

# Re: SPICEing The Inductance of a Trace Over a Ground Plane?

*Source:* <http://sci.tech-archive.net/Archive/sci.electronics.design/2007-09/msg03364.html>

- *From:* D from BC <myrealaddress@xxxxxxxxxx>
- *Date:* Tue, 18 Sep 2007 04:31:32 GMT

On Mon, 17 Sep 2007 20:38:29 -0700, John Larkin  
<jjlarkin@xx> wrote:

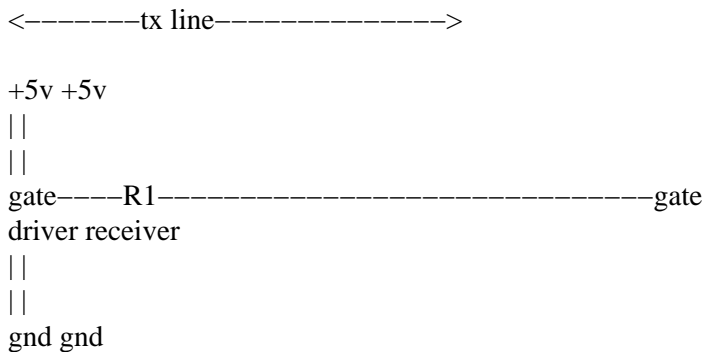
On Tue, 18 Sep 2007 02:27:00 GMT, D from BC <myrealaddress@xxxxxxxxxx>  
wrote:

[snip]

Aside from the 50% signal loss, invalid CMOS levels and a hot pulse generator...the great is the 10cm strip acts like it's not even there....if I got that right..

D from BC

You can also "source terminate" a transmission line....



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If  $R_1$  is close to the driver and equal to the line impedance, you get a perfect 5 volt step at the receiver, no problems, no ringing, no static power dissipation.

John

I think I read somewhere that open ended transmission lines can reflect..

I haven't given it much thought yet and don't know if it's a digital concern.

I'm wondering if PC motherboards use some sort of termination for long PCB traces passing high speed digital..?

D from BC

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