

## Re: Curve tracers

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On Wed, 28 Jun 2006 11:58:17 +0200, Gerhard Hoffmann <[spamtrap@xxxxxxx](mailto:spamtrap@xxxxxxx)> wrote:

4) A customer of mine used a curve tracer to check the connectivity of signal lines to BGAs. Not for mass production, but for lab prototypes. You can clearly see the protection diodes to vcc and gnd. Removed a lot of doubt if sth. did not work as expected.

In the 70s – 80s I worked for a large mainframe computer company. The models were based on ECL technology. Someone figured that a curve tracer was great for telling if a net had its source, load, and resistive termination. Any part of the characteristic curve missing indicated a bad connection.

The big Tek curve tracers were spendy for this and 99% of the functionality was not needed. One of the engineers whipped together a little box with an AC transformer, a pot and a resistor or two. Connected to the X-Y inputs of a scope you had all you needed. The I input on the Y axis of the scope was backwards with the simple configuration, but who cares. Good enough for our needs and cheap.

I made one and use it from time to time for looking at what is connected to a net. Many technologies don't have opposite polarity diode signatures on the source and load like the ECL did, but it can still be helpful, as Gerhard mentions.

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