

# Re: designing of frame grabber

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- *From:* "linnix" <[me@xxxxxxxxxxxxxxxxxxxxxx](mailto:me@xxxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* 10 May 2006 10:19:07 -0700
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Michael A. Terrell wrote:

linnix wrote:

cs\_posting@xxxxxxxxxxxxx wrote:

me wrote:

The rf modem involved in this part of project is transmitting only digital data, so I think I just need to take care of data(in bits of 1's and 0's which are coming ), since they are already in digital form only so I dont require any video processor or ADC.right?

In that case you don't need to worry about USB or cameralink either since you are getting data from the radio modem. All you have to do is buffer and prep it for the ultimate consumer.

Pity the guy working on the flight system though. Easiest fix up there is probably a little processor module running linux, if that supports the camera in question.

We are working on a similiar system, but it's on the ground. We are using a PCI (USB is too slow) frame grabber using the Phillips SAA7134. Resolution is good enough at 700x500. However, there are several problems:

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1. Image is monochromatic only.  
Still trying to figure out if its a hardware or software issue.  
I know color is an add-on to composite video.  
When bandwidth is limited, the color signals might not get through.

Or the software is not decoding the color data.

2. Hard to track start of frame.  
The picture has a dark bar near the bottom, which could be the retrace dead time. But sometimes it misses the frame altogether.

3. Need 8 to 12 input jacks, which is difficult to place on the PCI bracket without a custom connection system.

Any suggestions?

How about a second plate, or use a single connector with a harness to convert single inputs to the single connector?

Yes, but they have to be shielded cables.  
The alternative is an external video mux before coming to the internal board.  
There would be channel selection logics between them.  
Digital selection cable is probably easier to connect than multiple analog cables.

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Service to my country? Been there, Done that, and I've got my DD214 to prove it.  
Member of DAV #85.

Michael A. Terrell  
Central Florida