Subject: Re: Frame Grabber Support?
Posted by rivers on Sun, 03 Nov 1996 08:00:00 GMT
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In article <327A8E89.7B5@rit.edu>, Tuo Wu <txw8826@rit.edu> writes:
> Hi,everybody,
>
> I am a new comer in the world of IDL. I have just taken a research
> project which requries capturing RGB images from a 3-CCD camera using a
> Oculus TCX frame grabber (2 MB TCX, 1024x512 / 1x24 bits). Since all the
> following image processing and analysis will be done in IDL, it would be
> best to use IDL from very beginning. The technical support of Research
> System has informed me that there is no such interface in IDL to support
> any frame grabber. I wonder anyone here can help me out with this
> matter, either providing an interface for IDL to support the frame
> grabber, or let me know which RGB frame grabber (at least 2 MB/1x24
> bits) can be supported by IDL.

There are 2 ways to support a frame grabber in IDL, and I have done both.

1) You can write a true IDL device driver for it. To do so requires that you obtain a copy of the IDL Internals Manual. The advantage of writing a true device driver is that you can use all of the standard IDL graphics and imaging routines (PLOT, TV, TVRD, TVLCT, XYOUTS, etc.) to do output and input from the device. The disadvantage is that it is a bit of work. Also, with IDL 5.0 about to be released, I think the graphics interface will completely change, and you will have work to do to make your driver work with the new version.

2) You can simply use CALL_EXTERNAL to do the operations you want to do with the device. You take the library of routines which the frame grabber manufacturer probably provided with it, make a thin wrapper layer so the routines can be called from IDL with CALL_EXTERNAL, make some simple IDL routines which do the CALL_EXTERNAL, and you are done.

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