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Subject: Re: NVidia Quadro4 980 XGL card + IDL  
Posted by [Dick Jackson](#) on Thu, 02 Feb 2006 21:18:32 GMT  
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Hi Chintan,

"Karl Schultz" <k\_\_\_\_schultz@rsinc.com> wrote in message  
news:pan.2006.02.02.16.58.59.609000@rsinc.com...

> On Thu, 02 Feb 2006 00:01:57 -0800, 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 Visualization of images one needs, shutter  
>> glasses with infrared emitter to be connected with graphics card.

Looking at Display Properties for my NVIDIA Quadro FX 1300, it looks like  
some graphics cards can support a dozen or more different types of stereo  
viewing (red/blue glasses included!). I haven't been able to use these  
directly from IDL yet, but Karl's idea below is very promising. (what I  
\*have\* done is figure how to get left-eye view to one monitor, right-eye  
view to another, and let some nice hardware get those views to your two  
eyes:

<http://www.planar.com/Advantages/Innovation/docs/ds-planar-stereo-mirror.pdf>  
)

>> 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?

>

> This is not supported in IDL 6.2, nor will it be in 6.3. We're getting  
> enough requests for it that it may be in a release soon.

>

> Although it is not documented or supported, you can make OpenGL calls from  
> C-language DLM's if you do things carefully. To do what you want, you'll  
> probably have to subclass IDLgrView with IDL code where you would override  
> the Draw method. You would also write a C DLM that calls glDrawBuffer  
> with GL\_BACK\_RIGHT.

>

> By the time IDLgrView::Draw is called, the correct GL context is in  
> place and IDL has already called glDrawBuffer with GL\_BACK (implies  
> GL\_LEFT as well). Your new Draw method would call the C DLM code to call  
> the superclass Draw method, call the C DLM code to set GL\_BACK\_RIGHT, and  
> then call the superclass Draw method again.

>

> Presumably, you would jiggle the viewing transform matrix before each call  
> to the superclass Draw to simulate the eye separation. Finally, there's  
> probably some call that needs to be made to activate the stereo mode, but  
> I don't know enough about that yet to do more than mention it here.  
>  
> I can't say for sure if this will work, but may be worth a try.

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Cheers,

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-Dick

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