

Re: Video overlay generator

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- *From:* Andreas <blooddawn@xxxxxxxx>
 - *Date:* Wed, 15 Aug 2007 00:14:46 -0700
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On 13 Aug, 15:32, bloodd...@xxxxxxxx wrote:

Hi!

Im starting a design process for a utility that needs to implement a video overlay generator. Previously we've been using the "classic" STV5730-chip for text-overlay but since this IC is quite outdated and hard to get hands on we've decided to implement our own overlay generator.

The reason for this is that we want to be able to display graphical items (such as a customer logo) and also because we need delegate control of synchronization signals.

The video signal is CVBS in/out and could be either PAL or NTSC. We've thought of using these three major parts to implement the design: a video decoder (f.e. Texas Instruments TVP5150) that feeds a digital video stream into a FPGA (f.e. Xilinx's Spartan 3), that performs blending between the digital video stream and a "overlay buffer" that gets generated from a microcontroller, and finally into a video encoder (f.e. Analog Devices ADV7171).

I would really appreciate some feedback or input to this solution if someone out there has done something similar.

Should I count with a noticeable video quality loss due to the AD -> DA conversion?

Our application has some specific requirements, f.e. there is a frame counter that has to be updated each frame which probably will require us to implement a character generator inside the FPGA.

Do you think this is a viable solution - is there any existing ICs that will do some or most of this work for me?

Best regards,
Andreas Eriksson

No suggestions?

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