

Re: PCB photo etch using inkjet?

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- *From:* "Abstract Dissonance" <Abstract.Dissonance@hotmail.com>
 - *Date:* Fri, 17 Feb 2006 16:52:17 -0600
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"Abstract Dissonance" <Abstract.Dissonance@hotmail.com> wrote in message
news:11vc94490onpuac@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

"Abstract Dissonance" <Abstract.Dissonance@hotmail.com> wrote in message
news:11vc40in2caafc@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

"Steve Butler" <ksbutler@xxxxxxxxxxxx> wrote in message
[news:43f5b79a\\$0\\$17120\\$5a62ac22@xx](mailto:news:43f5b79a$0$17120$5a62ac22@xx)

ink doesnt dry quick enough consequently it runs or smudges
edges
I have done a board or two printing artwork to plain paper
and
exposing for a minute or so in sunlight , worked well but
now
use Laser printer and transparencies for development

Steve

"Tom Biasi" <tombiasi@xxxxxxxxxxxxxxxxxxxx> wrote in
message
[news:yRhJf.691\\$nu6.305@xxxxxxxxxxxx](mailto:news:yRhJf.691$nu6.305@xxxxxxxxxxxx)

If you're talking about the
photographic process where
a
sensitized board is exposed
to light with the artwork on
a transparency, then the
inkjets typically don't get
dark
enough for fine line work.
Laser toner is much more
opaque

Re: PCB photo etch using inkjet?

than any of the inkjet inks
I've seen so far.

JazzMan

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Also there are methods that rely on the
fusing of the toner to the
board. Ex. PNP Blue.

I tried printing the traces on a transparency with my inkjet and it turned out almost perfect. There were no smudges or anything and it looks pretty dark(it has a green hue to it though and I'm not sure if my printer is using the black ink completely or not.) I'd say its 99% perfect as far as the traces are concerned. There is a little "streak" about 1 mm long through one of the traces but that is easily fixed. I will go ahead and try it and see what happens. Hopefully the ink is thick enough to block the UV light. I might post my results if they are decent.

Jon

So far so good. I was able to get the layout on perfectly. I could not place a "weight" on the transparency since the ink would not dry. I have to cut the board to size and etch it. I was able to get about .008 trace width. Don't know for sure since I didn't use any traces smaller than 0.040 but my - sign's have a smaller than 0.01in so I guess its about 0.008.

So I guess everything is ok now. The etching should be routine(well gotta figure out the proper time). The next hurdle will be the drilling.

Jon

The etching went almost perfect as far as the traces are concerned. It was a little messy and the process wasn't perfect as far as efficiency and ease of use but it was cause the way I did the tank and the stuff I used. One thing I didn't expect was for the etchant to screw with the airator I used. It was one of those stone string things that let the bubbles through. The etchant ate through some of the stone for some reason ;/

The board itself is ok though. One of my G's(for ground) got ate through a

Re: PCB photo etch using inkjet?

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little but everything else is ok.

Next thing is the drilling ;/ I figure this will be the toughest but if it goes like the others then it should be a piece of cake.

One thing I should mention though is that using the inkjet transparency method lets use reuse the transparencies pretty easy. You just was off the ink(I used the developer and it came right off. I'm not sure if it would work with the toner though.)

Jon

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