Overview

The StarFighter family of 3D graphics accelerators from Real 3D brings outstanding graphics quality to the mainstream PC desktop for computer games, CAD and business applications. Powered by the new Intel*740* graphics accelerator chip, which Real 3D co-developed with Intel, StarFighter is available in both AGP and PCI bus systems. Drawing on its experience developing the world's most advanced 3D graphics for military simulators and Sega arcade games, Real 3D has engineered a graphics board that delivers unmatched 3D price/performance for gaming enthusiasts and business users. StarFighter brings high-quality visual computing to a new level, delivering smoother, more accurate, and highly detailed images to the PC platform.

StarFighter graphics accelerators deliver on the promise of "AGP done right." Real 3D worked closely with Intel to design the AGP specification and StarFighter takes full advantage of all the benefits delivered by a complete AGP implementation. StarFighter supports full screen video at 30 frames-per-second and leverages SGRAM/SDRAM technology to deliver unprecedented performance. Computer games can now deliver high resolution textures for sharper visuals and more realistic visual effects. Business applications such as computer-aided design, visualization, animation, and virtual reality no longer require expensive, high-end, proprietary systems.

Features

- Perspective corrected texturing assures correct visual rendering while creating realistic depth
- Bilinear MIP mapping smoothly transitions objects from far away to up close
- Gouraud and specular shading create realistic lighting effects and highlights
- Alpha blending and fog create interesting and realistic lighting effects
- Anti-aliasing and dithering eliminate sharp jagged edges and moving edge flicker
- Video scaling provides crisp images at 30 frames per second
- Z-buffering reduces the calculations needed for hidden surface removal
- Stipple accelerates cut away pattern such as screen doors

Benefits

StarFighter's dual memory architecture separates the frame buffer from texture memory, which frees memory-intensive texture calculations from competing with the frame buffer. StarFighter AGP supports all the sideband features of a full AGP2x implementation. StarFighter PCI includes local texture memory and additional hardware to improve PCI graphics performance. The result, with either StarFighter AGP or PCI, is outstanding 3D, 2D and video performance.

Gamers will be thrilled at the realism of the 3D worlds running under Windows 95 and Direct3D. Business users will appreciate StarFighter's quality and support for Windows NT and OpenGL, making StarFighter ideal for use with productivity tools and modeling applications. The combination of 3D/2D performance makes StarFighter a perfect solution for game players and business users.

StarFighter accelerates movie formats including DVD/MPEG II to ensure smooth, 30 frame-per-second video. Additional video options and features include: a standard TV or VCR signal (NTSC or PAL) for display in a video window; recording of video clips to disk; and converting the computer display for viewing on any standard TV.

For more information visit our website at http://www.Real 3D.com

Displays the available Refresh Rates. Click on one of the listed entry to change the current Refresh Rate.

Indicates the current Selected Video Display Device. Click one of them to set current display device.
CRT means that the video will be displayed on CRT only.
LCD means that the video will be displayed on the Flat Panel only.
BOTH means that the video will be displayed on both the CRT and the Flat Panel simultaneously.

Displays information about the currently loaded display driver files.

Displays information about resolution, color depth and mode number of current display mode.

Displays information about currently selected monitor.

If this is checked, the Windows default refresh rate is used. This is recommended because Windows automatically selects a default refresh rate when you change to different mode based on current monitor and display controller.

If this is unchecked, the refresh rate is fixed, and when you change to different mode, the display may not work properly.

If this is checked, the Windows Optimal refresh rate is used. This is recommended because Windows automatically selects an optimal refresh rate when you change to different mode based on current monitor and display controller.

If this is unchecked, the refresh rate is fixed, and when you change to different mode, the display may not work properly.

Load New Bitmap

This bitmap is for you to see the effects of the changes that are made to the color settings.

Resets Test Bitmap and Color Palette to Initial settings. Use the “Load Default” button to reset to Default Settings

Sets Display output to the Computer Monitor

Adjusts Gamma correction for the computer display

Adjusts Contrast for the computer display

Adjusts Brightness for the computer display

Selects Red palette for color adjustment

Selects Green palette for color adjustment

Selects Blue palette for color adjustment

Use this button to delete the current scheme. You will be asked to verify if you want to delete.

This will allow you to save the current settings as a scheme.

Use this to select a color scheme. Loading a scheme will set the Gamma, Contrast, and Brightness controls and the test bitmap according to the values saved in the scheme. For example, by selecting the scheme named “Default” you will set the Gamma, Contrast, and Brightness controls and the Test Bitmap to their default values.

This image is a representation of the effect the Gamma, Brightness, and Contrast controls have on the color curve.

Resets Test Bitmap and Color Palette to default settings. Use the ‘‘Reset’’ button to reset to initial Settings

If you uncheck this box the ‘‘Color’’ tab will not load the next time you open the Display Properties dialog box. By selecting the ‘‘Select Tabs’’ button on the ‘‘Real 3D’’ tab you can select which tabs will load.

Selects Red, Green, and Blue palettes for color adjustment

By selecting this Check Box you will force the use of antialiasing in ALL D3D applications. Antialiasing makes the edges of objects in a 3D scene look smoother but may cause performance decreases. The effects of antialiasing are most noticeable in objects with near vertical or near horizontal edges. Without antialiasing turned on the edges of such objects would appear jagged.

This slider selects the alitialias mode. If the “Force Anti-Aliasing” Check Box is checked the selected mode is forced in all D3D apps. Otherwise this mode is forced for apps that use sort independent anti-aliasing. The SubPixel anti-aliasing modes should only be used for apps that are not performance critical.

By Checking this box you will turn off anti-aliasing for triangles that use alpha blending.

By selecting this Check Box you will force the use of Bilinear Texture Filtering in ALL D3D applications. Bilinear filtering is a way of making 3D scenes look smoother but may cause performance decreases. Bilinear Filtering is most noticeable in scenes where textured objects stretch off into the distance, like a road in a racing game. With Bilinear Filtering turned on the road would appear much smoother.

This slider allows you to force texture filtering modes. Texture filtering is a way of making 3D scenes look smoother. This is accomplished by “filtering” the different levels of detail in a texture so that the there is a smooth transition between them. Texture Filtering is most noticeable in scenes where textured objects stretch off into the distance, like a road in a racing game. With Texture Filtering turned on the road would appear much smoother. Bilinear filtering is the fastest type of texture filtering and usually is sufficient for most applications. Trilinear filtering produces an even smoother result than Bilinear and is on the Starfighter card will not effect performance.

Checking this box enables the use of the Real 3D cursor. Unchecking the box will restore the windows default cursor.

Checking this box enables the use of the Real 3D Background as the desktop wallpaper. Unchecking the box will restore the windows default wallpaper.

Restore the D3D default settings.

This slider controls the Mip-Map bias. Mip-Map bias determines the sharpness of detail (textures) to be applied to objects in a 3D scene. The lower the number the higher the detail. A lower Mip-Map Bias (Higher detail) may cause a slight performance decrease and shimmering in the scene. A higher Mip-Map Bias (Lower detail) may cause blurriness in the scene. A value of -1.0 is a good compromise.

By checking this box you enable Auto Mip-Mapping. Starfighter will generate Mip-Map levels of textures automatically in D3D apps. This can increase performance in some apps.

Use this to select a D3D settings scheme. Loading a scheme will set the D3D Settings according to the values saved in the scheme. For example, by selecting the scheme named “Default” you will set the D3D Settings to their default values.

If you uncheck this box the “D3D Advanced” tab will not load the next time you open the Display Properties dialog box. By selecting the “Select Tabs” button on the “Real 3D” tab you can select which tabs will load.

This button will display a list of available tabs to display. By checking the box by the name of the tab you will enable the display of that tab the next time you open the display properties dialog.

This button will copy the information displayed on this page into memory. You can then paste the text into any application by pressing “ctrl+v”.

This button will allow you to save the information displayed on this page as a simple text file

Trilinear filtering is a way of making 3D scenes look smoother but may cause performance decreases. Trilinear Filtering is most noticeable in scenes where textured objects stretch off into the distance, like a road in a racing game. With the Trilinear LOD Dither weight set to full blending the road would appear much smoother.

Restore the OpenGL default settings for Mip-Mapping, Trilinear Filtering, Ignore Scissor, Ignore Viewport, and Use Texture For Line Stipple.

By Checking this box you will force the StarFighter drivers to Ignore Scissor Test. Some applications use Scissor test as a quick way of clipping the viewport window. This will cause a severe degradation in performance because Scissor Test is not supported by the StarFighter Card. By ignoring Scissor test performance is gained and in most cases no other side effects are seen.

By checking this box you will force the StarFighter drivers to Ignore Viewports that are defined out of range. Some applications define viewports that are slightly larger than the actual viewing window. This will cause a severe degradation in performance because all rendering is done in software. By ignoring the viewport out of range performance is gained because rendering is again performed in the StarFighter hardware.

By checking this box you will force the StarFighter drivers to use Textures for Stippled Lines. Stippled lines are lines with dashes or breaks. Some applications use stippled lines for visual effects or for grids. Stippled lines are not supported by the StarFighter hardware and applications using them will experience performance degradation. By enabling the use of textures for stippled lines the StarFighter hardware approximates the line stipple by applying a texture to the line. In most cases this is visually acceptable and will greatly increase performance.

Use this to select an OpenGL scheme. Loading a scheme will set the Mip-Map Bias, Trilinear LOD Dither Weight, Ignore Scissor, Ignore Viewport, and Use Texture For Line Stipple controls according to the values saved in the scheme. For example, by selecting the scheme named “Default” you will set the Mip-Map Bias, Trilinear LOD Dither Weight, Ignore Scissor, Ignore Viewport, and Use Texture For Line Stipple controls to their default values.

Save Changes and Exit

Don’t Save Changes And Exit

If you uncheck this box the “Information” tab will not load the next time you open the Display Properties dialog box. By selecting the “Select Tabs” button on the “Real 3D” tab you can select which tabs will load.

This slider adjusts the Performance vs. Image quality of D3D apps. For more control or information concerning this click on the ‘‘Advanced D3D’’ button.

Click on this Check box to Enable/Disable the Color Controls.

Click on this button to bring up the ‘‘Advanced D3D Settings’’ dialog box.

Click on this button to bring up the “Advanced OpenGL Settings” dialog box.

Use these check boxes to select which tabs you would like to see in the Configuration Applet.

Check this box to load the ‘‘Color’’ tab.

Check this box to load the ‘‘TV Out’’ tab.

Check this box to load the ‘‘Information’’ tab.

Use this slider to adjust the brightness of your TV display.

Use this slider to adjust the brightness of your TV display.

Use this slider to adjust the saturation of your TV display.

Use this slider to adjust the saturation of your TV display.

Use this slider to adjust the flicker setting of your TV display.

Use this slider to adjust the flicker setting of your TV display.

Change the video format of the TV.

Change the video format of the TV.

Change the video format of the TV.

Move the TV display screen to the left.

Move the TV display screen to the right.

This is the current value for the horizontal display position.

This box allows you to change the horizontal display position of your TV.

This button allows you to enable or disable S-video.

This button allows you to enable or disable composite.

This box allows you to change the output settings of S-video and composite.

Use this to select a TV output scheme. You can save your current settings into a scheme and you can load your saved schemes.

Use this to select a TV output scheme.

Use this to save your current TV output settings into a scheme.

Use this to delete your current TV output scheme.

Use this to reset the default TV output settings.

Check this box to enable or disable TV out connection.

Check this box to enable or disable macro-vision.

This picture displays your current TV connection status.

Move the TV display screen up.

Move the TV display screen down.

This is the current value for the vertical display position.

This box allows you to change the vertical display position of your TV.