

Re: Rework Schroff VME terminators to 3.3V

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- *From:* Joerg <notthisjoergsch@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Sat, 24 Feb 2007 19:53:00 GMT
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Bob wrote:

"Joerg" <notthisjoergsch@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message [news:pC%Dh.781\\$LF6.719@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:pC%Dh.781$LF6.719@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx)

John B wrote:

On 24/02/2007 Joerg wrote:

Hello Folks,

We want to use a VME box that was meant for 5V VCC. The terminators are the electronic plug-in style gizmos from Schroff (60800 series). They have a L272M (power opamp) on there which per datasheet doesn't operate below 4V. We need to go to 3.3V. Has anyone found a quick and easy mod for this?

I assume you're looking for 1.65V to drive the terminations. Couldn't you add a small -3.3V bias supply for the negative rail, as most of the current will be drawn from the +3.3V rail.

More like 2V bias since you typically want to stay a bit off the thresholds in

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case someone lets a bus line go for too long or doesn't have Schmitts. There won't be any negative supply other than the usual (weak) -12V rail. I'll probably need a L272 pin-compatible power opamp that can live with 3V.

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Regards, Joerg

<http://www.analogconsultants.com>

Joerg,

For SSTL and HSTL logic families, their termination supplies are commonly known as "VTT". They can and must be able to source as well as sink current. They are typically fixed at VDD/2 but some supplies allow other options. There are linear (opamps) and switching versions of these VTT supplies available.

If you go to www.ti.com and search for "VTT" you'll see a bunch of these. Here is a linear version that I've used with good success:

Thanks, I'll check that out.

<http://focus.ti.com/lit/ds/symlink/tps51100.pdf>

That one still requires 5V, like the L272 does. Which we don't have anymore. They even provided potmeters on those terminators so you can set your own VTT but unfortunately the L272 quits working correctly below 4V.

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Regards, Joerg

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