Subject: Re: NVidia Quadro4 980 XGL card + IDL
Posted by Rick Towler on Thu, 02 Feb 2006 19:16:41 GMT
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raval.chintan wrote:
> Dear All,
>
> I am using NVidia Quadro 4 980 XGL. One can visualize stereo images
> using Quad Buffer , available on this card. Proper interface
> (functions) for rendering images using this buffer are given in
> OpenGL.. Quad Buffer includes Left and Right Buffer ,which will be
> rendered one by one.For Visulization of images one needs, shutter
> glasses with infrared emitter to be connected with graphics card.
>
> Will it be possible to render an image with use of this buffer on IDL
> Draw widget? or in other way ,Will it be possible call this
> interface(functions) of OpenGL through IDL?

No, and Yes. IDL's openGL implementation is fairly generic and doesn't support many (any?) vendor specific extensions like the quadro's quad-buffer stereo API. So you can't do this in IDL. But, there are ways to do this from within a DLM. I just don't know if I would want to do it :)

You would be better off learning how to control the shutter glasses from within IDL (hack them to run off of the serial port?) and then modify IDL's IDLgrView/IDLgrModel parameters to render the left and right eye views as you run your glasses. My camera object makes rendering the left and right eye views easy. It also has the added bonus of allowing you to easily manipulate your model as you view it.

http://www.acoustics.washington.edu/~towler/RHTgrCamera.html

I've played around with this using multiple monitors, Saran wrap (http://www.sas.org/E-Bulletin/2003-06-20/labNotesAS/body.htm l) and polarized glasses. I have also used multiple projectors with polarizing lenses. It can be tricky setting up the views/monitors/viewer so you get a "natural" 3d effect but it can be done.

Dick Jackson has worked with this as well and has been quite successful. He could probably give you more tips on setting up views if you decided to go this route.

> In IDL help i found that IDL uses two type of rendering 1) Hardware
> (OpenGL) 2) Software.
> I also found the difference between hardware and software rendering in
> IDL.

The difference? There is only one? ;)

-Rick