

Re: repairing broken traces on a PCB

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- *From:* Spehro Pefhany <speffSNIP@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Fri, 24 Feb 2006 17:28:25 -0500
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On Fri, 24 Feb 2006 23:08:02 +0100, the renowned "Frank Bemelman" <f.bemelmanq@xxxxxxxxxxxxxxxxxxxx> wrote:

"Spehro Pefhany" <speffSNIP@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> schreef in bericht news:3i0vv195e58n088sddpu25m71tunhsf6hh@xxxxxxxxxxx

On Fri, 24 Feb 2006 22:35:36 +0100, the renowned "Frank Bemelman" <f.bemelmanq@xxxxxxxxxxxxxxxxxxxx> wrote:

"samIam" <him@xxxxxxxx> schreef in bericht

[news:pzHLf.17\\$Ry.12@xxxxxxxxxxx](mailto:news:pzHLf.17$Ry.12@xxxxxxxxxxx)

I have broken traces on a PCB I recently etched. Just a handful ...

I am wondering how some of you repair them. Trying to tap into your

body

of experience with this.

More interesting is to hear about experiences in finding hairline cracks in tracks.

I rather enjoy paying for 100% electrical inspection. Let the machines find the problems.

Well, I have a board here worth \$100 perhaps, that certainly passed all tests, but fails now. When I bend it, it works. I should add, that after bending it ~15 times it stayed in failure mode. I found one decoupling cap standing in the air, some flux rubbish (?) between a few

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legs of a TQFP, but nothing that causes the failure. Ditched it already.

Probably wise. I've found such problems, out of sheer stubbornness, but it's hardly cost-effective in itself, but necessary sometimes if you want to make sure it isn't something more ominous than a single failure.

I wonder what the dropout percentage is for tested boards, and if it is worth paying for.

Around 1% for moderate quantity 2-sided boards, IME, but hair shorts are more likely, and it's not that sensitive to design rules (10 mils and 8 mils are about the same).

Difficult to answer of course, I simply have excellent experience with untested boards, even with 7mil tracks/distance. Seems that more goes wrong with the assembly of parts, imo

We got a batch from a Taiwan manufacturer one time that was more than 20% bad. That was a long time ago.

Best regards,
Spehro Pefhany

—
"it's the network..." "The Journey is the reward"
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