
Subject: Re: NVidia Quadro4 980 XGL card + IDL
Posted by [raval.chintan](#) on Fri, 03 Feb 2006 06:22:05 GMT
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Karl Schultz wrote:

> 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.
>>
>>
>> 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.

If i am correct with my limited knowledge of IDL, IDLgrView class does not have the draw method. IDLgrWindow , IDLgrModel,IDLgrBuffer have draw method. Now the question comes that which class's draw method i should override. IDLgrWindow , IDLgrModel or IDLgrBuffer? Where will C dlm render the Left and right image? Will it be on IDL's window or on C's window?

It would be helpful if you can provide sample code or detailed explanation of your suggested technique.

>
> 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.
>
>> 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.
>
> Sorry, I don't know what you are getting at.

What I meant here is that Quad Buffer rendering is also a type of hardware rendering and IDL should automatically detect this.

>
> Karl

-Chintan
