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Subject: Re: Frame Grabbers with IDL

Posted by [Troy Klein](#) on Mon, 25 Nov 1996 08:00:00 GMT

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Rolando Raqueno wrote:

>  
> Does anybody have experience with having IDL control a frame grabber  
> (any recommendations) hosted by a PC?  
>  
> Thanks  
>  
> RVR

It can be done. I'm currently grabbing frames using IDL 3.6.1 on a 486 PC running Windows 3.1 with a Dipix frame grabber.

There were two main problems encountered:

- 1) IDL call\_external uses the argc, argv calling convention, while the windows library supplied by Dipix does not. So I had to have someone write a library to convert the function calls.
- 2) IDL on the PC seems to break up its memory allocation for variables into 64KB chunks.  
That is, you can't transfer more than 64KB of data at a time.

More explanation of 2):

The images that I am grabbing are exactly 128KB. If I create space to hold the image ( IDL> im=intarr(256,256) ), and then pass the variable to the DLL, it is passed by reference, i.e. the DLL gets the address of the first element of image. I can then start filling the image with valid data from the DLL. However, when I cross the 64KB boundary, bad things start happening. Apparently the last 64KB allocated for the image by IDL do not directly follow the first 64KB in memory address space. Therefore, I must transfer each image in two pieces. Not a big deal, but it took us a while to figure out what the problem was.

Has anyone else run into the 64KB limit on a PC, or am I dreaming?

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Troy Klein, Johns Hopkins University / Applied Physics Laboratory  
Johns Hopkins Road, Laurel, MD 20723  
E-Mail: troy.klein@jhuapl.edu

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