Õè¸èÒä°áíÊ·ÕèÊÛ\$·ÐªèÇÂà¾¼ÕèÁ»ÃÐÊÔ·ÔÀÒ¾¼;ÒÃ·Ó\$Ò¹ŒÍ\$â»ÃáiÃÁáí»¾¼
ÃÔàªÑ¹ ¸Ø³ÊÒÁÒÃŒàÃ×|;·Ò;¸èÒä°áíÊ´Õ;ÍÃµì 5 ¸èÒ àÃÔèÁ·Ô; "¸Ø³ÀÒ¾¼ŒÍ\$ÀÒ¾¼
´Õ·ÕèÊØ´" ä»¹ŒÖ\$ "»ÃÐÊÔ·ÔÀÒ¾¼´Õ·ÕèÊØ´"

ã¹ÃÒÂ;ÒÃ;ÒÃμÑέ\$ðèÒá[∞];ÓĚ¹´àÍ\$ (ĚÃ×Í "tweak") ·Õè¤Ø³ă´é°Ñ¹·Ö;ăÇé
ãĚéàÃ×Í;μÑÇàÃ×Í;·Ö;ÃÒÂ;ÒÃà^{3/4}×èlã^aé\$Ò¹;ÒÃμÑέ\$ðèÒ¹Ŏé
ã¹;ÒÃàÃÒÂ;ã^aé\$Ò¹;ÒÃμÑέ\$ðèŎ·ŎèμéÍ\$;ÒÃ ãĚé¤ÃŎ;·Ŏè»ØèÁ "μ;Ã\$" ĚÃ×Í
"μ;Ã\$ã^aé"

ªèÇÂãĚéªØ³ºÑ¹.Öï;ÒÃµÑésªèÒ»Ñ´´´ØºÑ¹ (ÃÇÁ·ÑésªØ´;ÒÃµÑésªèÒã¹ă´ÍĐÂçí;ºçí;«ì
"More Direct3D) à»ç¹ÃÛ»áºº.Õè;ÓĚ¹´àÍ\$
;ÒÃµÑésªèÒ·ÕèºÑ¹.ÖïăÇé¹Ŏé´Đà¾ŎèÁĀ\$ã¹ÃŎÂ;ÒÃ·ŎèÍÂÙè¶Ñ´ă»
ĚĀÑ\$´Ò;·ŎèªØ³ă´é;ÒÃµÑésªèÒ·Ŏè´Ŏ·ŎèÊØ´ÊÓĚĀÑºà;Ááºº Direct3D áĀéÇ
ãĚéºÑ¹.Öï;ÒÃµÑésªèÒ¹Ñé¹ăÇéà»ç¹ÃÛ»áºº.Õè;ÓĚ¹´àÍ\$ (custom tweak)
«Ŏè\$ªèÇĀãĚéªØ³ĚŎĀŎĀ¶;ŎĚ¹´ªèŎ Direct3D ä´éÍĀèŎ\$ĀÇ´àĀçÇ â
´ĀăĀèµéÍ\$µÑésªèŎáµèĀĐµÑÇàĀ×Í;ăĚĀè·ÑésĚĀ´

Åº;ÒÃµÑé§æèÒ·Õè;ÓĚ¹´àÍ§·Õèă´éàÅ×Í;ăÇé¨Ò;ÃÒÂ;ÒÃ

àÃÕÂ;æèÒ´Õ¿ÍÅµìϕÍ§;ÒÃµÑé§æèÒ·Ñé§ĚÁ´¤×¹

áÊ´šă´ÍĐÅçí°çí«ì«Öèšă^aéÊÓËÃÑ^o»ÃÑ^oà»ÅÕèÂ¹ıÒÃμÑéš^oèÒí×è¹æ ¢Í§ Direct3D

μÑÇàÀ×í¹Õé¨Ðà»ÀÕèÂ¹á»ÀŞÊ;ÕÁ;ÒÃÃÐ⁰Ø^¾×é¹¹/₄ÔÇ¢ÍŚÎÒÃĩ´áÇÃìÊÓËÃÑ⁰à·ç;à«À
(ÍŚᄁì»Ãᄁ;í⁰¢ÍŚ¾×é¹¹/₄ÔÇ)

ı̀ÒÃà»ÀÕèÂ¹ᄁèÒàËËÀèÒ¹Õé¨Ðà»ÀÕèÂ¹μέ¹ά⁰⁰à·ç;à«À·Õè;ÓË¹´äÇé â
´À·ÕèᄁèÒ·Õèà»ç¹´ÕĲÍÃµì¨ᄁÊÍ´ᄁÃéÍŚ;Ñ⁰¢éÍ;ÓË¹´¢ÍŚ Direct3D
«ÍĲµìáÇÃì⁰ÔŚ»ÃᄁàA·ÍÒ´μέÍŚ;ÒÃ;ÒÃ;ÓË¹´µÓáË¹èŞà·ç;à«ÀăÇéµèÔŚËÒ;´éÇÂ
ᄁØ³ÀÖ^¾ă¹;ÒÃáË´Ş¹/₄ÃÀÖ^¾¢ÍŚáÍ»^¾/₄ÃÒàᄁ^aN¹»ÃᄁàA·´ÑŚ;ÃèÔÇ¨ᄁ´Ô¢Öé¹
ËÒ;ÃÖ;ÒÃ;ÓË¹´¢éÍÁÙÃà·ç;à«ÀăËËè â
´Â»ÃÑ⁰á¶⁰àÀ×èí¹ă»ÃÒÃᄁËÇèÔŚÃØÁ⁰¹«éÒÂáÃᄁ¨ᄁ´ÈÙ¹Âì;ÃÒŚ¢ÍŚà·ç;à«À

ãĒéâ»Ãà«Ēà«ÍÃì;ÃÒ¿Ôìãªé"Ó¹Ç¹Ē¹èÇÂ¤ÇÒÁ"ÓŒÍ\$ÃĐº.ÕèÃĐºØäÇéŒÍ\$.Õèà;ç^{03/4}×é^{11/4}ÔÇă´é (1ì;àĒ¹×Í"ÒìµÔ´µÑé\$Ē¹èÇÂ¤ÇÒÁ"ÓŒÍ\$ìÒÃì´áĒ´\$¼Åà¾ÔÃ\$ÍÃèÒ\$à´ÔÃÇ)

ĒÁÒÂàĒµØ: "Ó¹Ç¹Ē¹èÇÂ¤ÇÒÁ"ÓĒÛ\$ĒØ
´ŒÍ\$ÃĐº.Õè¹ÔÃÔãªéĒÃéÒ\$¾×é^{11/4}ÔÇĒÒÁÒÃ¶Ó¹Ç³ă´é"Òì;Ó¹Ç¹ RAM
·ÕèµÔ´µÑé\$ÍÃÛèã¹à¤Ã×èÍ\$¤ÍÃ¾ÔÇàµÍÃìŒÍ\$¤Ø³ ĀÕè\$µÔ´µÑé\$ RAM
äÇéÃÒ;à·èÒã´ ¯èÒ·ÕèĒÒÁÒÃ¶ãªéă´é"ĐÃÒ;ŒÖé¹à·èÒ¹Ñé¹

¤èÒ¹Œé"Đãªé;Ñº;ÒÃì´;ÒÃáĒ´\$¼Å PCI à·èÒ¹Ñé¹ (ĒÃ×Í;ÒÃì´;ÒÃáĒ´\$¼Å AGP
·Õèãªéã¹âĒÁ´·Õèãªé\$Ò¹ă´é;Ñº PCI)

àÀ×Í;µÑÇàÀ×Í;¹Õéà¾×èÍÂ;àÀÔ;ìÒÃ«ÔŜâµÃä¹«ìá¹ÇµÑéŜ
·ÓãËéáË´§ÀÒ¾ä»ÂÑ§Ë¹éÒ´Íä´é·Ñ¹·Õâ
´ÂäÀèµéÍ§ÃíãËéÁÔ;ÒÃ«ÔŜâµÃä¹«ìÀÒ¾ã¹á¹ÇµÑé§;ÃÑºä»·Õè´ÍÀÒ¾
áÀÐªèÇÃãËéÍµÃÔ;ÒÃáË´§¼ÃËÛ§;ÇèÒÍÑµÃÔ;ÒÃÃÔà¿ÃªÇÍ§´ÍÀÒ¾
áµèÍÒ´Ëè§¼Ã;ÃÐ·µèìµØ³ÀÒ¾ÇÍ§ÀÒ¾ä´é

¡ÒÃÄ'ÃÍÃËÃÑ¡à»¹à.ª¹Ôª.Õèãªéã¹¡ÒÃÄ' "àÊé¹¢ÃØ¢ÃÐ"

«Oè§°O§¤ANè§°Ð»AO┘ ¢Oè¹µOA¢┐¢I§AO¾¾ 3D EOEA
¤Ø³ÈÒÁÒÃ┐àÅ×Í;ǎ´éµNé§áµè;ÒÃ°°ÁÍÊÃÑ;Í;ǎÉèËÁ

`ä»¹¶ŒàÄx|ãĒéAOˆO¹Ç¹AIAĒAN;ă´éEUŞEØ

ãªéµÑÇàÀ×Í;¹Õéã¹;ÒÃÀ
´ÁÍÄËÃÑ;ã¹áÍ»¾¼ÀÕàªªÑ¹.ÕèäÁèÊÒÁÒÃ¶ãªéªØ³ÊÁºÑµÔ¹Õéä´éâ´ÂµÃ§
ªØ³ªÇÃãªéµÑÇàÀ×Í;¹ÕéÍÂèÒ§ÃÐÃÑ´ÃÐÇÑ§ â»Ã
´.ÃÒºÇèÒºÒ§áÍ»¾¼ÀÕàªªÑ¹«Òè§äÁèÊÒÁÒÃ¶ãªéà.ª¹Ôª¹Õéä
´éÍÒ´.ÕãËéäÁèÊÒÁÒÃ¶áÊ´§¼¼Ãä´éÍÂèÒ§àËÄÒÐÉÁ ËÃ×ÍÍÒ´àÃ¹à´ÍÃìÀÒ¾¼¼Ô´»µÔ
ãËé»Ô´µÑÇàÀ×Í;¹ÕéÊÒ;ªØ³¾¼º»ÑËÒã¹;ÒÃáÊ
´§¼¼Ãà;ÄËÃ×ÍáÍ»¾¼ÀÕàªªÑ¹«Òè§äÁèÊÒÁÒÃ¶ãªéà.ª¹Ôª;ÒÃÃ´ÃÍÃËÃÑ;ä´é

μÑÇàÀ×í;¹Öéãªé;ÓĚ¹
´;ÖÄàμÃÖÄÄ´´Ó¹Ç¹à;ÃÁϕÍ§«Ö¾ÖÂÛ;èÍ¹.Öè´Ð»ÃÐÁÇÅ¼ÅàÁ×èÍªØ³àÅÔ;ãªé;ÒÃ«Ô
§âªÃä¹«ìã¹á¹ÇμÑés
ã¹ºÒ§;Ã³Ö ÂÔè§ÁÖ´´Ó¹Ç¹à;ÃÁ·ÖèÁÖÍÂÛèÁÒ;ϕÖé¹à·èÖã´ "input lag"
ÍÒ´´μÍºĚ¹Í§μèÍÍØ»;;Ã³;μèÒ§æ àªè¹ ´´ÍÂĚμÔê; à;Áá¾´ ĚÃ×Íá»é¹¾ÖÁ¾ìã´ é´ÖϕÖé¹
ãĚéÁ´ªèÒ¹ÖéÅ§ĚÒ;¾ºÇèÒ;ÒÃμÍºĚ¹Í§μèÍÍØ»;;Ã³;μèÒ§æ
·Öèàª×èÍÁμèÍÍÂÛè;Ñºàª×èÍ§ªÍÁ¾ÔÇàμÍÂìà»ç¹ä»ÍÂèÒ§ÅèÒªéÒÁÒ;ã¹ϕ³Ð·ÖèªØ³à
Åè¹à;Á

ªèÇÃãĚéá´ÃàÇÍÃìĚÒÁÒÃ¶ãªéâ»ÃájÃÁĚèÇ¹ŦÂÒÂ OpenGL **GL_KTX_buffer_region**
ă´é

µÑÇàĀ×Íj¹ŒéªèÇÃà¾ŒèÁ»ÃĐĚŒ·ŒÀŒ¾ŦÍſâ»ÃájÃÁ·ŒèªªéĚĚéŒŒâÁà´Ā 3D
·ŒèĚ¹ÑºĚ¹Œ¹jŒĀ·ŒŒŒ¹ĀèÇÁjÑºĚèÇ¹ŦÂŒĀ¹Œé

ªèÇÂãĚéÊÒÁÒÃŦãªéĚ¹èÇÂªÇÒÁ¨ÓÊÓĚÃÑªáĚ´Œ¼Ā¨ÒĭĚ¹èÇÂªÇÒÁ¨ÓĚÃÑĭä´é
àÁ×èĭÓĚ¹`ãĚéãªéŒÒ¹ĚèÇ¹ŒĀŦ GL_KTX_buffer_region
ÍĀèÒŒãĀĭçµÒÁ ĚÒĭĚ¹èÇÂªÇÒÁ¨ÓĭÒÃáĚ´Œ¼ĀĚÃÑĭÁŦ¹éÍĀĭÇèÒ 8 àÁĭĐäªµĭ
ªØ³¨ĐãªéŒÒ¹â»ÃáĭĀĀĚĚÇ¹ŒĀŦĀ¨ÍáĚ´Œ¼ĀªŦèãĀèä´é
ĭÒÃµÑĚŒªèÒ¹Ŧé¨ĐäĀèĀŦ¼ĀĚÒĭăĀèä´éãªéŒÒ¹µÑÇàĀ×Íĭ "Enable buffer region extension"
(ãªéŒÒ¹ĚèÇ¹ŒĀŦĀ¾×é¹·ŦèŒÍŒªŦŒàĭĀĭ)

ıÖÃıÓĚ¹˘ãĚéã^aé¿ÔÂàμÍÃî fast linear-mipmap-linear
˘Đ^aèÇÂà³/₄ÔèÁ»ĂĐĚÔ˘,ÔÀÔ³/₄¢ÍŚáÍ»³/₄ĂÔà^aŃ¹ áμè^aØ³ÀÔ³/₄¢ÍŚÀÔ³/₄ÍÔ˘˘Ă˘ĂŚ
ã¹ĚĂÔÂæıÃ³Ŏ^aØ³ÀÔ³/₄¢ÍŚÀÔ³/₄˘ĐĂ˘ĂŚăĂèĂÔı¹Ńı˘ŃŚ¹Ńé¹^aØ³˘ÖŚ^aÇÃıÓĚ¹
˘ãĚéã^aéŚÔ¹^aØ³ĚĂ⁰ŃμÔ¹Ŏéà³/₄×èÍãĚé»ĂĐĚÔ˘,ÔÀÔ³/₄à³/₄ÔèÁ¢Öé¹

μÑÇàÅ×Í;1ÕéªèÇÂãËé OpenGL ÊÒÁÒÃ¶ãªé;ÒÃ·Ó¿ÔÅμÍÃì Anisotropic
à¾×èíà¾ÔèÅ∅³ÅÒ¾¶Í§ÅÒ¾

ãĖĖàĀ×ÍjμÑÇàĀ×Íj¹ŌĖà¾×èÍĀjàĀÔj;ÒĀãªĖä´ĀàÇÍĀiĖÓĖĀÑªø
´ºÓĖÑĕ§¾ŌàĖĖ¢İ§«Ō¾ŌĀU
«Ō¾ŌĀUºŌ§»ĀĐàÀ·Ė¹ÑºĖ¹Ø¹ªØ´ºÓĖÑĕ§ 3D «Ōĕ§ãªĖä
´ĖjÑªâ»Āà«Ėà«ÍĀjĀŌ¿Ōj NVIDIA ¢İ§ºØ³
áĀĐà¾ŌĖĀ»ĀĐĖŌ·ŌĀŌ¾ãĖĖàjĀĖĀ×ĭâ»ĀájĀĀáj»¾ĀŌàªªÑ¹ 3D
μÑÇàĀ×Íj¹ŌĖªĕÇĀãĖĖªºØ³ĖŌĀŌĀ¶ĖÑĕ§ĀjàĀÔj;ÒĀãªĖªØ´ºÓĖÑĕ§ 3D
¾ŌàĖĖĖĖĀĖŌ¹ŌĖã¹ă´ĀàÇÍĀi
«Ōĕ§ĀŌ»ĀĐâĀª¹ĭ¹jŌĀà»ĀŌĀª·ŌĀº»ĀĐĖŌ·ŌĀŌ¾ĖĀ×ĭăĖă¹jŌĀájĖ»ÑĖŌ

μÑÇàÀ×Í;àĚÀèÒ¹Œé¨Đ;ÓĚ¹; òĀĀ´ĀĪĀĚĀÑ;áºàμçÁĚ¹éÒ´Í ÊÓĚĀÑºà▯Ā×èİſ·Œèãªéä
´ĀàÇĪĀì OpenGL ;òĀĀ
´ĀĪĀĚĀÑ;à»ç¹à·▯¹Œ▯·Œèãªéã¹;òĀáμèſçÍºçÍſÍºà¨;μĩãĚéàĀŒĀºà¾₄×èÍĀ´
"àĚé¹çĀøçĀĐ" «Œèſ»ĀŒ;_ãĚéàĚç¹ã¹ºŒſ▯ĀÑés ÇŒ_Œ;ŒĀáĚ´ſ¼Āáºº 1.5 x 1.5
ĚŒĀŒĀ¶Ā´ĀĪĀĚĀÑ;çÍſĀŒ¾₄ä´éÍĀèŒŒ´ŒàĀŒèĀĀ ç³Đ·Œèáºº 2 x 2 ¨Đ·ŒãĚéĀŒ¾₄·Œèä
´éĀŒ▯ø³ĀŒ¾₄ĀĪ´àĀŒèĀĀ

ă´ÃàÇÍÃì´´ĐÊÒÁÒÃ¶àíç;«ì»ÍÃìµÃÙ»á^{003/4}Ô;à«Å¢Í§ÊàµíÃÔâíă´é àÁ×èíă^aémÑÇàÅ×í;¹Öé
â»Ãá;ÃÁ OpenGL ´Đă^aéÊàµíÃÔâíáÅĐàÅ¹Êì^aÑµàµíÃì¢Í§ÊàµíÃÔâíă´é

ă´ÃàÇÍÃì`Đàlç;«ì»ÍÃìµÃÙ»á⁰⁰³/₄Ô;à«Ãà³/₄×èÍ;ÒÃ«éÍ¹ÀÒ³/₄ à³/₄×èÍãĚéâ»ÃÁ;ÃÁ OpenGL
ã^aé⌘Ø³ÊÁ°ÑµÔ;ÒÃ«éÍ¹ÀÒ³/₄ă´é

μÑÇàÅ×Í;¹ÖéªèÇÂãĚé OpenGL ÊÒÁÒÃŲãªé;ÒÃ·Ó¿ÔÅàμÍÃì Anisotropic
à¾×èÍà¾ÔèÁªØ³ÀÒ¾¼ŲÍŚÀÒ¾¼ â»Ã´ÊÑŚà;μÇèÒ;ÒÃãªéŚÒ¹ªØ³ÊÁ°ÑμÔ¹Öé
ˆˆĐªèÇÂãĚéªØ³ÀÒ¾¼ŲÍŚÀÒ¾¼à¾¼ÔèÁŲÖé¹â´Â»ÃĐÊÔ·,ÔÀÒ¾¼;ÒÃ·ÓŚÒ¹ăÁèÁ´ÂŚ

àÁ×èí;ÓĚ¹`ãĚéä`ÃàÇÍÃì OpenGL ``Ñ´ÊÃÃºÑ¿à¿ÍÃì´éÒ¹ĚÃÑşáÃĐºÑ¿à¿ÍÃìáĚ´şÀÒ¾ 3
ÁÔµÔäÇé·ŦëÃĐ´ÑºÇÒÁÃĐàÍŦÃ´¢Íş;ÒÃáĚ´ş¼ÃÃĐ´Ñºà´ŦÃÇ;Ñ¹

ÇÔ,Ŧ;ÒÃ¹Ŧé`Đă´é¼ÃÃÔèş¢Ŧé¹ĚŦ;ăéĚ¹èÇÂÇÒÁ`Ó;ÒÃáĚ
´ş¼Ã¢Íşâ»ÃájÃÁ«ŦèşÁŦĚÃŦÃĚ¹éŦµèŦş

ĚŦ;Ç³ăÃèăéşŦ¹ă`ÃàÇÍÃì OpenGL ãĚé`Ñ´ÊÃÃºÑ¿à¿ÍÃìĚèÇ¹ĚÃÑşáÃĐºÑ¿à¿ÍÃìáĚ
´şÀÒ¾ 3 ÁÔµÔäÇé´éÇÃ;Ñ¹ă¹·Ŧ;Ě¹éŦµèŦş·Ŧèáí»¾ÃŦàÇÑ¹¹Ñé¹ĚĚèŦş¢Ŧé¹

Ç³ĚÁºÑµŦ¹Ŧé`ĐªèÇÂà¾ŦèÁ»ÃĐĚŦ·,ŦÀÒ¾¢Íşâ»ÃájÃÁ OpenGL
«ŦèşăéĚ¹éŦµèŦşĚÃŦÃĚ¹éŦµèŦş¾ÃéÍÃ;Ñ¹

μÑé\$▯èÒãĚé|Ñ°â»Ãá;ÃÁ OpenGL ·ÖèàÅ×Í;äÇéà¾×èíãĚéâ»Ãá;ÃÁ·Ó\$Ò¹ă´é¼Å
´Œ·ŒèÊØ´

µÑÇàÅ×Í;¹Õéãªé;ÓË¹´ÇèÒ¾×é¹¼ÔÇ·ÕèÁÕÃÐ´ÑºÊÕ¹Ñé¹æ
´Ð¹ÓÁÕÕªéª¹â»Ãá;ÃÁÁÍ»¾ÅÕàªÑ¹ OpenGL ËÃ×ÍäÁè

µÑÇàÅ×Í; **Use desktop color depth** ´ÐªªéªÇÒÁà¢éÁ¢Í§ÊÕà´ÕÃÇ;Ñºà
´Ê;ì·Í»¢Í§ÇÕ¹â´ÇÊì

µÑÇàÅ×Í; **Always use 16 bpp** áÅÐ **Always use 32 bpp** à»Ç¹;ÒÃ;ÓË¹
ªÊéªªªé¾×é¹¼ÔÇµÕÁÃÐ´ÑºÊÕ·Õè;ÓË¹´ªÇé â
´ÃäÁèªÓ¹Õ§¶Õ§ªèÕ·ÕèµÑé§äÇé·Õèà´Ê;ì·Í»

μÑÇàÅ×Í;¹ÕéãªéÃÐ°ØâĚÁ´;ÒÃ·Ó§Ò¹ buffer flipping
ãĚé·Ó§Ò¹áººàμçÅĚ¹éÖ´ÍϕÍ\$áÍ»¾ÅÖàªªÑ¹ OpenGL

â´ÂªØ³ÊÒÁÒÃ¶àÅ×Í;ãªéÇÔ Õ¶èÒÂâÍ¹ϕéÍÁÙÁáºººÅçÍª (Block Transfer) à¾¼´¿ÅÔ»
(Page Flip) ĚÃ×ÍàÅ×Í;ÍÑμâ¹ÃÑμÖ (Auto-select) ;çä´é
μÑÇàÅ×Í;àÅ×Í;ÍÑμâ¹ÃÑμÖ´Ð·ÔãĚéâ´ÃàÇÍÃìàÅ×Í;ãªéÇÔ,Õ·Õè´Õ·ÕèÊØ
μÖÁªèÖªÍ¹¿Ôà;ìàÃªÑ¹ϕÍ\$ÍÖÃì´áÇÃì

µÑÇàÅ×Í;¹Õéãªé;ÓĚ´;ÒÃ«ÔŞâªÃä¹«ìá¹ÇµÑéŞã¹â»Ãá;ÃÁ OpenGL

Always Off ``ĐăÁèãªé;ÒÃ«ÔŞâªÃä¹«ìá¹ÇµÑéŞ¢ÍŞáÍ»¾ÅÔàªªÑ¹ OpenGL ·ÑéŞĚÁ

Off by default ``ĐăÁèãªé;ÒÃ«ÔŞâªÃä¹«ìá¹ÇµÑéŞ
´¹;ÇèÒ`ĐÁÕâ»Ãá;ÃÁáÍ»¾ÅÔàªªÑ¹ă`àÃÕÂ;ăªé

On by default ``Đăªé;ÒÃ«ÔŞâªÃä¹«ìá¹ÇµÑéŞà»ç¹ªèÒ
´Õ;ÍÁµì´¹;ÇèÒ`ĐÁÕâ»Ãá;ÃÁáÍ»¾ÅÔàªªÑ¹.ÕèăÁèµéÍŞ;ÒÃăªéŞÒ¹
``ÕŞ`ĐàÅÔ;ăªé;ÒÃ«ÔŞâªÃä¹«ì¹Õé

ãĚé°Ñ¹.ÖïjÒÃµÑé\$ðèÒà»ç¹ "ÃÙ»áºº.ÕèjÓĚ¹´àÍ\$" àÁ×èÍ°Ñ¹.ÖïjÒÃµÑé\$ðèÒáÁéÇ
ÃĐºº·Đ¹ÓðèÒ¹Ñé¹ă»à»ç¹ÃÕÂjÒÃµèÍ·éÒÃÕÒÂjÒÃà´ÔÁ·ÕèÁÔÍÂÙè
ĚÂÑ\$¨ÒjµØ³ă´éjÒÃµÑé\$ðèÒ·Õè´Õ·ÕèĚØ´ĚÓĚÂÑºáÍ»¾¼ÂÔàµªÑ¹ OpenGL áÁéÇ
jÔÃºÑ¹.ÖïjÒÃµÑé\$ðèÒ¹Ñé¹ăÇé¨ĐªèÇÂăĚéµØ³ĚÔÁÔÃ¶µÑé\$ðèÒµÍ¹¿Ôj OpenGL ä
´éÍÂèÔ\$ÃÇ´àÃçÇjèÍ¹.Õè¨ĐàÃÕèÃăªéâ»ÁájÃÃ â
´ÃăÃèµéÍ\$µÑé\$ðèÔµÑÇàÃ×ÍjµèÔ\$æ ãĚÁè·ØjµÃÑé\$

¡ÒÃã^aéá¶^oàÀ×éí^{1a}èÇÃãËé^{ø3}»ÃÑ^oÇÒÁÊÇèÒS ¢ÇÒÁ¢Á^aÑ^r
ËÃ×í^èÒóá¡ÁÁÒÇíSá^{a1}à¹ÃËÕ.ÕèàÀ×íjã^é

ãªé;òÃá;éä¢ÊÕà¾×el»ÃÑºÇÒÀÊÇèÒ§.Õèám;µèÒ§;Ñ¹ÃÐËÇèÒ§ÃÛ»µé¹©ºÑº;Ñºái
 Òµì¾Øµ.ÕèàÊ'§¹ÍØ»;Ã³íÊ'§¹¼Ã

«Ôè\$ÃÕ»ÃĐÂÂ^{â1}jaÁ×el.ÔSÔ¹¡N⁰â»ÃÁjÃÁ»ÃĐÁÇÁ^¼4ÃÛ»ÀÒ^¾4 à^¾4×elăĖĖă
éĖĖ.Ôè¶U¡méłS.ÔèĖØ (ă^{â1} ÆÛ»¶èÔĀ) âÀ×elăĖ Š^¼4⁰¹·¡łÁ^¾4ÔÇàmlĀì

1Ĵ"Ō;1Ōē à;Á 3D ĒÀŌÂà;Á"ĐÁŌ;ŌĂăĒ'Œ¼¼Ā.Ōēēēē1¢ēŌŒÁ×
;ŌĂà¼ŌēÀēēŌēÇŌÁĒĒēēŌŒăĀĐ/ĒĂ×ĴēēŌá;ĀĀŌă^{a1}à1ĂĒŌ.ŊēŒĒĀ
"ĐăēÇĀăĒĒēēĀŌ¼ă¹à;ĀĒÇēēŌŒŌē¹ŌŒ³.ŌŒĒŌĀŌĀŊĀăĒà;Āă'éŌŌŌē¹

⌘Ø³ÊÒÁÒÃ¶àÀ×Í¡à¹ÀÊÕä´éâ´Âãªéá¶ºàÀ×èÍ¹·Ñé§ÂÑ§ÊÒÁÒÃ¶»ÃÑºá¹à¹ÀÊÕä´§
ÊÕà¢ÕÂÇ ÊÃ×ÍÊÕ¹éÓà§Ô¹ä´éâ´ÂµÃ§ ÊÃ×Í»ÃÑº·Ñé§ 3 á¹à¹À¾⁄⁄ÃéÍÁæ ¡Ñ¹¡çä´é

Digital Vibrance · ÓãĚé⌘Ø³ÊÒÁÒÃ¶Çº⌘ØÁ;ÒÃáÂĵÊÕáÅĐ⌘ÇÒÁàϕéÁϕí§ÊÕă
´éAÔĵϕÖé¹ «Öè§Êè§¼ÅãĚéAÒ¾ă¹ái»¾ÅÔà⌘Ñ¹.Ñé§ĚÁ´ÁÕÊÕ·Õè⌘ÁªÑ´ÂÔè§ϕÖé¹

jÃÒ¿áÊ´§ªèÇ§ÊÕ àÊé¹âªé§¹Õé´´ĐáÊ
´§¼¼ĀjŌĀà»ĀŌèĀ¹á»Ā§·Ñ¹·Ō·ŌèªØ³»ÃÑºªèÒªÇÒÁªÁªÑ´ªÇÒÁÊÇèÒ§
ĒĀ×ÍªèÒájĀĀÒ

jÒÃàÅ×ÍjµÑÇàÅ×Íj¹Õé¨Ð·ÓãËéÃÐººãªéjÒÃµÑé§ªèÒ·ÕèªØ³jÓË¹
´äÇé¢³ÐºÙµªªÃ×èl§â´ÁlÑµâ¹AÑµÔ

ËÁÒÂàËµØ:

ËÒjªªÃ×èl§ªÍÁ¾ÔÇàµlÃì¢l§ªØ³·Ó§Ò¹lÂÙèã¹à¹çµàÇÔÃìj ÊÕ¨Ðà»ÃÕèÂ¹á»Ã§ä
»ËÃÑ§¨Òjã´éÅçljl¹ã¢éÒËÙèÇÔ¹â´ÇËiáÁéÇ

ÃÒÂ¿ÒÃ¿ÒÃµÑé\$µèÒ·Õè¤Ø³⁰Ñ¹·Ö¿äÇé
ãĚéàÅ×Í¿µÑÇàÅ×Í¿·Ö¿ÃÒÂ¿ÒÃà³/₄×èĭã^aé\$Ò¹¿ÒÃµÑé\$µèÒ¹Õé

ɱø³ÊÒÁÒÃ¶°Ñ¹.Ö;ì;ÒÃµÑésɱèÒÊÕ»Ñ¹···ø°Ñ¹äÇéà»ç¹ÃÙ»áºº.Õè;ì;ÖÊ¹' àísä' é
 ;ÒÃµÑésɱèÖ.Õè°Ñ¹.Ö;äÇé¹Öé'Dà¾⁄⁄ÔèÁÅSä¹ÀÖÃ;ÒÃ.ÕèìÁÙè¶Ñ¹'ä»

Å°ÃÒÂ¿ÒÃ¿ÒÃµÑé\$ðèÒÊÕ·Õèä´éàÅ×Í¿äÇé¨Ò¿ÃÒÂ¿ÒÃ

àÃÕÂ¡¢éíÁÙÅæèÒÊÕ¢í§æèÒÎÒÃĩ´áÇÃì·ÕèµÑé§ÁÒ¨Ò¡âÃ§§Ò¹

ãªéàÀ×ÍjâĚÁ´ä·ÁìÁÔè\$¢Í\$´´ÍÀÒ¾₄:

Auto-Detect ãĚéÇÔ¹â´ÇÊìÃÑºªèÒ·ÕèàĚÁÒÐĚÁ´Òj´´ÍáĚ´\$¼₄ÀàÍ\$

«Õè\$µÑÇàÀ×Íj¹Õé´´Ðãªéà»ç¹ªèÒ´ÕĴÍÀµì â»Ã

´·ÃÔºÇèÒ´´ÍÀÒ¾₄ÃØè¹àjèÒºÕ\$ÃØè¹ÍÔ´´ãÁèĚÔÁÒÃ¶¶ãªéªØ³ĚÁºÑµÔ¹Õéä´é

General Timing Formula ĚÃ×Í **GTF** à»ç¹ÁÒµÃºÒ¹·ÕèãªéjÑº´´ÍÀÒ¾₄ÃØè¹ãĚÁè

Discrete Monitor Timings ĚÃ×Í **DMT**

à»ç¹ÁÒµÃºÒ¹ÃØè¹àjèÒ·ÕèÃÑ\$ª\$ãªéã¹´´ÍÀÒ¾₄ºÒ\$»ÃÐàÀ·

ãĚéãªé\$Ô¹µÑÇàÀ×Íj¹ÕéĚÔj´´ÍÀÒ¾₄¢Í\$ªØ³µéÍ\$ãªéâĚÁ´ DMT

à¾ÔèÁăÍ¹ NVIDIA QuickTweak äÇé·Õè·ÒÊìºÒÃìŒİŞÇÔ¹â´ÇÊì
ăÍ¹¹¹Õé·ĐăĚéºØ³ăéºèÒ Direct3D, OpenGL ĚÃ×ÍºèÒĚÕ·ÕèºØ³µÑéŞºèÒàİŞ "ă
´éÍĀèÒŞĀÇ´àĀçÇ" ·ÒìàÁ¹Ù»êÍ»ÍÑ» ¹İì·Òì¹Õé
àÁ¹Ù¹ÕéĀÑŞĀŌĀŌĀìŌĀĚŌĚĀÑºăéºèŌ´ŌĴÍĀµìáĀĐàĀŌĀìăéă´ÍĐĀçììºçìì«ì
'Display Properties'

⌘⌘³ÊÒÁÒÃ¶àÀ×Í;äÍ⌘Í¹ÊÓËÃÑºãªéá.¹ÂÙ·ÔÅÔμÕ QuickTweak ¹¹.ÒÊìºÒÃì¢Í§ÇÔ¹â
´ÇÊìà´é

ãËéàÀ×Í;äÍ⌘Í¹.ÖèμεÍ§;ÒÃáÊ´§¨Ò;ÃÒÂ;ÒÃ¨Ò;¹Ñé¹ ⌘ÅÔ; "OK" ËÃ×Í "Apply"
à¾×èÍÎÑ»à´μäÍ⌘Í¹¹¹.ÖÊìºÒÃì

àÀ×Í;â»Ãá;ÃÁ;ÒÃ"Ñ´;ÒÃà´Ê;ì·Í»£Í§ NVIDIA

â»Ãá;ÃÁ"Ñ´;ÒÃà´Ê;ì·Í»£Í§ NVIDIA

"Đ^aèÇÃà³/₄ÔèÁ¿Ñ§;ì^aÑ¹;ÒÃ·Ó§Ò¹ÎÃèÒ§ÁÕ»ÃĐÊÔ·ÔÀÒ³/₄ÁÒ;ÂÔè§£Öé¹ à^aè¹
ÎÎµ^µÔÃ;ÒÃ"Ñ´;ÒÃÇÔ¹â Çì, ;ÒÃ;ÔÊ¹´µÔáÊ¹è§;Ôè§;ÃÒ§ãÊé;Ñ⁰ă ÍĐÃçÍ;°çÍ;«ì
áÃĐ;ÒÃ«UÁ àÃ×èÍ^µØ³ăăé;ÒÃ;ÔÊ¹´µèÔ^µÍ¹¿Ôà;ÌàÃ^aÑ¹ăÊé;Ñ⁰ÊÃÔÃ"ÍÃÒ³/₄
â»Ãá;ÃÁ"Ñ´;ÒÃà´Ê;ì·Í»"ĐÊ¹Ñ⁰Ê¹Ø¹;ÒÃ·Ó§Ò¹£Í§à´Ê;ì·Í»ÊÃÔÃà´Ê;ì·Í»
à³/₄×èÍ^aèÇÃăÊé^µØ³´Ñ´;ÒÃ³/₄×é¹·Ôè·Ó§Ò¹ă¹ă»Ãá;ÃÁă´é´ÔÃÔè§£Öé¹

à»Ô´ä´ÍĐĀçÍj;ÒĀjÓĚ¹´²èÒ²Í¹¿ÔàjÍàĀªÑ¹ŦÍŦâ»ĀájĀĀ´Ñ´j;ÒĀà´Êj·Í»ŦÍŦ NVIDIA
ä´ÍĐĀçÍj;ÒĀjÓĚ¹´²èÒ²Í¹¿ÔàjÍàĀªÑ¹ă¹â»ĀájĀĀ´Ñ´j;ÒĀà
´Êj·Í»´Đ²Çº²ØÁ¿ŦŦjªÑ¹áĀĐ²èÒ·ŦéŦĚÁ´ă¹â»ĀájĀĀ´Ñ´j;ÒĀà´Êj·Í»
ÍĀèÒŦàªè¹µŦÇàĀ×Íj;ÒĀjÓĚ¹´µÓáĚ¹èŦj;ÒèŦjĀÒŦŦÍŦă´ÍĐĀçÍjºçÍj«ìj;ÒĀàĀ×ÍjĪÍµ²ŦĀì
áĀĐ²èÒj;ÒĀ´Ñ´j;ÒĀâ»ĀájĀĀ

»Ô´ă´ÍĐĂçÍ;°çÍ;«ì¹ŒéáĂĐ°Ŧ¹·Ö;î;ÒĂà»ĂŒèĀ¹á»ĂšăÇé
áµè;ÒĂà»ĂŒèĀ¹á»Ăš·ĐÁŒ¼ĂĖĂŦš·Œ;▯Ø³▯ĂŒ; "ŒK" ĖĂ×Í "Apply" ã¹ă
´ÍĐĂçÍ; "Additional Properties"

ãĚé⌘Ø³;ÓĚ¹ÇèÒ`Đăªé»ØèÁã
´ϣÍšàÁÒÊîàÃŒÂ;àÁ¹ÙàÁ×èÍÁŒ;ÒÃ⌘ÅÔ;·ŒèăÍ⌘Í¹⁰¹·ÒÊ;ìºÒÃì

à»Ô´ËÃ×Í»Ô´¢éÍ⌘ÇÒÁÂ×¹ÂÑ¹
àªç⌘μÑÇàÂ×Íj¹Õé ËÒj⌘Ø³äÀèμéÍ§jÒÃãËéáÊ´§¢éÍ⌘ÇÒÁÂ×¹ÂÑ¹.Øj⌘ÃÑés.ÕèâËÅ
´⌘Í¹¿ÒàjÌàÃªÑ¹ 3D ¨ÒjàÁ¹Û.ÒËjìºÒÃì

àÅ×íµÑÇàÅ×í¹Õé ĚÒᵢᵐØ³µéí§ᵢÒÃáÊ´§¼₄ÅàÁ¹Ù·ÒÊᵢᵐÒÃĩ´éÇÂàĩçàçᵢµᵢ 3D

μÑÇàÀ×í;¹Öéãªé;ÓĚ¹μÓáĚ¹è§;ÒÃáĚ´§ÀÒ¾¹·Íá¹ àÁ×èÍ·Ó§Ò¹·Öè¤ÇÒÁÅĐàÍÕÂ
´μèŒ;ÇèŒ¤ÇÒÁÅĐàÍŒ´ÊÛ§ÊØ´·ÖèÊŒŒŒŒ¶ãªéä´é

ã^aé»ØèÁÅÙ;ÈÃà¾×èÍ»ÃÑ^oμÓáĚ¹è§ŒÍ§¾×é¹.Œèà´Êì·Í»^{o1}·ÍáÊ´§¾Å

ÃÕà«çµðèÒà´Êì·Í»à¾×èÍãé´Õ¿ÍÀµì¢Í§ðèÒðÇÒÁÅÐàÍÕÂ
´áÅÐÍÑµÃÒ¿ÒÃÃÕà¿Ãª»Ñ´´Ø°N¹

μÑÇàÅ×íjàËÄèÒ¹Õéãªé;ÓË¹´»ÄÐàÀ·ϕí§íØ»¡Ä³íáÊ´§¼⁄₄Å (´ÍÀÒ¾ ´Íá¹ ËÄ×íâ·Ã·ÑÈì â
ÄϕÖé¹ÍÄUè;ÑºÍØ»¡Ä³ì·Öè;ÖÄì´´ÍÊ¹ÑºÊ¹Ø¹)

à»Ô´Ě¹éÒµèÒ§·Õè¤Ø³ÊÒÁÒÃ¶»ÃÑºáµè§¤èÒă´é¡Ñº´ÍáÊ´§¼⁄₄Å·Õèăªé§Ò¹ÍÂÙè

ÃĐ°ØÃÙ»á°áÃĐ»ÃĐà·È·Õèãªé;ÒÃáÊ´§¼Å·Ò§â·Ã·ÑÈ¹ì

à»Ô´Ě¹éÒµèÒ§·Œè∅³µéí§;ÒÃÃĐ°ŒÃÙ»á^{oo}àíÒµì¾∅µϕí§â·Ã·ÑĚ¹ìá^{oo¾}ÔàĚĚ

ÃÒÂ;ÒÃ¹ÕéãªéàÅ×Í;ÃÙ»áº;ÒÃáÊ´§¼Å·Ò§â·Ã·ÑÈ¹µÒÁ»ÃĐà·È·Õè⌘Ø³ÍÂÙèÍÒÈÑÂ
ËÁÒÂaËµØ: ËÒ;»ÃĐà·È·Õè⌘Ø³ÍÂÙèäÁè»ÃÒ;┐ÍÂÙèã¹ÃÒÂ;ÒÃ
ãËéàÅ×Í;»ÃĐà·È·ÕèÍÂÙèã;Áé»ÃĐà·È·Õè⌘Ø³ÍÂÙèÁÒ;·ÕèÊØ´

ıÖĖ1´ãĖéÃÛ»á^{oo}.ŌèàĀ×Íjà»ç¹ÃÛ»á^{oo}.Ōèã^aéàÁ×èlà»Ô´à▯Ã×èÍŖ
àÁ×èlà»Ô´à▯Ã×èÍŖıÁ^{3/4}ÔÇàııÃı.Ōèà^a×èÍÁıèlà©^{3/4}ÒĐâ·Ã·ÑĖ¹ıàŖéÒıÑ^oıÒÃı´ıı
ıÑÇàĀ×Íjı¹Ōé^aèÇÃãĖéĀÑè¹ã´ă´éÇèÒŖéı▯ÇÒĀ·ÑéŖĖĀ´.ŌèáĖ
Ŗ^{o1}ııĀÖ^{3/4}ÃĐĖÇèŌŖıĀĐ^oÇ¹ıÖĀ^oŪııĐ»ĀÖı^{-o1}ıâ·Ā·ÑĖ¹ııĀèŌŖııııéıŖ

ã^aé;ÓĚ^{1'}^{a1}Ô´ϕÍŜĚÑÒ³àÍÒμì^{3/4}Øμ·ÕèĚè§^{1/4}èÒ¹ă»ÂÑŝâ·Ă·ÑĚ¹ı

ĚÒ;ϣØ³ă´éà^a×èÍÁμèÍă´Âă^aéĚÒÂà[°]ÔĀ·ÕèŦÛ;μéÍŝ^{a1}Ô´ĚÑÒ³ă^{oo} S-Video out
“ĐăĚé[°]Ø³ĀÒ^{3/4}ĚÛŝ;ÇèŦĚÑÒ³Íı;ă^{oo} Composite video ĚÒ;ϣØ³ăĀèă¹èă´à;ÕèĂÇ;ıÑ^{oa1}Ô
´ϕÍŜĚÑÒ³ăĚéàĂ×ı; **Auto-select**

ã^aé»ØèÁÂÙ;ÈÃ»ÃÑ°μÓáĚ¹èšà´Ê;ì·Í»⁰¹·Íâ·Ã·ÑĚ¹ì

ĚÁÒÂaĚμØ: ĚÒ;ÀÒ³/₄ã¹â·Ã·ÑĚ¹ìÁéÁĚ×ÍâÁèÁŎÀÒ³/₄à¹×èÍš[·]Ò;ì·ÒÃ»ÃÑ°μÑés

ãĚéÁÍ»ÃĐÁŎ³ 10 ÇŎ¹Ŏ·Ŏ ÀÒ³/₄·Đ;ÃÑ°ÁŎáĚ´š¹/₄Â·Ŏè μÓáĚ¹èš·Ŏèa»ç¹

´Ŏç;ÍÂμ;â´ÁÍÑμâ¹ÁÑμŎ

··Ŏ;¹Ñé¹⊘³ÂNšĚÒÁŎÂ¶àÃŎèÁ·Ó;ÒÃ»ÃÑ°μÑés⊘èÒãĚÁèÍŎ;⊘ÃÑés

ĚÂNš[·]Ò;ìÓĚ¹ μÓáĚ¹èšçÍšà´Ê;ì·Í»áÁéÇ ⊘Ø³μéÍš⊘ÂŎ;·Ŏè»ØèÁ "OK"

ĚÃ×Í "Apply" à³/₄×èÍ⁰Ñ¹·Ŏ;⊘èÒÁŎÂã¹àçÂŎ 10 ÇŎ¹Ŏ·Ŏ

ÃÕà«çµà´Êì·Í»ä»ÂÑ§µÓáĚ¹è§´Œ¿ÍÅµìº¹â·Ã·ÑĚ¹ìâ´ÂãªéªÇÒÁÅĐàÍÕÂ´»Ñ´···∅ºÑ¹

ã^aéµÑÇ¤Ç^o¤ØÁàËÅèÒ¹Õéã¹¡ÒÃ»ÃÑ^o¤ÇÒÁÊÇèÒ§áÅĐ¤ÇÒÁà¢éÁÊÕ¢¡§ÀÒ¾ã¹â·Ã·
ÑÊ¹¡

ãªéµÑÇªÇºªØÁàĚÅèÒ¹Õéã¹;ÒÃ»ÃÑºªÇÒÁÊÇèÒ§áÅĐªÇÒÁªÁªÑ
´ϕÍŠÀÖ¾â¹â·Ã·ÑĚ¹ì

ãªéµÑÇªÇºªØÁ¹Õéà¾×èÍ»ÃÑº¿ÔÀàµÍÃìÀ
´ìÒÃÊÑè¹¢Í§ÀÒ¾·ÕèµéÍ§ìÒÃãªéìÑºã·Ã·ÑÈ¹ì
¢Íá¹Ð¹ÓãËéªØ³»Ô´¿ÔÀàµÍÃìÀ´ìÒÃÊÑè¹¢Í§ÀÒ¾àÀ×èìàÀè¹ÀÒ¾À¹µÃì DVD
“ÒìÍØ»ìÃ³ì¶Í´ÃËÑÊ¢Í§ÍÒÃì´áÇÃì

ıÓĚ¹ꞡÇÒÁÅĐàÍŎÂ´¢Í§´´ÍáÊ´§¼ÅáÅĐÃĐ´ÑºÊŎă¹ıŎÃáÊ´§¼Å·Ò§´´Íâ·Ã·ÑÈ¹ı

ãªéµÑÇ¤Çº¤ØÁàĚĀèÒ¹Œéã¹;ÒÃ»ÃÑº¤Ø³ÀÒ¾₄ŒİŞĖÑÒ³ÇÔ´ŒăİĚÃ×Í DVD ¹¹·ÍÀÒ¾₄
¤Ø³ĚÒÁÒÃ¶¤Çº¤ØÁ¤èÒ¤ÇÒÁĚÇèÒŞ ¤ÇÒÁ¤ÁªÑ´
¤èÒ¤ÇÒÁÍŒèĀµÑÇŒİŞĖŒà¾₄×èÍ¤Ø³ÀÒ¾₄;ŒÃăĚ´Ş¼Ā·Œè´ŒàÁ×èÍàĀè¹ÀÒ¾₄Ā¹µĀİ
DVD ã¹à¤Ā×èÍŞ¤ÍĀ¾₄ŒÇàµÍĀİ

ãË¤Ø³ÊÒÁÒÃ¶»ÃÑº¤ÇÒÁ¶ÕèÊÑÒ³¹ÒìÔ;ÒËÃÑ; áÅÐÊÑ-
Ò³¹ÒìÔ;Ò¶Í§Ê¹èÇÂ¤ÇÔÁ¨Ò¶Í§â»Ãà«Êà«ÍÀ;ÃÔ¿Ô;¶Í§ NVIDIA ä´é

μÑέ\$⌘èÒ⌘ÇÒÁàÃçÇϕÍ\$ÊÑÒ³¹ÒìÔ;ÒËÅÑ;ϕÍ\$â»Ãà«Êà«ÍÃ;ÃÒ¿Ô; NVIDIA

ÃĐ°Ø¼ÇÒÁàÃçÇÊÑÒ³¹ÒìÔ;ÒËÃÑ;à»ç¹àÁ;ĐàÎÔÃμ«ì

ıÓĚ¹ꞑÇÒÁàÃçÇÊÑÒ³¹ÒìÔıÒıİİİÔ¹àıİİàç«Ě¹èÇÂꞑÇÒÁꞑÓ¹ıÒÃı́áÊ´§¼Å

ÃĐ°Ø¤ÇÒÁàÃçÇÊÑÒ³¹ÒìÔ;ÒŒÍ§ÍÔ¹àμíÃìà¿«Ë¹èÇÂ¤ÇÒÁ¨Óà»ç¹àÁ;ĐàÎÔÃμ«ì

·ÉÍ°ÇÒÁàÃÇÇÊÑÒ³¹ÒìÔ;ÒãËÁèà³/₄×èÍ·ÉÍ°ÇÒÁàÊ¶ÕÃÃ¢Í§ÃÐ⁰⁰ìèÍ¹ã^aé§Ò¹·ÃÔ§
ËÁÒÃàËμØ: ÇØ³μέÍ§·ÉÍ°;ÒÃμÑέ§ÇèÒãËÁè«Òè§äÁèã^aèÇèÒ
·Ö¿ÍÃμì¢Í§¹/₄Ùέ¹/₄ÃÔμ;èÍ¹·Öè·Ðã^aέÇèÒ¹Νέ¹μΑÍ·ä»

iÒÃàÀ×ÍjμÑÇàÀ×Íi¹ÖéªèÇÃãĚéÁÑè¹ã¨¨´éÇèÒ jÒÃà»ÀÖèÂ¹¤ÇÒÁ¶ÖèÊÑ-
Ò³¹ÒìÒjÒ¨ĐÁÖ¼₄ÃãªéŚÒ¹â´ÁÍÑμâ¹ÁÑμÔ·Øj¤ÃÑéŚ·ÖèàÃÖèÁãªéŚÒ¹ÇÔ¹â´ÇÊì

ĚÁÒÂàĚμØ: ¤Ø³ĚÒÁÒÃ¶¶¢éÒÁ¢Ñé¹μ¹jÒÃμÑéŚĚÑ-
Ò³¹ÒìÒjÒìÍÑμâ¹ÁÑμÔ·Öè·ÓŚÒ¹¢³ĐàÃÖèÁμé¹ÃĐªªª´é â´ÂjÒÃi´¤ÕÂì CTRL
¤éÒŚăÇé ¢³Đ·ÖèÇÔ¹â´ÇÊìjÓÃÑŚàÃÖèÁ·ÓŚÒ¹
ĚÒjà¤A×èÍŚ¤ÍÁ¾₄ÔÇàμÍÃàªª×èÍÁμèÍÍÂÙèjÑªà¹çμàÇÔÃi ¢Ěéi´¤ÕÂì CTRL
¤éÒŚăÇé·Ñ¹·Ö ĚÃÑŚ ¨¨Òjª´éÃÇÍjÍ¹à¢éÖĚÙèÇÔ¹â´ÇÊì

ÃÕà«çµÊÑÒ³¹ÒìÔjÒ·ÑésËÁ´ áÀéÇãËéÃĐ⁰⁰µÃÇ´Êí°ìÒÃì
´áÇÃìjÀÒ¿Ôìjèí¹·Ôè´Đã^aésÒ¹µÑÇµÇ⁰µØÁ·ÔèjÔË¹´äÇéíÔjµÃÑés
ϕíá¹Đ¹ÓãËéµØ³ÃÕà«çµ·ØjµÃÑés·Ôèá¿Å^a BIOS ϕí§jÒÃì´´í â
´Ãã^aéä¿ÀìíÔÃàÁ´ÊÔËÃÑ°íÑ»à´µ BIOS

⌘Ø³ÊÒÁÒÃ¶àÀ×Í;âĚÁ´ nView ä´é´Ò; 4 âĚÁ´ ´Ñ§¹Ŏé

Standard âĚÁ´ ;ÒÃáĚ´ §¼Åá°ÁÒµÃ°Ò¹ã¹Ě¹éÒ´Íà´ ŎÂÇ ⌘Ø³ÊÒÁÒÃ¶ãªéâĚÁ´
¹Ŏéã¹;Ã³Ŏ·ŎèÁŎÍØ»;Ã³;ÒÃáĚ´ §¼Å·ŎèµèÍ;Ñº;ŎÃì´´Í NVIDIA à¾ŎÂŞÍÂèŎŞà´
ŎÂÇ

Clone âĚÁ´¹Ŏé´ĐăĚéÀÒ¾º¹´ÍáĚ´ §¼ÅĬŞàĚÁ×Í;ÑºÀÒ¾º¹´ÍáĚ´ §¼ÅĚĬÑ;

Horizontal Span âĚÁ´¹Ŏéãªéã¹;ÒÃŦÂÒÂà´Ê;ì·Í»ŦÍŞÇŎ¹â´ÇÊìã»ÂÑŞ´ÍáĚ´ §¼Å 2
Ě¹éÒ´Íã¹á¹Ç¹;¹ă´é ã¹âĚÁ´¹Ŏé´´ÍáĚ´
´§¼Å·ÑéŞĚÍŞ´Đàª×èÍÁµèÍ;Ñ¹à»Ç¹¾×é¹·Ŏè;ÒÃáĚ´ §¼ÅŦ¹Ò´ăĚèà¾ŎÂŞ´Íà´ ŎÂÇ

Vertical Span âĚÁ´¹Ŏéãªéã¹;ÒÃŦÂÒÂà´Ê;ì·Í»ŦÍŞÇŎ¹â´ÇÊìã»ÂÑŞ´ÍáĚ´ §¼Å 2
Ě¹éÒ´Íã¹á¹ÇµÑéŞă´é ã¹âĚÁ´¹Ŏé´´ÍáĚ´
´§¼Å·ÑéŞĚÍŞ´Đàª×èÍÁµèÍ;Ñ¹à»Ç¹¾×é¹·Ŏè;ÒÃáĚ´ §¼Å·ŎèÁŎŦ¹Ò´
´ĚŰŞŦŎé¹à¾ŎÂŞ´Íà´ ŎÂÇ

nView Standard äËÁ´_iÖÃáÊ´§¼ÄÁ°ÁÒµÃ°Ò¹ã¹Ë¹éÖ´´íà´ÖÂÇ ¢Ø³ÊÒÁÒÃ¶ãªéâËÁ
´¹Öéã¹_Ã³Ö·ÖèÁÖÍØ»»_Ã³i_ÖÃáÊ´§¼Ä·Öèµèí_Ñº_ÖÃì´´Í NVIDIA à¾ÖÂ§ÍÂèÒ\$à´ÖÂÇ

nView Clone ãĖÁ´¹Œé`ĐãĖéÀÒ¾⁰¹´´íaĖ´§¼₄ÅĬísàĖÁ×í¹;ÑºÀÒ¾⁰¹´´íaĖ´§¼₄ÅĖĀÑ;í

nView Horizontal Span âĒÁ´¹Ōéãªéã¹;ÒÃ¢ÂÒÂà´Êì·Í»¢ÍŞÇÔ¹ă´ÇÊìă»ÂÑŞ´´ÍáÊ
´Ş¼⁄₄Â 2 Ê¹éO´´Íă¹á¹Ç¹Í¹ă´é ā¹âĒÁ´¹Ōé´´ÍáÊ
´Ş¼⁄₄Â·ÑéŞĒÍŞ´´Đàª×èÍÁµèÍ;Ñ¹à»Ç¹³⁄₄×é¹·Ōè;ÒÃáÊ´Ş¼⁄₄Â¢¹Ò´ăĒèà³⁄₄ŌÂŞ´´Íà
´ŌÂÇ«ŌèŞ´´ĐªèÇÂăĒÉ´ÚÂŌ³⁄₄ă´é;ÇéŌŞ¢Ōé¹;ÇèŌ;ŌÃ´Ù´´Ò;´´Íà´ŌÂÇ

[illegible]

A0¾;Ã0¿Ô;µ0Ã0æ0ð0¶1¿0à;íàÃªÑ1¢í§;òÃáÊ´§1¼Ãª1ãÊÁ´ nView
j0Ã0¤Ã0;Ã0¾;Ã0¿Ô;0¹·íÀ0¾¼·Ðà»ç1;òÃàÃ×íjãÊë·íáÊ´§1¼Ã1Ñê¹à»ç1·íáÊ
§1¼Ã»Ñ···0ºÑ1¢í§0æ0³ áÀ×èí0º³0Ã0j¢C0¹Ã0¾¼;Ã0¿Ô;0·0è·íÀ0¾¼
0º³·ÐàÊç1Ã0Ãj0Ãµè0§æ ·0è0º³Ê0Ã0Ã¶»ÃÑºà»Ã0èÃ1ãÊëjÑºí0;»Ã3j;òÃáÊ
´§1¼Ã·0èàj0èÃÇçéí§jÑ¹

ËÒ;ãªéâËÁ´ Clone ¢Ø³¨ÐÊÒÁÒÃ¶;ÓË¹; òÃáÊ
´§¼Äã¹Ë¹éÒ¨ÍÊÃÑ;ãÊéÁÔ¢èÒ¢ÇÒÁÃÐàÍÔÁ´¢Í§à´Ê;ì·Í»ÁÒ;ÇèÒã¹Ë¹éÒ¨ÍÃÍ§
ËÒ;¢èÒ¢ÇÒÁÃÐàÍÔÁ´¢Í§¨ÍáÊ´§¼ÄÃÍ§¹éÍ;ÇèÒ¢ÇÒÁÃÐàÍÔÁ´¢Í§¨ÍáÊ´§¼ÄÊÃÑ; à
´Ê;ì·Í»¢Í§¨ÍáÊ´§¼ÄÃÍ§¨Ðá¾¹àÍ§à´ÁÍÑµâ¹ÃÑµÒàÁ×èÍ¢Ø³àÁ×èÍ¹àÁÒËèä»ËØ´¢Íº·Í

Âj àÂÔj; ÒÃã^aé^ø³ÊÁ°ÑμÔ; ÒÃá^¾â´ÂÍÑμâ¹ÁÑμÔã¹´´ÍáÊ´S¼ÃÍ§ ËÒj ä
´éà×Íj μÑÇàÂ×Íj "Allow virtual desktop" (ã^aéà´Êj; Í»àÊÁ×Í¹´ÁÔ§j; Ñ°´ÍáÊ´S¼ÃÍ§ä´é) äÇé
«Òè§´Ð·ÔãÊéà´Êj; Í»ÊÂØ´j; ÔÃ·Ô§Ô¹ã¹μÔáÊ¹è§ã´μÔáÊ¹è§Ê¹Ôè§
ø³ÊÁ°ÑμÔ¹ÔéàÊÁÔÐÊÔÊÑ°j; ÒÃ¹ÔàÊ¹Í§Ô¹ã¹áÍ»¾ÃÔàø^aÑ¹·Ôèã^aé^øÇÒÁÂÐàÍÕÂ
´ã¹j; ÒÃáÊ´S¼ÂÊÛ§

jÒÃã^aé§Ò¹¤Ø³ÊÁ^ºÑµÔ¹Õé`ĐÂçÍ¤µÓáĚ¹è§jÒÃá^{3/4}»Ñ^{.....}Ø^ºÑ¹ϕÍ§`ÍáÊ
`§^{1/4}ÃÁÍ§.ÕèàÃ×ÍjăÇéã¹ϕ³Đ¹Õé «Õè§`Đ.ÓãĚéà´Ějì.Í»ĚÂØ´jÒÃ.Ó§Ò¹ã¹µÓáĚ¹è§ã
´µÓáĚ¹è§Ě¹Õè§
¤Ø³ÊÁ^ºÑµÔ¹ÕéàĚÁÒĐÊÓĚÑ^ºjÒÃ¹ÓàĚ¹Í§Ò¹ã¹áÍ»^{3/4}ÃÔà¤^aÑ¹.Õèã^aé¤ÇÒÁÃĐàÍÕÂ
`ã¹jÒÃáĚ´§^{1/4}ÃĚÜ§

ã^aé§Ò¹⊠Ø³ÊÁ°ÑμÔϕÍ§à´Êì·Í»àÊÁ×Í¹·ÃÔ§ã¹âËÁ´ìÒÃϕÂÒÂÀÒ³/₄ϕÍ§ nView
ìÒÃã^aé§Ò¹⊠Ø³ÊÁ°ÑμÔ¹Õé´Ð·ÓãËé⊠Ø³μÑé§⊠èÒà´Êì·Í»ãËéÁÕϕ¹Ò´ãËèìÇèÒ´ÍáÊ
´§¹/₄Ã·Õèà^a×èÍÁàϕéÒ´éÇÂìÑ¹
ÀÒ³/₄·Õèà^a×èÍÁμèÍàϕéÒ´éÇÂìÑ¹·Ð»ÃÒì¬ãËéàËç¹μÁÍ´³/₄×é¹·Õèà´Êì·Í»·ÕèãËèϕÖé¹
àÁ×èÍ⊠Ø³/₄ÂÒÂÒÂàÁ×èÍàÁÓÊìÍì´Òì³/₄×é¹·Õè·ÕèáÊ´§

ÀÒ¾¼jÃÒ¿ÔiμÒÁ¤èÒ¤Í¹¿ÔàjíaÃªÑ¹¢Í§jÒÃáÊ´§¼ÅÃísã¹âËÁ´ nView
jÒÃ¤ÅÔj·ÕèjÃÒ¿Ôj¨Ð·ÓãËé¤Ø³ÊÒÁÒÃ¶μÑé§¤èÒÍØ»jÃ³jÒÃáÊ´§¼Å
«Õè§μèljÑº·íaÊ´§¼ÅÃís·ÕèãªéjÒÃì¨·Í·ÕèáÊ´§¼Åªºº nView ä´é
ã¹¢³Ð·Ó§Ò¹ÍÁÙèâËÁ´ Clone

jÓË¹ãé;ÒÃÇºØÁ;ÒÃ«ÙÁà¾×èíãËéÊÒÁÒÃ¶«ÙÁà¢éÒä»ÂÑ§Ë¹éÒ´Í;ÒÃáÊ
§¼Å·ÛèµéÍ§;ÒÃã´é

ã¹âĖÁ¹Ōé ¢Ø³ÊÔÁÔÃ¶àÅ×ĭ;³/₄×é¹.ŌèĚ¹éŌ¹ÍĖèÇ¹.Ōèμéİ§ĭÔÃ«ÙÁ
ĖĀŊ§¹ŌĭàÅ×ĭĭáĀéÇ ¢Ø³ÊÔÁÔÃ¶«ÙĀă»·ŌèĚ¹éŌ¹ÍĖèÇ¹¹Ŋé¹ă¹é·Ŋ¹.Ō â
¹ĀàÅ×èĭ¹μŊÇàÅ×èĭ¹éŌ¹ĀèŌ§

μÑÇàÅ×Í;¹Õé`ĐăĚé⌘Ø³«ÙÁÊèÇ¹·ÕèàÅ×Í;äÇéϕÍ§Ě¹éÒ`Í;ÒÃáÊ´§¼Åä
é·Ñé§àϕéÖĚÅ×ÍÍ;

àÅ×í;ÍØ»;ĩÃ³;òÃáÊ´§¼ÅÊÓËÃÑº;òÃáÊ´§Àò¾ã¹âËÁ´;òÃáÊ´§¼ÅáººàµçÁË¹éÒ´Í

⌘Ø³ÊÒÁÒÃŕàÅ×ÍjÍÑμÃÒÊèÇ¹ϕÍ§ÀÒ¾ (ϕ¹Ò´ã¹á¹Ç¹Í¹μèíá¹ÇμÑés) ÊÓËÃÑº;ÒÃáÊ
´§¹⁄₄Ãá°°àμçAÊ¹éO¨Í

jÒÃã^aé§Ò¹μÑÇàÅ×Íj¹Õé^ˆĐ·ÓãĚéă´ĀàÇÍĀìjÒÃáĚ´§¹/₄ĀÊÒÁÒÃŋjÓĚ¹
ꞡèÒꞡÇÒĀĀĐăÍŌĀ´·ŌèàĚÁÒĐĚĀjŊ^ojŌÃáĚ´§¹/₄Āá^{oo}àμçĀĚ¹éŌ^ˆĭă´é

iÒÃã^aé§Ò¹µÑÇàÅ×Í¹Õé^ˆĐà»ç¹iÒÃà^a×èÍÁâÂ§iÒÃÇ⁰ÇØÁiÒÃ«ÙÁã¹Ë¹éÒiÒÃÇ⁰ÇØ
ÁâlàÇÍÀàÁÀi iÑ⁰iÒÃÇ⁰ÇØÁiÒÃ«ÙÁã¹iÒÃáË´§^{1/4}Ãã⁰⁰àµçÁË¹éÒ^ˆÍă´éã¹¢³Đà
´ÔÃÇiÑ¹

iÒÃ¤ÅÔi·Õè»ØèÁ¹Õé¨Ð·ÓãĚéãªésÒ¹¤Ø³ĚÁºÑµÔiÒÃáĚ´§¼¼Å¢Ñé¹ĚÙsâ´ÂãªéâĚÁ´
Clone ¢Í§ nView â»Ã´ĚÑsàjµÇèÒµéÍ§ãªésÒ¹âĚÁ´ Clone
ÍÂÙè¨Ö§¨Ðà¢éÒãªé¤Ø³ĚÁºÑµÔàĚÀèÒ¹Ŏéă´é

jÒÃã^aé§Ò¹µÑÇàÅ×Íj¹Õé[°]Đà»ç¹jÒÃjÓË¹
ãÉé«ÍçµiáÇÁiâiàÇÍÁiàÅÁiàÃÕÁjã^aé^oÑÊÁÒÈàµÍÃiÃÔ§
áµèäÁèá¹Đ¹ÓãÉé[°]Ø³àÅ×ÍjµÑÇàÅ×Íj¹Õé à³/₄ÃÕĐ[°]Đ·ÓãÉéàjÔ´»ÑËÒã¹jÒÃáÉ[°]
ŞÀÒ³/₄^{o1}·Í à^aè¹ áÉ´ŞÀÒ³/₄äAè¶ÛjµéÍŞËÃ×IäAèÃÕÀÒ³/₄»ÃÒj ¤Öé¹ãÅÅ

áÊ´§^{a1}Ô´¢í§íÀÒ³/₄·Õè¤Ø³íÓÂÑ§ã^{aé}íÑ°íÒÃì´í·ÕèàÅ×í;äÇé

⌘ÅÔ;à¾×èíáÊ´§⌘Ø³ÊÁ°ÑμÔϕÍ§ä´ÃàÇíÃ`áÅĐÍØ»;ĩ³iÊÓĚÃÑ°·ÍÀÒ¾¹Öé

áÊ´§ÍÑµÃÒ;ÒÃÃÕà¿Ãª.ÑéŒĚÁ´.Õèãªéä´é;Ñº·ÍÀÒ¾¹Õé
ÍÑµÃÒ;ÒÃÃÕà¿Ãª.ÕèÁÕªÇÒÁ¶ÕèÊÛ\$ŒÓé¹·ĐÁ´ÍÑµÃÒ;ÒÃĚÑè¹ŒÍ\$ÀÒ¾¹Ě¹éÒ·Í

ÃĐ°ØÇèÒÃÒÂ;ÒÃã¹ ¢ÇÒÁ¶Õèã¹;ÒÃÃÕà¿Ãª ¨ĐÃÇÁâĚÁ´.Õè¨ÍÀÒ¾¹ÕéäÁèä
´éĚ¹ÑºĚ¹Ø¹ÍÂÙèĚÃ×ÍäĚè ;ÒÃàÃ×ÍâĚÁ
´.ÕèäÁèàĚÁÒĐĚÁ;Ñº¨ÍÀÒ¾¶Í§¢Ø³ÍÒ¨.ÓãĚéà;Ô´»ÑĚÒĚéÒÂáÃ§ã¹;ÒÃáĚ
´§¹⁄₄ÃáÃĐÍÒ¨.ÓãĚéÍÒÃİ´áÇÂì¶Í§¢Ø³àĚÕĚĚÒĚ

μÑÇàÀ×Í;¹Õé;ÓË¹´ãËéä´ÃàÇÍÃ` OpenGL ãªéºÑ¿à¿ÍÃ;ÒÃáË´§ÀÒ¾ 3 ÁÔμÔáº 16
ºÔμâ´ÃäÁèºÓ¹Ö§¶Ö§ÃÙ»áºº¢Í§¾Ô;à«Ã·ÕèáÍ»¾ÃÔàªÑ¹ä´éàÀ×Í;äÇé
μÑÇàÀ×Í;¹ÕéÃÑ§ªèÇÃà¾ÔèÁ»ÃÐËÔ·ÔÀÒ¾¢Í§;ÒÃ·Ó§Ò¹áÃÐ;ÒÃÃº¢éÍÁÙÃã¹ºÑ¿
à¿ÍÃ;ÒÃáË´§ÀÒ¾ 3 ÁÔμÔ áμè·Ð·ÔãËéªÇÒÁ¶U;μéÍ§ã¹;ÒÃà;çº¢éÍÁÙÃºÑ¿à¿ÍÃáË
´§ÀÒ¾ 3 ÁÔμÔÃ´Ã§

àÁ×èíÓË¹´ãªé§Ò¹μÑÇàÀ×í¹ÖéáÀéÇ OpenGL ¨ĐãªéªØ³ÊÁºÑμÔ Advanced Multi-Monitor ¢Í§ Windows 2000

⌘Ø³ÊÒÁÒÃŒãªéµÑÇàÅ×Í¹Õéã¹jÒÃàÅ×ÍjÇèÒ¨ĐãĚé¨íaÊ´§¼Åă´áÊ´šà
´Êjì·Í»ã¹ÅØA^{o1}«éÒÃ ÊÔè§·ÔèàĚç¹ă´éªÑ´·ÔèÊØ
´ă¹jÒÃàÅ×ÍjµÑÇàÅ×Í¹Õéjç⌘×ÍjÒÃáÊ´§¼Å¨Đà»ÅÕèÂ¹µÓáĚ¹è§ŒÍ§ÀÒ¾ã¹Ě¹éÒ¨Í

ãĚéáĚ´š´´íaĚ´š¼Å¢Íš nView ·ÑéšĚÁ´ã¹¢³Đ¹Ŏé
ĚŎ;¤Ø³µéÍÍØ»;Ā³iäÇéÁŎ;ÇèŎĚ¹ŎèšÍĀèŎšáĀĐ¤Ø³ă´éà»ĀŎèĀ¹âĚÁ´ĵŎĀáĚ
´š¼Åà»ç¹âĚÁ´ă´ĵµŎĀ·ŎèăĀèăèâĚÁ´ Standard ¤Ø³µéÍšàĀ×ÍĵÇèŎ´ĐáĚ´š¼Å·Ŏè´´íă

¹ĵ´Ŏĵ¹Ŏé ¤Ø³ĀÑšĚŎĀŎĀ¶¤ĀŎĵ;ĀŎĵŎĵ·Ŏè»ĀŎĵ⁻⁰¹´ÍĀŎ¾ă¹µÑÇ¤Çº¤ØÁ´éŎ¹ºă´éâ
´ĀµĀš à¾×èlàĀ×ÍĵãĚéáĚ´š¼Åă¹´Í·ŎèáĚ´šÍĀŬèă¹¢³Đ¹Ŏé

⌘ÅÔj»ØèÁ¹Õéà¾×èÍµÑé§⌘èÒĚÃ×Íà»ÅÕèÂ¹⌘èÒ†Í§ÍØ»jÃ³j;ÒÃáÊ
´§¼Å·ÕèãªéjÑº·ÍáÊ´§¼Å»Ñ···ØºÑ¹

ıÖÃÇºØÁıÖÃá¾¹ãªéıÖË¹¢¹Ö¢İ§¾×é¹.ÖèË¹éÒ´Í.Öè´ĐÊÒÁÒÃ¶´Ùä´é
ãËéÊÑÁ¾Ñ¹ııÑº¾×é¹.Öèà´Êıı·Í»´ÁÔ§.ÖèÁÕÍÂÙè «Öè§´Đãªéã¹ıÖÃáÊ´§¹¼Åà
´Êıı·Í»«Öè§ÁÕ¢¹Ö´ãËèıÇèÖ¢¹Ö´»ıμÔ.ÖèáÊ´§ä´éã¹´ÍÂÖ¾´´Íáº¹ ÊÃ×Í´Í.ÔÇÕ¢İ§ºØ³

⌘ÅÔ;à¾×èíµÃÇ¨ÊÍ¨´ÍáÊ´§¼Å·Ñé§ĚÁ´·Œèµèlàª×èÍÁàŒéÔ;Ñº;ÒÃì¨´Í
ãĚéãªé⌘Ø³ĚÁºÑµÔ¹ŒéĚÔ;⌘Ø³àĚŒÂª»ÅÑê;àŒéÔ;Ñº´ÍáÊ´§¼ÅĚÅÑ§¨Ò;·Œèà»Ô
´⌘Í¹â·ÃÅ¾Òà¹ÅŒŒé¹ÅŒáÅéÇ

·Óà¤Ã×èì§ËÁÒÂ·Õèªèì§¹Õé ËÒ;¤Ø³àª×èìÁµèì´´ÍÀÒ¾¼à¢éÒ;Ñªèì§àÊÕÂª´´ÍáÊ
´§¹¼ÅÃÍ§«Õè§äÁèä´éµÃÇ´´ÊíªÍÀÙèã¹¢³¤¹Õé
ìOÃ·Oàªè¹¹Õé´´Ðà»¢¹»ÃÐâÂª¹ìµèì´´ÍÀÒ¾¼ÃØè¹à;èÒ
ËÃ×Í´´ÍÀÒ¾¼·Õèªª×èìÁµèì;Ñªèì§àÊÕÂª BNC

▣ÅÔ;à¼×èlàŒéÒ`ÙŒéÍÁÙÅ·Õèà;ÕèÂÇŒéÍ§;Ñº;ÒÃì´´ÍŒÍ§ NVIDIA

⌘ÅÔjà¾×èíà¢éÒãªé⌘Ø³ÊÁ°ÑμÔà¾ÔèÁàμÔÁ¢Í§ìÒÃĩ´´Í¢Í§ NVIDIA

⌘ÅÔ;à¾×èíà¢éÒ`Ù¢éíÁÙÁáÅĐă´ÃàÇíÃìÃØè¹ÅèÒÊØ´¢Í§;ÒÃì´´í·Õèà»ç¹¢Í§ NVIDIA
ã¹àÇçºă«μì¢Í§ NVIDIA

ϕέíÁÙÀ¹Õé¨ĐãĚéÃÒÂẢĐàíÕÂ´à;ÕèÂÇ;ÑºÎÒÃĩ´áÇÃìϕÍ§;ÒÃì
¨¨Í·ÕèàẢ×Í;äÇéã¹ϕ³Đ¹Õé

ϕέíÁÙÀ¹Õé¨ĐãĚéÃÒÂĤĐàíÕÂ´à;ÕèÂÇ;ÑºϕέíÁÙÀϕÍŠÃĐº.Õèà×Í;äÇé
«ÕèŠĚèŠ¼Ĥµèí»ÃĐĚÔ,ÔÀÔ¾ϕÍŠ;ÃÔ¿Ô;â´ÂÃÇÁ

μÒÃÒ§¹Õé×ÍÃÒÂ;ÒÃăĹÀ
áÅĐϕéÍÁÙÀÇÍÃªÑè¹.Õèà;ÕèÂÇϕéÍ§;Ñ¹«Õè\$ÁÕ;ÒÃăé;Ñº;ÒÃĩ´´Í NVIDIA ã¹ϕ³Đ¹Õé

Ě¹éÒ; ÒÃµÑéŞµèÒ ; ÒÃ·Ñ´; ÒÃáÍ»¾ĀÔàµªÑ¹ ã^aéã¹; ÒÃ·Ñ
´CÒŞµÓáĚ¹èŞŒÍŞĚ¹éÔµèÔŞáÍ»¾ĀÔàµªÑ¹ĀĐĚÇèÔŞ´ÍáĚ´Ş¼ĀáĀĐà´Ê; Ì·Í»ĚĀÒĀ´Í â
´ĀµÑéŞµèÒ·ŌĀĐáÍ»¾ĀÔàµªÑ¹

ÃÒÂ¿ÒÃ¹Õé ¢×Í ÃÒÂ¿ÒÃÁí»¾ÃÔàªÑ¹.Õèâ»ÃÁ¿ÃÁ¿ÒÃ·Ñ´¿ÒÃà
´Ê¿·Í»ãªéÍÃÙèã¹¢³Đ¹Õé
ãËéàÃ×Í¿Áí»¾ÃÔàªÑ¹·Ò¿ÃÒÂ¿ÒÃà¾×èÍµÑé\$ªèÒªÍ¹¿Ô¿¿ÒÃ·Ñ´¿ÒÃÁí»¾ÃÔàªÑ¹
áÃĐÁ¿éä¢ÃÒÂ¿ÒÃâ´Ããªé»ØèÃ "Add" áÃĐ "Remove" ·ÕèÍÃÙè·Õ\$¢ÇÒ

ı'»ØeÁ¹Öéà¾×èÍà¾ÔèÁâ»ÃáıÃÁáı»¾ÅÔàªÑ¹áºãËÁè¢ÍŠÀÒÂıÒÃáı»¾ÅÔàªÑ¹.Ö
èâ»ÃáıÃÁ"Ñ'ıÖÃà'Êı·Í»"Ñ'ıÖÃÍÂÙè

ĩ»ØèÁ¹Õéà¾×èÍÅ°áí»¾ÅÔàªÑ¹.ÕèàÅ×Í;äÇéã¹¢³Đ¹ÕéÍí·Ò;ÃÒÂ;ÒÃáí»¾ÅÔàªÑ¹.
Õèâ»Ãá;ÃÁ·Ñ´;ÒÃà´Ê;ì·Í»´Óà¹Ô¹;ÒÃÍÃÙè

ı´»ØèÁ¹Öéà¾×èÍ°áı»¾ÄÔàªÑ¹.ÑéŞĖÁ´Íı·ÒıÃÔÂıÔÃ
ªÓàµ×ı¹: ıÔÃı´»ØèÁàĖĖèÒ¹Öé·Đà»ç¹ıÔÃÃÖà«çµıÖÃµÑéŞªèÒ·ÑéŞĖÁ´.ÖèªØ³ă
´éıÖĖ¹ăÇéĖÖĖÃÑ°áı»¾ÄÔàªÑ¹

jÒÃàÅ×ÍjμÑÇàÅ×Íj¹Öéà»ç¹jÒÃjÓË¹
ãËÉË¹éOμèÖStÍŠáÍ»¾ÅÖàªÑ¹»ÃÖj⁻tÖé¹ã¹´ÍáÊ´§¼Å·ÖèªØ³ä´éjÓË¹´äÇéàÊÁÍ

¿ÔÀ´ì¹ÕéãªéÃÐºØÇèÒ¨ÐáÊ´şáí»¾ÅÔàªÑ¹.Õèă´éàÅ×ÍjăÇéã¹¢³Ð¹Õéã¹¨ÍáÊ´ş¹¼Å
(¨ÍÀÒ¾¼)¨Íă´ËÒjă´éàÅ×ÍjµÑÇàÅ×Íj "Always start this application on screen number" (àÃÔèÁà»Ô
ªªéşÒ¹áí»¾ÅÔàªÑ¹ă¹É¹éÒ´İĖÁÔÂàÅ¢)ăÇé

ËÒ¡ð³àÅ×¡¡µÑÇàÅ×¡¡¹Öé â»ÃájÃÁ¬Ñ´¡ÒÃà´Ê¡·Í»¬ÐµÃÇ¬ÊÍ°£¹Ò
´áÅÐµÓáË¹è§£Í§Ë¹éÒµèÒ§áí»¾¼ÅÒàªÑ¹¹Öé
àÅ×è¡ð³àÅÒèÅµé¹ãªé§Ò¹áí»¾¼ÅÒàªÑ¹¹ÅÑé§¶Ñ´ä» â»ÃájÃÁ¬Ñ´¡ÒÃà´Ê¡·Í»¬Ð¡ÓË¹
´Ë¹éÒµèÒ§áí»¾¼ÅÒàªÑ¹¹ÖéãËéÅÖ£¹Ò
´áÅÐµÓáË¹è§µÓÁ·ÖèºÑ¹·Ö¡äÇé¡è¹Ë¹éÒ¹Öé

μÑÇàÀ×í;¹Õéãªéã¹;ÒÃ;ÓË¹ ÇèÒ ÐãËé;ÒÃ¢ÀÒÂ¢¹Ò Ë¹éÒµèÒ§áí»¾ÀÔàªÑ¹áÊ
´§àµçÁË¹éÒ ìà©¾ÔĐ Ì·ÕèáË´§ÍÀÙè â ÄäÁè¢ÀÒÂ;ÒÃáË´§¼ÄãËéàµçÁ¾×é¹·Õèà
´Ëì·Í»·Ñé§ËÁ´«Õè§ÍÒ ãªéËÀÔÃË¹éÒ Ì

àÀ×íµÑÇàÀ×í¹Öéà¾×èíàÃÔèÁãéşÒ¹áí»¾ÀÔà²Ñ¹¹Öé¹à´Êì·Í»áí»¾ÀÔà²Ñ¹·Öèä
´é;ÓE¹´äÇéÍÕ;â»Ãá;ÃÄE¹ÖèŞ
µÑÇÍÂèÒŞàªè¹ ²Ø³ÊÒÁÒÃ¶ÊÃéÒŞà´Êì·Í»à¾ÔèÁ¢Öé¹à¾×èíãéşÒ¹ÍÂèÒŞí×è¹ àªè¹
ÊÓËÃÑªàÇçªàºÃÔà«ÍÂì ÊÃ×ÍÊÓËÃÑªªªéíèÒ¹ÍÔàÁÂì ¹í;àE¹×Í´Ò;à´Êì·Í»¢ÍŞÇÔ¹â
´ÇÊì·Öèà»ç¹Ö¿ÍÂµì

»éÍ^{1a}×èÌà´Êì·Í»áÍ»¾ÄÔàªÑ¹·ÕèÊÃéÒ§ŧÖé¹ÊÓËÃÑ^ºã^aé§Ò¹Í×è¹ã¹µÑÇàÅ×Í¹Õé¹
Í¹·Ò¹·Õé ¢Ø³ÃÑ§ÊÒÁÒÃ¶ã^aé»ØèÁá^{ºº}·ÃÍ»´ÒÇ¹ìã¹·ÒÃàÅ×Íà
´Êì·Í»·ÕèªØ³ÊÃéÒ§äÇéÊÓËÃÑ^ºáÍ»¾ÄÔàªÑ¹Í×è¹
¿ÔÃ´¹Õé·ÐÁÕ;çµèÌàÁ×èÍªØ³ä´é·ÓàªÃ×èÍ§ËÁÒÂàÅ×Í;µÑÇàÅ×Í "Start this application on a
separate desktop" (àÃÔèÃã^aé§Ò¹áÍ»¾ÄÔàªÑ¹¹Õéã¹ÍÕ;à´Êì·Í»Ë¹Õè§)

Ě¹éÒĭıμ⌘ŎÂĩã^aéã¹ĵÒÃ»ÃÑ^oà»ÅŎèÂ¹ĭıμ⌘ŎÂĩ à³/₄×èĭĵÓĚ¹
´μÓáĚ¹èšĚ¹éŎμèŎšáĭ»³/₄ÅŎà⌘^aÑ¹⁰¹à´Ěĭı·ĭ»´éÇÂμÑÇ⌘Ø³àĭš

⌘ÕÂì¼ÊÁ¹Õé¨ÐÂéÒÂË¹éÒµèÒ§·Õè¡ÓÃÑ§ãªé§Ò¹ÍÂÙèã¹¢³Ð¹Õé
(·Õè¡ÓÃÑ§·Ó§Ò¹ÍÂÙè) ä»ÃÑ§ÍÕ¡¨ÍÂÒ¾Ê¹Õè§â´ÂÍÂÙèã¹µÓáË¹è§à´ÕÂÇ¡Ñ¹

ꞤÖÂ¼ÊÁ¹Öé·ÐÂéÒÂË¹éÒµèÒ§.Ñé§ËÁ´ã¹·ÍáÊ
´§¼ÅáÅÐáí»¾¼ÅÔàꞤÑ¹.Öèãªé§Ô¹ÍÂÙèã¹¢³Ð¹Öéä»ÂÑ§ÍÖ;Ë¹éÒ·ÍË¹Öè§

⌘ÕÂ½ÊÁ¹Õé¨ÐÂéÒÂË¹éÒµèÒ\$¢Í\$áÍ»¾ÅÔà⌘Ñ¹.Ñé\$ËÁ´ä»ÂÑ\$¨ÍáÊ
´\$½Å«Öè\$ÁÕàÀÒÊ½ÍÀàµÍÂÍÀÙè

ËÒ¡¸Ø³ÁÕà´Êì·Í»áí»¾ÄÔàªÑ¹.ÕèãªésÒ¹ÍÂÙèËÂÒÂË¹éÒ
ªÕÂì¼ÊÁ¹Õé´Ðà»ÂÕèÂ¹·Òjà´Êì·Í»Ë¹Õè\$ä»ÂÑ\$ÍÕjà´Êì·Í»Ë¹Õè\$
ªØ³ÊÒÁÒÃ¶ì´ªÕÂì¼ÊÁ¹Õé«éÓ¡Ñ¹ÊÂÒÂªÂÑésà¾×èÌÇ¹´Ùà
´Êì·Í»áí»¾ÄÔàªÑ¹.ÑésËÁ´.ÕèãªésÒ¹ÍÂÙè¡çä´é

Ë¹éÒ Global Settings »ÃĐjÍ° éÇÂµÑÇàÅ×Íj«ÖèŞà»ç¹µÑÇÃèÇÁŧÍŞâ»ÃájÃÁ"Ñ´jÒÃà
´Êj·Í»áÅĐâ»ÃájÃÁ"Ñ´jÒÃáj»¾⁄₄ÅÕà²ªÑ¹·ÑéŞĚÁ´

iÒÃàÀ×ÍjϕÂÔÂϕ¹Ò´áí»¾ÀÔàªÑ¹ãËéáÊ´§¼Àã¹ "à´Êjì·Í»·Ñé§ËÁ´" ËÁÔÂ¶Ö§
jÔÃϕÂÔÂϕ¹Ò´áí»¾ÀÔàªÑ¹ãËéáÊ´§¼ÀµçÁË¹éÒà´Êjì·Í»
ÃÇÁ¶Ö§jÃ³Ö·Öèµéí§ϕÂÔÂjÔÃáÊ´§¼Àà»ç¹ËÂÔÂË¹éÖ´Í
ÊèÇ¹jÒÃàÀ×ÍjϕÂÔÂϕ¹Ò´áí»¾ÀÔàªÑ¹ãËéáÊ´§¼Àã¹ "Ë¹éÒ´Í·ÖèáÊ´§ÍÂÙè"
ËÁÔÂ¶Ö§ jÔÃϕÂÔÂϕ¹Ò´áí»¾ÀÔàªÑ¹ãËéáÊ´§¼ÀµçÁË¹éÖ´Íà©¾ÔÐã¹´Íà
´ÔÁ·ÖèãªéÍÂÙè

ıÒÃĵÓĒ¹´ãªé¤Ø³ÊÁ°ÑμÔ¹Õé·ÓăĒéÁŌàÁ¹ÙÂèÍÂ "NVIDIA Desktop Manager"
à¾ŌèÁ¢Ōé¹ÁŌã¹àÁ¹UÃĐºº¢İ§Ē¹éŌμèŌ§áĲ»¾ĲŌà¤Ñ¹.ŌèÍÂÙèÃĐ´Ñºº¹ĒØ´.Ñé§ĒÁ´
àÁ¹UÂèÍÂ¹Ōé´ĐªèÇÃăĒĒéà¢éŌăªé¿Œ§ĵªÑ¹ĵŌÃ´Ñ´ĵŌÃáĲ»¾ĲŌà¤Ñ¹.Ñé§ĒÁ´ă
´é§èŌÃáÃĐÃÇ´àÃçÇÃŌè§¢Ōé¹ â´ÃăAè´Ōà»ç¹μéİ§à»Ō
´¤İ¹ă·ÃĲ¾Ōà¹Ã¢İ§ă»ÃăĵÃĲ´Ñ´ĵŌÃă´Ēĵĵ·İ»
¤Ø³ÊŌŌŌÃĲà¢éŌĒÛèàÁ¹ÙÃĐºº¢İ§Ē¹éŌμèŌ§áĲ»¾ĲŌà¤Ñ¹ă´éâ
´Ã¤ÃŌĵ¢ÇŌ·ŌèăμàμŌŌºŌĲĒĒ×İ¤ÃŌĵ·Ōèăİ¤İ¹àÃçĵæ ¢İ§áĲ»¾ĲŌà¤Ñ¹«Ōè§ÍÂÙè
´éŌ¹«éŌĒĒØ´ ¢İ§ăμăμŌŌºŌĲĲ

jÒÃàÀ×ÍjμÑÇàÀ×Íj¹Öé`ĐªèÇÃãĚéâ»ÃájÃÁ`Ñ´jÒÃà´Êjì·Í»»éÍ§jÑ¹ÇÔ¹â´Çì»êÍ»ÍÑ»ÃĐ
ÑºĚÛ§`OjìÒÃ¢ĀŌĚĚ×ÍjÒÃáĀjĬjà»ç¹ĚÍ§`ÍĀŌ¾ (ĚÃ×ÍĀŌjìÇèŌ¹Ñé¹) â´ĀjÒÃjÓĚ¹
´μÓáĚ¹è§»êÍ»ÍÑ»ãĚĀèãĚéà¢éŌjNºĚ¹éŌ`Í

àÀ×ÍµÑÇàÀ×Í¹Õéà¾×éÍÑ
´È¹éÔµèÕ§»êÍ»ÍÑ»ãÈéÍÂÙèµÃ§;ÀÒ§È¹éÒ´Í·Õè¤Ø³àÀ×ÍàÊÁÍ

àÅ×í"íÀÒ¾·Õè∅³μεί§;ÒÃãĚĚ¹έÒμεò§»êí»ÍÑ»ÍÂÙèμÃ§;Àò§ â´Â¿ÔÅ
`ì¹Õé"ĐÁŒçμεìàÁ×èí∅³·Óà∅Ã×èί§ÉΑὸÃàÅ×í»ØèÁ "Center system-wide pop-ups on screen
number" ("Ñ´ãĚĚ¹έÒμεò§»êí»ÍÑ»»ÃŒ⌊⌋Öé¹μÃ§;Àò§Ě¹έὸ"ÍÉΑὸÃàÅΦ)

μÑÇàÅ×í¹Öé·ÓãĚéĚ¹éÒμèÒ§»êÍ»ÍÑ»«Öè\$¢ÂÒÂ¡ÒÃáĚ´§¼Åă»ÂÑ\$ĚÅÒÂĚ¹éÒ´Í
ÍÂÙèμÃ\$¡ÅÒ§´ÍáĚ´§¼Å·ÖèÁÒà²ÍÃà«ÍÃ à¹×èÍ\$´Ò¡ÁÕ²ÇÒÁà»ç¹ă»ă´éÁÒ¡·ÖèĚØ
´ÇèÒ²Ø³¡ÓÂÑ\$ăé\$Ò¹´ÍáĚ´§¼Å¹Ñé¹ÍÂÙè

μÑÇàÀ×í¹Õé°Ñ¹·Ö_jË¹éÒµèÒ§»êí»ÍÑ»ϕÍ§áí»¾₄ÅÔà^aÑ¹äÇéã¹Ë¹éÒ°íà
°ÔÅÇ_jÑ⁰Ë¹éÒµèÒ§áí»¾₄ÅÔà^aÑ¹ä°ÔÁ·Õèã^aéËÃéÒ§Ë¹éÒµèÒ§¹Ñé¹
ËÒ_jË¹éÒµèÒ§»êí»ÍÑ»¾₄ÅÔ°ä»»ÃÔ_j·ÕèíÔ_j°íáË°§¼₄ÅË¹Õè§â»Ãá_jÃÁ°Ñ°_jÒÃà
°Ë_j·Í»°ĐàÀ×è¹ä»ÍÃÙè·Õè°íáË°§¼₄ÅϕÍ§Ë¹éÒµèÒ§áí»¾₄ÅÔà^aÑ¹¹Ñé¹

j'»ØèÁ¹Õéà¾×èÍàÃÕÂjãªéªèÒà´ÔÁçÍ§ªèÒÃèÇÁ·Õèà»ç¹
Õ¿ÍÁµìáÃĐÍµªÕÂìçÍ§â»ÃájÃÁ´Ñ´jÒÃà´Êjì·Í»

ËÁÒÂàËµØ:

jÕÃj'»ØèÁ¹Õé´ĐäÁèÊè§¼ÅµèÍjÒÃ»ÃÑºà»ÃÕèÂ¹áÍ»¾ÅÔàªÑ¹·ÕèªØ³ä
é·ÔäÇéã¹Ë¹éÔ Application Management

j'»ØèÁ "OK" à¾×èÍÂ×¹ÂÑ¹áÂĐ¹Ó;ÒÃà»ÂÕèÂ¹á»Â§.ÕèϣØ³ă
éμÑé§ăÇéă¹â»Ãá;ÃÁ"Ñ'ıÖÃà´É;ı·ı» áÂĐà¾×èı»Ô´Ě¹éÔμèÔ§ı§ı¹â·ÃÂ¾Ôà¹Â

j'»ØèÁ "Cancel" à¾×èÍ»Ô´Ë¹éÒµèÒ§¹â·ÃÅ¾Òà¹Å¢Í§â»Ãá;ÃÁ·Ñ´;ÒÃà´Ê;ì·Í» â
´ÃäÀèµéÍ§ºÑ¹·Ö;ËÃ×Í¹Ö;ÒÃà»ÃÕèÂ¹á»Å§ä»ãªé
ªÓàµ×Í¹: ÃÐºº·ÐÂ;àÃÔ;ìÒÃµÑé§ªèÒ·ÕèªØ³ä´éà»ÃÕèÂ¹á»Å§äÇé

í»ØèÁ "Apply" à¾×èíãªésÒ¹áÅĐ°Ñ¹·Öij;ÒÃà»ÃÕèÂ¹á»Å§µèÒ·ÑésËÁ´
ÉÃÑ§¨Òj¹Né¹ãÉéà»Ô´É¹éÔµèÒ§µÍ¹â·AA¾Òà¹Å¢Í§â»ÃájAA¨Ñ´;ÒÃá´Éjì·Í»

⌘Ø³ÊÒÁÒÃ¶àÀ×Í;áÍ»¾ÅÔà⌘ªÑ¹áººãĚÁè«Öè§¨Đ¨Ñ´;ÒÃâ´Ââ»Ãá;ÃÁ¨Ñ´;ÒÃà´Ê;ì·Í»ä
´é â´Âãªéä´ÍĐÅçÍ;ºçÍ;«ì¹Öé

ÃÒÂ¿ÒÃ¹Õéà»ç¹ÃÒÂ¿ÒÃáí»¾ÃÔàªÑ¹.Õè¿ÓÃÑšãé§Ò¹ÍÂÙèã¹à´Ê¿ì·Í»
ªØ³ÍÔàÃ×¿¿áí»¾ÃÔàªÑ¹·Ô¿ÃÒÂ¿ÒÃ¹Õé EÃ×ÍÃÐºØáí»¾ÃÔàªÑ¹¿×è¹ àªè¹
áí»¾ÃÔàªÑ¹.ÕèäÃèä´éãªé§Ò¹ÍÂÙèã¹¢³Ð¹Õé â´Â¿ÒÃ¿»ØèÃ "Browse"

j'»ØèÁ¹Õéà¾×èíà»Ô´ă´ÍĐĂçj;°çj;«làĴ.Àì «Öè§▯Ø³àĂ×Í;áí»¾ĂÔà▯ªÑ¹ÇÔ¹â
ÇÊì·Öè"ĐãÉéâ»Ăá;ĂĂ"Ñ´j;ÔÀà'Éjì·Í»´Ôà¹Ô¹;ÔĂ

í'»ØèÁ¹Õéà¾×èÍÂ×¹ÂÑ¹ăĴÂîâ»ÃájÃÁ·Õè⌘Ø³àÅ×Í;ăĆé
ăĒÉéà»ç¹ál»¾ÅÔàªÑ¹ăĒĀè·Õèâ»ĀájÃÁ·Ñ'ıŎĂà'Éì·Ĭ»·Đ'Óà¹Ô¹;ÒĂ

j'»ØèÁ¹ÕéËÒ;¤Ø³äÁèµéÍ§;ÒÃàÅ×Í;áí»¾ÅÔà¤ªÑ¹ã¹¢³Ð¹Õé ÆÐ^{oo}·Ð»Ô´ä
ÍÐÅçÍ^oçÍ;«ì¢Í§áí»¾ÅÔà¤ªÑ¹ãÉÁè â´ÅäÁèà»ÃÕèÁ¹á»Å§;ÔÃµÑé§¤èÔã´æ

ä´ÍÐÅçí;¹Õéãªéã¹;ÒÃ»éí¹ª×èlà Êì·Í»¢Í§áí»¾ÅÔàªÑ¹ãËÁè

»éí^{1a}×èlà´Êì·Í»·ÕèÁÕìÒÃà»Ô´áí»¾₄ÂÔà^aÑ¹ãËÀèäÇéã¹ä´ÍÐÂçíì¹Õé¹ì·Òì¹Õé
^aØ³ÂÑŞËÔÀÔÃ¶àÂ×íì^a×èlà´Êì·Í»·Ôì^a×èlàí»¾₄ÂÔà^aÑ¹ì×è¹·Õèä´éÃÐ^oØäÇé
µÑÇÍÂèÒŞà^aè¹ ^aØ³ÍÒ´µéíŞìÒÃãËéà´Êì·Í»ÇÍŞàÇÇ^oà^oÃÒà«ÍÃìã^aé^a×èÍÇèÒ "àÇÇ^o",
â»ÃáìÃÁÍÒàÃÁìã^aéÇèÒ "àÃÁì" ^aØ³ÊÁ^oÑµÔÍµ^aÔÀìÇÍŞâ»ÃáìÃÁ´Ñ´ìÕÃà
´Êì·Í»·ÐãËé^aØ³àÂ×íìÒÃ·ÓŞÔ¹ÇÍŞà´Êì·Í»áí»¾₄ÂÔà^aÑ¹µèÒŞæ á´é
´éÇÂµ¹àíŞÍÂèÒŞŞèÒÃ´ÒÃ

j'»ØèÁ "OK" à¾×èíã^aé^a×èíà´Êjì·í»^a×èíãËÁè ¢Ø³·ĐăÁèÊÒÁÒÃ¶jì´»ØèÁ¹Õéä
é¹ÇèÒ¢Ø³·Đ»éí^a×èíà´Êjì·í»·Õèã^aéä´é

ı'»ØèÁ "Cancel" ËÖı⌘Ø³ăÁèμεί§ıÖÃ»éı¹ª×èlà´Êıı·Í»ă¹ϕ³Đ¹Ŏé

¶ÕÂ¼ÊÁ¹Õé´ĐáÊ´Şà¶ÍÃà«ÍÃÃÙ»ÊÕèàËÃÕèÂÁáº.Öº à¾×èÍãËé¶Ø³¡ÓË¹
´µÓáË¹èŞà¶ÍÃà«ÍÃ¡ÍŞàÁÒËìä´é

àÅ×ÍµÑÇàÅ×Í;¹Õéà¾×èíãĚĚ¹éÒµèÒ§»ÃÒ;¯·ÕèĚ¹éÒíã
´Ě¹éO´ÍĚ¹Õè§à¾ÕÅŞĚ¹éOíà´ÕÂÇ ¢³Đ·Õè∅³ãªéàÃÒĚìÃÒ;Ě¹éÒµèÒ§

μÑÇàÅ×í;¹Öé´ÐÁÕ¼ÅµèÍ§¤ì»ÃĐj|°ã¹íÔ¹àµíÃìà¿«ŒÍ§¼Ùéãªé¹ÇÔ¹â
ÇÊìŒÍ§à¤Ã×èÍ§ä¤Ààí¹µì àªè¹ ĀÑjĒ³ĐŒÍ§·ÔÊjì°ŌÃìáĀĐĒ¹éÒµèŒ§ÊĀÑ°;ÒÃ·Ó§Ò¹

àÅ×íµÑÇàÅ×í¹Öéà¾×èíãªé§Ò¹Ë¹éÒµèÒ§ÊÃÑº;ÒÃ·Ó§Ò¹ «Öè§ä´éÃÑº;ÒÃ;ÓË¹
´ã¹ãÊÁ´ nView ãËéáË´§¹¼Å·Öè;Öè§;ÀÒ§Ë¹éÒ´Í¹;´Ò;¹Öé
¤Ø³ÃÑ§ÊÒÁÒÃ¶ãªéË¹éÒµèÒ§´Ñ§;ÀèÒÇÊÃÑº;Ñºáí»¾¼ÅÒà¤Ñ¹.Öèãªé§Ò¹ºà
´Ë;·Í»µèÒ§æ ä´éÍÖ;´éÇÃ
Ë¹éÒµèÒ§ÊÃÑº;ÒÃ·Ó§Ò¹¹Öé´Ð»ÃÒ;¬ÖÖé¹àÁ×èÍ;´¤ÕÂ¹¼ÊÁ ALT+TAB

ıÖÃ·Óà▯Ã×èİ§ËÀÒÂàÅ×Íı·ÕèμÑÇàÅ×Íı¹Õé"Đ·ÓãËéË¹éÒμèÒ§ÊÑºıÒÃ·Ó§Ò¹»ÃÒı
-₀₁ıİÀÒ¾·Õè▯Ø³ıÖË¹'ăÇéàÊÁİ

àÅ×í;íÀÒ¾·Õè∅³µéÍ§;ÒÃãËéáÊ´§Ë¹éÒµèÒ§ÊÅÑº;ÒÃ·Ó§Ò¹ â
´Å∅³ÊÒÁÒÃ¶àÅ×í;íÀÒ¾·Õèãé§Ò¹ÍÀÙèã¹¢³Ð¹Õéà·èÒ¹Ñé¹

àÅ×íµÑÇàÅ×í¹Õéà¼×èíãĚé·ÒÊìºÒÃì·ÓŞÒ¹ìÑº·ÍÀÒ¼·Íà´ÕÂÇ
à¼×èí»éíŞìÑ¹ăĂèăĚéÁŌìÒÃăªésÒ¹ŧéÒÁ·ÍÀŌ¼

μÑÇàÀ×ÍjàËÀèÒ¹Õé¨ĐİÓĚ¹ÇÔ Õ·Õèâ»ÃáİÃÁ¨Ñ´İÒÃà´Êİ·Í»İÓĚ¹
´μÓáĚ¹èŞİİŞĚ¹éÒµèÒŞ»êÍ»ÍÑ» ĀÇÁ¶ÖŠă´ÍĐĀçİ°çİ«İŦéÍŦÇÒÁáĀĐă
´ÍĐĀçİ°çİ«İŦİŠáÍ»¾ĀŌàŦ¹

àÀ×íµÑÇàÀ×í¹Õéà¾×èíãªéŞÒ¹¤Ø³ÊÁºÑµÔ«ÙÁ
«ÕèŞ´Ð¢ÃÔÃÀÒ¾ã¹ºÃÔàÇ³·ÕèÃÔà¤ÍÃìà«ÍÃì¢ÍŞàÃÔÊìíÃÙè
ÀÒ¾·Õè¢ÃÔÃàÁÁéÇ´Ð»ÃÔᵀ¢Õé¹º¹´ÍÃÒ¾ÍÕᵀ´Í«ÕèŞãÃèÃÔà¤ÍÃìà«ÍÃì¢ÍŞàÃÔÊì
ᵀÕÃàÀ×èí¹à¤ÍÃìà«ÍÃìàÃÔÊìä»·Õè´ÍÃÒ¾Ë¹ÕèŞ
´Ð·ÓãÊéÃÒ¾·Õè«ÙÁäÇéà»ÃÔèÃ¹ä»áÊ´Ş·ÕèÍÕᵀ´ÍÃÒ¾Ë¹ÕèŞâ´ÃÍÑµâ¹ÃÑµÔ
¤Ø³ÊÁºÑµÔ«ÙÁ´Ð·ÓŞÒ¹ᵀçµèíàÀ×èí¤Ø³ă´éàª×èíÃµèí´ÍÃÒ¾ËÃÔÃ´Íà¢éÒ´éÇÂᵀÑ¹
áÃÐ¤Ø³ă´éàÀ×íᵀâÊÃ´ᵀÔÃ¢ÃÔÃÀÒ¾ã¹ă¹Ç¹Í¹ÊÃ×íá¹ÇµÑéŞãÇéáÁéÇ

àÅ×íµÑÇàÅ×í¹Õéà¾×èÍ¢ÂÒÂÀÒ¾â´ÂãªéÊà;Åáº¿ÔÀàµíÃì (áºº»ÃĐÁÒ³¤èÒ)

⌘⌘³ÊÒÁÒÃ¶ãªéÍµ⌘ÕÂìµèlä»¹Õéà¾¼×èÍ⌘Çº⌘ØÁ⌘Ø³ÊÁºÑµÔ«ÙÁä´é ã¹á·çº Hot Key
ãËé⌘ÂÔì·Õè¿ÔÁ`ì áÅĐì´⌘ÕÂì¼¼ÊÁ·Õè⌘Ø³µéÍ§ìÒÃ

ËÁÒÂàËµØ: Íµ⌘ÕÂì`ĐäÁè·Ó§Ò¹àÁ×èÍ⌘Ø³à»Ô´á·çº "Zoom" ËÃ×Í "Hot Keys"
⌘éÒ§äÇé ·Ñé§¹Õéà¾¼×èÍ»éÍ§ìÑ¹äÁèãËé⌘Ø³ìÓË¹
´Íµ⌘ÕÂìãËÁè«éÍ¹ìÑºÍµ⌘ÕÂì·Õèãªé§Ò¹ÍÁÙè

ÎÍµϣÕÂî¹Õé¨Ðà»Ô´ËÃ×Í»Ô´;ÒÃ·Ó§Ò¹ϣØ³ÊÁºÑµÔ«ÙÁ

ÎÍµœÕÂî¹Õéà¾ÔèÁÃĐ´ÑºÏÒÃ«ÙÁÀÒ¾

ÎíµœÕÂî¹ÕéÅ´ÃĐ´ÑºıÒÃ«ÙÁÀÒ¾

¾ÒÃÒÁÔàµíÃì¹Õé¨ĐÃĐ°ØÇèÒÁÕ;ÒÃ»ÃÑ°;ÒÃ«ÙÁÀÒ¾¼;ÕèªÃÑé\$µèÍÇÔ¹Ò·ÕàÁ×è
ÍăĀèÁÕ;ÒĀàĀ×èÍ¹àÁÒĒì (»iµÔ¨ĐÁÕ;ÒĀ»ÃÑ°;ÒĀ«ÙÁÀÒ¾¼â
´ÁÍÑµâ¹ĀÑµÔ·Ø;ªĀÑé\$·ÕèàĀ×èÍ¹àÁÒĒì) â»Ā
¨¨ÓăÇéÇèÔ;ÒĀà¾¼ÕèĀªèÒă¹¾¼ÒĀÒÁÔàµíÃì¹ÕéÍÒ¨·ÓăĒé»ĀĐĒÔ·,ÔÀÒ¾¼;ÒĀ·Ó\$Ò¹
¢Í\$ĀĐººĒĀ×ÍáÍ»¾¼ĀÔàªªÑ¹Ā´Ā\$

⌘èÒã¹³/₄ÒÃÒÁÔàµÍÃì¹Õéà»ç¹µÑÇàÀ¢áÊ´§;ÒÃ´ÕàÃÃîâ
´ÁÃÕË¹èÇÃà»ç¹ÃÕÃÃÕÇÕ¹Õ·Õ
jèí¹·Õè´ÐËÃÑ⁰;ÒÃ«ÙÃÃÕ³/₄´Òj´´ÃÀÒ³/₄Ë¹Õè§ã»à»ç¹ÍÕ_l´´ÃÀÒ³/₄Ë¹Õè§;ÒÃ
´ÒàÃÃì¹Õé´Ð^aèÇÃ»éÍ§;Ñ¹ãÃèãËéÃÕ³/₄·Õè«ÙÃãÇé"jÃÐâ´´"ã»ÃÕÃÐËÇèÒ§´´ÃÀÒ³/₄
ã¹jÃ³Õ·Õè⌘Ø³ãÃ×èí¹à⌘ÍÃìà«ÍÃìàÃÕËì³/₄ÃÕ´ã»ãÇé⁰¹´´ÃÀÒ³/₄·ÕèáÊ´§ÃÕ³/₄«ÙÃÍÃÙè
⌘Ø³ÍÕ´´µÑé§⌘èÒ³/₄ÒÃÒÁÔàµÍÃì¹Õéà»ç¹ËÙ¹ÃìËÕjãÃèµéÍ§;ÒÃãËéÃÕ;ÒÃ´ÕàÃÃì

àÅ×ÍµÑÇàÅ×Í¹Õéà¾×èíà»ÅÕèÂ¹ÃĐ´ÑºìÒÃ«ÙÁÀÒ¾·ÕèáÊ´şÍÂÙè â´Âì´»ØèÁ
CTRL, ALT áÅĐ SHIFT ¢éÒšăÇé áÅĐàÅ×èí¹â´ÂăéàÁÒÊì

àÅ×ÍjÇèÒ¨Đã^aé«ÕÂì¼ÊÁă´ĂĐĚÇèÒ§ CTRL, ALT áÅĐ SHIFT à¾×èía»ĂÕèÂ¹ĂĐ
´ÑºjOĂ«ÚÁâ´Âă^aéàÁÒÊì

Ë¹éÒÍµÕÂîãªéã¹;ÒÃ»ÃÑºà»ÅÕèÂ¹ÍµÕÂî à¾×èÍ;ÓË¹
´µÓáË¹è§Ë¹éÒµèÓ§áÍ»¾ÅÕàªÑ¹º¹à´Ëì·Í»´éÇÂµÑÇªØ³àÍS
ËÁÒÂàËµØ: ÍµÕÂî´ÐäÁè·Ó§Ò¹àÁ×èÍªØ³à»Ô´á·çº "Zoom" ËÃ×Í "Hot Keys"
ªéÒ§äÇé ·Ñé§¹Õéà¾×èÍ»éÍS;Ñ¹äÁèãËéªØ³;ÓË¹
´ÍµÕÂîãËÁè«éÍ¹;ÑºÍµÕÂî·Õèãªé§Ò¹ÍÂÙè

μÑÇàÀ×í;¹Õé¨ĐäÁèãªé;ÒÃÀ´ÃÍÂËÂÑ;ã¹áí»¾ÀÔàªÑ¹ 3D
àÀ×í;μÑÇàÀ×í;¹ÕéËÒ;μέί§;ÒÃãËéáí»¾ÀÔàªÑ¹ϕί§ϣØ³ÁÕ»ÃĐÊÔ·,ÔÀÒ¾ÊÙ§ÊØ´

μÑÇàÅ×Í;¹Õé¨ĐăéşÒ¹;ÒÃÅ´ÃÍÂĚÂÑ; â´ÂăéáâĚÁ´ 2x
âĚÁ´¹Õé¨ĐăĚé∅³ÀÒ¾¢ÍşÀÒ¾·ÕèªÑ
´à¨¹áÅĐ»ÃĐĚÔ·ÔÂÒ¾;ÒÃ·ÔşÔ¹¢ÍşáÍ»¾ÅÔàªªÑ¹ 3D à¾ÔèÁÊÛş¢Öé¹

μÑÇàÀ×Í¡¹Õé¨ÐàÀ×Í¡à·¤¹Ô¤¡ÒÃÀ´ÃÍÃËÃÑ¡·Õè¶Ù¡μéÍ§·ÕèÁÕã¹ÃØè¹ GeForce GPU

¤Ø³ÊÁºÑμÔ¡ÒÃÀ´ÃÍÃËÃÑ¡¢Í§ Quincunx ¨Ð·ÓãËéâËÁ´ 4x
·Õè·Ó§Ò¹ªéÒ¡ÇèÒáμè¨ÐãËé»ÃÐËÔ·,ÔÀÒ¾·Õè´Õ¡ÇèÒâËÁ´ 2x

μÑÇàÅ×í;¹Õé¨ĐãªésÒ¹;ÒÃÅ´ÃÍÃĚÂÑ; â´ÂãªéâĚÁ´ 4x
â´Â¨ĐãĚéªØ³ÀÒ¾₄ŦÍŞÀÒ¾₄ÊÙŞÊØ´áµè·ÓãĚé»ÃĐÊÔ·,ÔÀÒ¾₄ŦÍŞáí»¾₄ÅÔàªªÑ¹ 3D
°ÒŞμÑÇÅ´ÅŞ´éÇÃàªè¹;Ñ¹

μÑÇàÅ×Í;1Õé`Đã^aé⊞Ø³ÊÁ°ÑμÔĀ´ĀÍĀĚĀÑ;ă´éă¹;Ă³Õ·Õè⊞Ø³ă^aéâĚÁ´ 4x, âĚÁ´ 9-tap
(Gaussian)

â´Ā`ĐãĚé⊞Ø³ÀÒ³/₄ŦÍ\$ÀÒ³/₄ÊÙ\$ÊØ´áμè·ÓăĚé»ĂĐÊÔ·ÔÀÒ³/₄ŦÍ\$áÍ»³/₄ĀÔà^aÑ¹ 3D
°Ò\$μÑÇĀ´Ā\$´éÇĀă^aè¹;Ñ¹

μÑÇàÀ×Í¹Õé¨Đã^aéŞÒ¹ıÒÃÁ´ÃÍÂĖÂÑı â´Âã^aéâĖÁ´ 6x

â´ÂâĖÁ´¹Õé¨ĐãĖé^ø3ÀÒ³/₄¢ÍŞÀÒ³/₄·Õè^aÑ´à¨¹ıÇèÒâĖÁ´ 4X

ámè»ÃĐĖÔ·ÔÀÒ³/₄ıÒÃ·ÓŞÒ¹¢ÍŞáÍ»³/₄ÂÔà^aÑ¹ 3D Á´ÂŞ

ĖÁÒÂâĖμø: ÍÂèÒŞäÃıçμÒÁ ^øèÒ¹Õé¨ĐĖèŞ¹/₄ÂıÃĐ·^oàÁ×èÍã^aéáÍ»³/₄ÂÔà^aÑ¹ Direct3D

à·èÒ¹Ñé¹ ¢³Đ·Õè^ø3ÂN¹áÍ»³/₄ÂÔ^aÑ¹ OpenGL â»ÃájÃÁ OpenGL

¨Đã^aéıÒÃμÑéŞ^øèÒıÒÃÁ´ÃÍÂĖÂÑı·Õèã^aéä´é^øèÒ¶Ñ´à» (à^aè¹ ³/₄^o^øèÒμÑÇàÀ×Íı·Ñ¹·Õ
μÒÁ´éÇÂ^øèÒ 6x)

μÑÇà×í¹Öé¨ĐãªéªèÒ;ÒÃÁ´ÁÍÄËÂÑ;ÊÛ§ÊØ´â´ÁÍÑμâ¹ÁÑμÔ;Ñªâ»ÃájÃÁ 3D
«Öè§à»ç¹â»ÃájÃÁ·ÖèÊ¹ÑºÊ¹Ø¹;ÒÃÁ´ÁÍÄËÂÑ;

μÑÇàÅ×Í;¹Öé·ĐãĚé⊞Ø³àÅ×Í;ãªéâĚÁ´;ÒǺǺ´ǺÍĀĚĀÑ;´éÇÂμÑÇ⊞Ø³àÍ§
ϕ³ĐǺÑ¹áÍ»¾ǺÔà⊞ªÑ¹ 3D

ϙείÁÚÀà;ÕèÂÇ;Ñ°æÈ AGP »Ñ°Ñ¹ã¹àæÃ×èÍæÍÁ¾ÔÇàµÍÃìϙÍæØ³

**μÑÇàÅ×Í_i¹Öé·ĐăĚé⊞Ø³àÅ×Í_iã^aéÍÑμÃÒ AGP ä´é
´éÇÂμ¹àÍ\$`Ö_iÃĐ⁰⁰ÂèÍÂ¢Í\$ÀÖ^{3/4}_iÃÖ¿Ö_i ĚÖ_i⊞Ø³ăÁèá¹èã·ÇèÖ⊞Ø³ã^aéÍÑμÃÒ AGP ä´
ãĚéàÇé^{1a}èÍ\$·Óà⊞Ã×èÍ\$ĚÁÖÂ¹Öéà»ç¹ă⁰⁰ăAèä´é·Óà⊞Ã×èÍ\$ĚÁÖÂăÇé
ĚÂÑ\$`Ö_i¹Ñé¹ÃĐ⁰⁰·Đ_iÖĚ¹ÍÑμÃÒ AGP ĚÛĚĚ´ă´ÂÍÑμâ¹ÂNμÔ

»ÃÑ°á¶°àÅ×èí¹à¾×èíàÅ×íjãªéíÑµÃÒ AGP ·Õèªªâ
´ÃÃÐ°°ÀèíÃ¢í§ÃÒ¾iÃÒ¿Öí´éÇÃµ¹àí§

ªèÇÃãËé¤Ø³àÅ×Í¡ÇÔ,Õ·Õèä´ÃàÇÍÃì´Ñ´¡ÒÃË¹èÇÃ¤ÇÒÁ´Ó¡ÒÃáÊ
´§¼₄Å´Ò¡Ë¹èÇÃ¤ÇÒÁ´Ó†Í§ÃĐººã´é

ªèÇÂãËé¤Ø³ÃĐ°Ø´Ó¹Ç¹Ë¹èÇÂ¤ÇÒÁ´Ó†Í§ÃĐºº.Õèãªé
µÒÁÇÔ,Õ¡ÒÃ·Õè¤Ø³ÃĐ°ØăÇéã¹âËÁ´à¿ÃÁºÑ¿à¿ÍÃì»Ñ´´´ØºÑ¹ă´é

ªèÇÂãĚéªØ³ÃĐ°ØÇÔ_Õ"Ñ'¡ÒÃĚ¹èÇÂªÇÒÁ"Óà¿ÃÁ°Ñ¿à¿ÍÃì àÁ×èĺãªéâĚÁ
´à¿ÃÁ°Ñ¿à¿ÍÃì»Ñ"Ø°Ñ¹ă´é

â»ÃÁiÃÁ PowerMizer ¢Í§ NVIDIA ¨ĐªèÇÂªØ³ªÇºªØÁjÒÃãªé¾ÅÑ§§Ò¹¢Í§ GPU
ªØ³ÊÒÁÒÃ¶ªèÇÂª¾ÔèÁÍÒÃØjÒÃãªé§Ò¹¢Í§ª°µàµÍÃÕèä´éã´ÃjÒÃµÑé§ªèÒà»ç¹
"»ÃĐÊÃÑ´ä¿ÊÛ§ÊØ´" ÊÃ×íãªé¿ÒÃáÊ´§jÃÖ¿ÔjÍÃèÒ§àµçÁ»ÃĐÊÔ·ÔÃÖ¾¢Í§ GPU â
´ÃàÃ×Íj·Õè "»ÃĐÊÔ·ÔÃÖ¾ÔÃ·Ó§Ò¹ÊÛ§ÊØ´"

ËÒ;ϣ³àÀ×Í;μÑÇàÀ×Í;¹Õé ¨ÐªèÇÃãËé;ÒÃì¨¨ÍáÊ´§^{1/4}Å·ÕèÁÕËÀÒÂ¨ÍÀÒ^{3/4}
·Ó§Ò¹;ÑºÃÐ⁰⁰»¨ÕºÑμÕ;ÒÃÇÒ¹ã´ÇÊìã´é áÁéÇèÒ¨ÐÁÕ;ÒÃãÃ;ÒÃμÔ´μÑé§;ÒÃì
´äÇéã¹ÃÐ⁰⁰ϣÍ§ϣ³ 1;¨Ò;¹Õéϣ³¨ÐËÒÀÒÃ¨àÀ×Í;ϣÇÒÁÃÐàÍÒÃ´ áÃÐ/ËÃ×ÍÃÐ
´ÑºËÒϣÍ§ÍØ»;Ã³;ÒÃãÊ´§^{1/4}ÅámèÃÐμÑÇ·Õèàª×èÍÁμèÍÎÙè;ÑºÍÐá
´»àμÍÃìª⁰⁰ËÀÒÂ¨ÍÀÒ^{3/4}ã´é

ıÖÃãé´ÍáÊ´§¼ÅÊİµÑÇâ ÂãéèÒı¹ÇÖàİàÃªÑ¹Ë¹èÇÂÇÒÁ´Ó/GPU èèÒà´ÕÂÇ
´Đà»ç¹İÖÃİÓË¹´¢éİ´ÓİÑ´İÑºèèİÖÃáÊ´§¼Å ¢Ø³ËÒÁÖÃ¶ãéŞÒ¹ăÍĐÂİı¹Çİ«İ
Windows Display Properties ã¹âĖÁ´¹Öéă´é µÒÁİÖÃİ´´ÍİİŞèèÒı¹ÇÖàİàÃªÑ¹´ÍáÊ´§¼Åà
´ÖèÂÇ àÁ×èİºØ³ãéÍĐá´»àıİİİÑº´ÍáÊ´§¼ÅÊİİ´ÍâĖÁ´·ÖèãéèÇÒÁĖĐàİÕÂ
´ËÙŞİÇèèİİİ´ÍáÊ´§¼ÅË¹ÖèŞİÒ´ãéăÁèă´éİÑºİÖİ´ÍáÊ´§¼Å·ÖèÇÒÁĖĐàİÕÂ´µèÓİÇèè
ã¹İÃ³Ö¹Öé İÍá¹Đ¹ÓăĖéèØ³àĖ×İèèÒ¼ĖÁİŞâĖÁ´İÖÃáÊ´§¼Å «ÖèŞèÇÂăĖéİÖÃİ
´´İÊÒÁÖÃ¶·ÓŞÒ¹ă´éÍĖèÒŞ¶ÙİµéİŞ

j'»ØèÁ¹Õéà¾×èí»ÃÑºà»ÅÕèÂ¹ÊàµíÃÔâí OpenGL áÅĐµèÒ;ÒÃ«éí¹ÀÒ¾ â»Ã
´ÊÑ§à;µÇèÒ »ØèÁ¹Õé·ĐãªésÒ¹ă´éàÁ×èíµØ³ãªésÒ¹µÑÇàÅ×í; "Enable quadbuffered stereo API"
«Öè§ÍÂÙèã¹ºçí;«ìÃÒÂ;ÒÃáÃ;¢í§Ě¹éÒµèÒ§ÃÒÂ;ÒÃ¹Õéà·èÒ¹Ñé¹

ãĖ▯³ãªésÒ¹;ÒÃ«é¹ÀÒ¾ã¹ OpenGL â»Ãá;ÃÁá¹»¾ÅÒà▯ªÑ¹⁰ÒŜâ»Ãá;ÃÁ (àªè¹
Softimage3D) μéÍŜªªéá¼₄Ŝ;ÒÃ«é¹ÀÒ¾₄
á¹¼₄Ŝ;ÒÃ«é¹ÀÒ¾₄·Đ·ÓĖ¹éÒ·ÕèàĖÁ×Í;Ñ⁰à»ç¹ÍŎ;¾₄×é¹¹¼ŎÇĖ¹ŎèŜ·ÕèàĖèÍĖÙèã¹⁰ÑĸàĸÍ
ÃĖĖŎ»;μŎ (RGB) ▯³ĖÒÁŎÃŋªªé▯³ĖÁ⁰ÑμŎ;ŎÃ«é¹ÀÒ¾₄ă´éÍĖèÒŜà;Ŏ´»ÃĐâĖ¹¹;
àÁ×èÍ▯³μéÍŜ;ŎÃ«é¹¹¾₄×é¹·ŎèÍ×è¹æ ÅŜª¹¾₄×é¹·Ŏè;ŎÃÇŎ´ÀÒ¾₄
«ŎèŜáĖ;Ŏ;¾₄×é¹·ŎèÀÒ¾₄ 3D àªè¹ àÁ¹ÙáĖĐà▯ÍĖà«ÍĖĖ à
´Ė▯³ĖÒÁŎÃŋªªé;ŎÃ«é¹ÀÒ¾₄ă´éã¹ăĖĖÁ´ĖŎ 16 °Ŏμ áĖĐ 32 °Ŏμ
ĖÁŎĖĖμŎ: ▯³ăĖèĖÒÁŎÃŋªªéĖĖμÍĖŎĖÍ OpenGL
áĖĐ▯³ĖÁ⁰ÑμŎ;ŎÃ«é¹ÀÒ¾₄ã¹àÇĖÒà´ŎĖÇ;Ñ¹ ĖŎ;▯³ãªé▯³ĖÁ⁰ÑμŎ;ŎÃ«é¹ÀÒ¾₄
▯³·Ŏà»ç¹μéÍŜĖŎĖ¹èÇĖ▯³ŎÁ´ŎÀÒ¾₄;ĖŎĸŎ;à¾₄ŎèĖĖμŎĖ
«ŎèŜÍŎ´ăĖèĖŎã¹ĖèÇ¹▯³ŎÁĖĐàÍŎĖ´·ÑésĖĖ´ ▯³ÍŎ´μéÍŜĖ´▯³ŎÁĖĐàÍŎĖ´ĖĖ×ÍĖĐ
´Ñ⁰ĖŎ ĖŎ;à;Ŏ´»ÑĖŎàĖ×èÍàĸéŎãªéĸÑŜ;ª¹Ñ¹;ŎÃ«é¹ÀÒ¾₄

ãĖé¸ð³ãªéÊàµíÃÔâí OpenGL ä´é
ĖÖ;¸ð³µéí§;ÔÃãªé§Ò¹â»ÃájÃÁÊàµíÃÔâí¾¼ÃéíÁ;ÑºàĀ¹ÊªÑµàµíÃì ĖÃ×ÍÔÃì´áÇÃìí×è¹
ă´ÃàÇíÃìċí§ NVIDIA ´ĐàíÇ;«ì»ÍÃìµÃÙ»áºº¾¼Ô;à«Āċí§ÊàµíÃÔâí OpenGL áĀĐ´Ñ
´Ė¹èÇĀ¸ÇÒĀ´ÓãĖéãªé;Ñºâ»ÃájÃÁÁí»¾¼ĀÒà¸ªÑ¹ Stereoscopic áĀĐ Monoscopic ä
´éã¹àÇĀÒà´ÔĀÇ;Ñ¹

ĖĀÖĀàĖµØ: ãªéµÑÇàĀ×Í;¹ÔéàĀ×èí´´Óà»Ç¹à·èÒ¹Ñé¹
â»ÃájÃÁÁí»¾¼ĀÒà¸ªÑ¹ºÔ§â»ÃájÃÁ´ĐàĀ×Í;ÃÙ»áººÊàµíÃÔâíâ´ĀíÑµâ¹ĀÑµÔ
ã¹ċ³Đ·Ôèâ»ÃájÃÁí×è¹ÍÒ´´Đ·Ó§Ò¹ă
´éăĀè¶Ů;µéí§àĀ×èí¸ð³ãªéÃÙ»áºº¾¼Ô;à«ĀÊàµíÃÔâí

ĖĀÖĀàĖµØ: ¸ð³ăĀèÊÒĀÒÃ¶ŮãªéÊàµíÃÔâí OpenGL
áĀĐ¸ð³ĖĀºÑµÔ;ÔÃ«éí¹ĀÒ¾¼ã¹àÇĀÒà´ÔĀÇ;Ñ¹ ;ÔÃ
´ÙÊàµíÃÔâí´´Óà»Ç¹µéí§ĀÔĖ¹èÇĀ¸ÇÒĀ´´Óċí§ĀÒ¾¼;ĀÒ¸Ô;í×è¹æ
áĀĐÍÒ´ăĀèíĀÙèã¹ĖèÇ¹¸ÇÒĀĀĐàíÔĀ´·Ñé§ĖĀ´ ¸ð³ÍÒ´µéí§Ā´¸ÇÒĀĀĐàíÔĀ´ĖÃ×ÍĀĐ
´ÑºĖĖ ĖÖ;¸ð³»ĀĐĖº»ÑĖÖ;Ñº;ÔÃ´ÙÊàµíÃÔâí

ä´ÃàÇíÃì NVIDIA Ê¹ÑºÊ¹Ø¹ÎÒÃì´áÇÃìÊàµíÃÔâíã¹ËÅÒÃÃÙ»áºº ËÒ;²Ø³ãªéÎÒÃì
´áÇÃìÊàµíÃÔâí×è¹.ÕèäÁèãªèèè´Õ¿ÍÅµì ²Ø³µéÍßàÅ×Í;âËÁ´;ÒÃáÊ
´ß¼⁄⁄Å´Ò;ºÇÍ;«ìÃÒÃ;ÒÃ

àÅ×ÍµÑÇàÅ×Í¹ÖéàÅ×èÍµØ³ãªé ELSA 3D REVELATOR(TM) ËÃ×ÍÍĐá
´»àµÍÃì·Öè·ÓŞÒ¹ÃèÇÁµÑ¹ă´éà·èÒ¹Ñé¹ â´ÂÍĐá´»àµÍÃìàËÃèÒ¹Öé´Đá»ÅŞÊÑ-
Ò³·ÍÀÒ¾à»ç¹ 3-pin-DIN áººă´éÁÒµÃºÒ¹ «ÖèŞãªéµÑ¹ă¹ÎÒÃì´áÇÃìÊàµÍÃÔâía´ÂÊèÇ¹ăËè
ËÁÒÂàËµØ: µØ³ăÁè´Óà»ç¹µéÍŞãªéÍĐá´»àµÍÃì¹Öé ËÒµµÒÃì´´ÍÇÍŞµØ³ÁÕªèÍŞàÊÕÂº 3-
pin-DIN áººµÔ´µÑéŞã¹µÑÇ

àÅ×íµÑÇàÅ×í¹ÖéËÖᵢᵐØ³àª×èÍÁµèÍ´Íáª¹áª auto-stereo à¢éÖᵢÑºᵢÒÃĩ´´Í¢Í§ᵐØ³

ÈÒìµØ³µéİşİÖÃãéµÑÇàÀ×İ₁Öē µØ³ˆÒà»ç¹µéİşµèİâ»Ãàˆˆ;jàµİÃİàÇēÖİÑ°İÖÃİ
 ˆİá°°Éİşàèİş «Öèş.ÓŞÖ¹ÃèÇÁİÑ° NVIDIA GPU ààè¹ ÃØè¹ Quadro2 MXR (ÈÃ×İ
 GeForce2 MX/GeForce2 Go) âˆÂàÀ×İ;ããéşÖ¹âĖĖ´ nView Close ˆÖİ¾Öà¹ĖÇİş nView
 àèİşİÖÃâĖ´ş¼ĖĖ¹ÖèşàèİşˆĖâĖ´şİÖÃĖİşàĖÇ¹ĖÖ¾ˆˆÖİµÖÇēÖŞ«ēÖĖĖĖĖÇēÖŞÇÇÖ
 µÑÇàÀ×İ₁ÖēˆˆĖããéşÖ¹ă´éİÑ°İÖÃİˆˆá°°ĖĖÖĖĖĖİş

ËÒ¡;ÒÃì´´ÍϕÍ§¤Ø³ÁÕªèÍ§àÊÕÂ° 3-pin DIN á°µÔ´µÑé§ã¹µÑÇ
ãËéàÅ×Í¡µÑÇàÅ×Í¡¹Õéà¾×èÍãªé§Ò¹¤Ø³ÊÁ°ÑµÔ¹Õé ã¹¡Ã³Õ¹Õé ¤Ø³ãÁè´´Óà»ç¹µéÍ§µÔ
´µÑé§ÍÐ´´»àµÍÃìà¾ÔèÁàµÔÁ àªè¹ ÍÐ´´»àµÍÃì·Õè´´Ñ´Êè§ÁÒ¾ÃéÍÁ¡Ñ° ELSA 3D
REVELATOR(TM) ËÃ×ÍàÅ¹Êì StereoGraphics(R) ¤Ø³ÊÒÁÒÃ¶µèÍÒÃì
´áÇÃìÊàµÍÃìÔâìàϕéÒ¡Ñ°ÒÃì´´Íä´éâ´ÂµÃ§ â´ÃªªéªèÍ§àÊÕÂ° 3-pin-DIN

àÅ×íµÑÇàÅ×í¹ÖéËÒ;⊞Ø³ãªéÍĐá´»àµíÃì·Öè´Ñ´ÊèŞÁÒ¾ÃéÍÁ;Ñº StereoGraphics(R)
StereoEyes(R) ËÃ×í¼ÅÔµÀÑ³±ì×è¹·Öè·ÓŞÒ¹ÃèÇÁ;Ñ¹ă´é â´ÂÍĐá
´»àµíÃìàËÃèÒ¹Öé´Đá»ÅŞÊÑÒ³´ÍÀÒ¾ãËéàÇéÒ;ÑªªéÍŞàÊÕÂº DIN áºº 3-pin
·Öèă´éÁÒµÃºÒ¹ «ÖèŞãªé;ÑºÍÒÃĩ´áÇÃìÊàµíÃÔâĩâ´ÂÊèÇ¹ăËè

ËÁÒÂàËµØ: ⊞Ø³ãªªè´Óà»Ç¹µéÍŞãªéÍĐá´»àµíÃì¹Öé ËÒ;ìÒÃì´´ÍÇÍŞ⊞Ø³ÃÕªèÍŞàÊÕÂº 3-
pin-DIN áººµÔ´µÑéŞã¹µÑÇ

<http://www.stereographics.com/html/se.htm> ã¹ĴÃ³Õ·Õèø³ăĂèàËç¹ălȚàȚıμîÊàmİÃÔâl
ãĖĖàÅ×İjμNÇàÅ×İj¹Ōéà¾₄×èÎĒÑº;ŌÃ´ÙÀŌ¾₄«ēŌÁáÂĐƧÇŌ
ĖĀ×İμØ³İŌ'''Ōà»ç¹μÉİšăéşŌ¹μNÇàÅ×İj¹ŌéjÑ''ÍáĔ'ş¼Ä·ŌëÁŌİŌ¹à·ÍĀìàÀ«á¹ÇμNés
áÂĐă¹âĖĀ'ăĂèăăéşŌ¹

μÑÇàÅ×í;¹Õé¨ĐãªéĚ¹èÇÂᵐÇÒÁ¨ÓÁÒ;¾Í·Õè¨ĐãªéŞÒ¹áÁ»¾×é¹¹¼ÔÇă´é â
´ÂÊÒÁÒÃ¶à¾ÔèÁ»ÃĐÊÔ·ÔÀÒ¾ãĚé;Ñª»Ãá;ÃÁ·ÕèµéÍŞ;ÒÃ¾×é¹¹¼ÔÇÁÒ; â
´ÂÊèŞ¼Åµèí»ÃĐÊÔ·ÔÀÒ¾¶ÍŞâ»Ãá;ÃÁ·ÕèăÀèµéÍŞ;ÒÃ¾×é¹¹¼ÔÇà¾ÕŒŞàŒç;¹éÍĀà·è
Ò¹Ñé¹

μÑÇàÅ×í₁¹Öé[·]Đã^aé trilinear filtering â
´ÂäÁè^²Ó¹Ö§ÇèÒâ»Ãá;ÃÁáí»^¾ÅÔà^²Ñ¹¹Ñé¹μέί§;ÒÃã^aé;ÒÃ¿.ÔÅàμíÃìá⁰⁰¹ÖéËÃ×íäÁè
«Öè§ÊÒÁÒÃ¶à^¾ÔèÁ^²Ø³ÀÒ^¾ϕí§ÀÒ^¾ã¹áí»^¾ÅÔà^²Ñ¹ 3D

