PCB "Fab-In-A-Box"

Our "Direct Etch" technique enables you to transfer toner printed images in minutes from any conventional laser printer with high etch precision.

Make SINGLE and DOUBLE-sided circuit boards up to 8"x10" in under 10 minutes with trace widths down to .005" using any standard 1,200dpi B&W laser printer (or conventional photo-static copier).

There is also a "MINI" kit. See contents below for differences in the two kits.

ALL "PulsarProFX" PRODUCTS:

KITS:

- PCB "Fab-In-A-Box"	50-1003
- PCB "Fab-In-A-Box" (MINI kit)	50-1006
- Combo (PCB + DecalPro)	50-1004
- DecalPRO (10min Graphics)	50-1001

LAMINATOR:

- Applicator (12" 120 vac)	50-1301C

SUPPLIES:

- PAPER: Toner Transfer Paper	50-1101
- FOIL: GreenTRF (Etching)	50-1225
- FOIL: WhiteTRF (Silkscreen)	50-1226
- FOILS: "DecalPro"	50-1201 ~ 50-1299
- CARRIER BOARD: "DecalPro"	50-1503

COPPER CLAD: 8" x 10"

- 2pk Rigid .032" Single Sided	50-1501
- 2pk Rigid .032" Double Sided	50-1502
- 2pk Flex .005" Single Sided	50-1504
- 2pk Flex .005" Double Sided	50-1505

COPPER CLAD: 6" x 8"

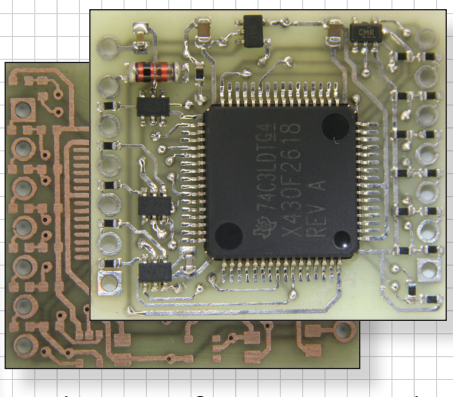
- 4pk Rigid .032" Single Sided	50-1507
- 4pk Rigid .032" Double Sided	50-1508
- 4pk Sampler (Mixed)... (.005" SS+DS and .032" SS+DS)	50-1506

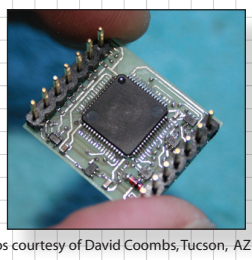
No more photographic negatives, expensive pre-sensitized UV boards or developing chemistry. Just Design, Print, Transfer and etch... done!

A Simple, Fast and Efficient way to make single, double and Flex PCB's, both thru-hole and SMT!

NO
- ☑ Negatives
- ☑ Darkroom
- ☑ Developing

"Fine-Line" Capability!
Create circuit boards with traces as fine as .006" using any standard B&W laser printer * and a suitable 10mil type laminator **





"This project uses 0402 resistors, 0603 caps, and a 64-pin LQFP device on .008" traces w/.006" air-gap, .020" vias, and .010" via holes."

Photos courtesy of David Coombs, Tucson, AZ

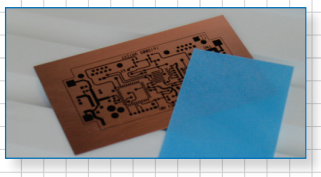
To achieve super-fine traces you must have fast etch times to eliminate under-cutting. By using 1/2oz copper (vs. conventional 1oz) coupled with an .032" fiberglass base, you get fast etch times, good rigidity, reduced overall project height and boards that cut using a standard paper cutter. (We also make paper-thin .005" FlexPCB which cuts with scissors!) See our website for our "Contact Etch" technique to etch these boards in under 2 minutes... without using an etching tank!

The Process Steps:

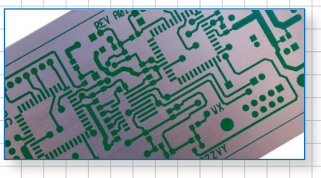
PRINT your PCB layout to the Toner Transfer Paper using any laser printer * (or conv. photo-copier)

FUSE the toner image to the copper board by using either a household iron or a suitable laminator **

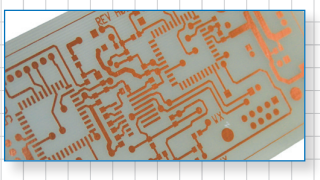
WATER BATH for 1 minute to release the toner image from the Toner Transfer Paper



SEAL the toner by covering and fusing the GreenTRF the same way as the paper above

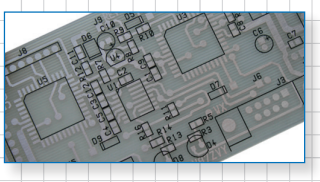


ETCH the board. When done, wipe off the toner and GreenTRF with Acetone... all done!

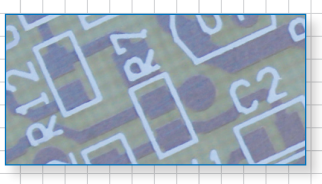


Optional Steps

SILKSCREEN layer can be added to the component side after the board has been etched



WhiteTRF foil can be added over the black image for a more conventional silkscreened look



Customer Comments...

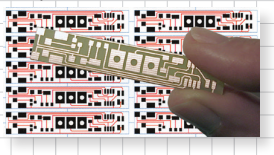
"Your system is truly excellent! Everything worked exactly as described. Having never created a pcb before, I couldn't believe how well they turned out."

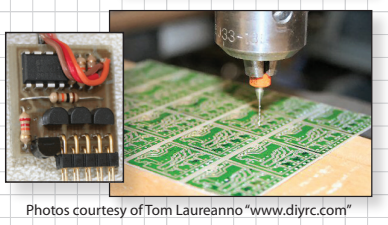
Brett J, Vancouver, BC CANADA

"My company has a pcb router, but I have to get in line to use it. I have the budget to send stuff out, but that takes time. Sometimes, I just can't wait! I ordered your system with a laminator. Great stuff! I am delighted with the performance. Nothing but success."

David E, Ph.D., Zeeland, MI

Ideal for proto-types and short-run custom fabricated in-house products!





Photos courtesy of Tom Laureanno "www.diyrc.com"

*** PRINTERS:** Use this product only on B&W laser printers (or conventional photo-static copiers). Note however, that BROTHER® and SAMSUNG® laser printers do not work well with our process due to their non-standard, very high-temperature toner formulations.

**** IRON vs. LAMINATOR:** Household irons can be used to reliably transfer circuit images to copper-clad boards with traces down to .015" wide (after simple calibration). Finer traces require greater control over heat & pressure by using recommended pouch laminators. See our site for info at "PCBfx.com".

Pulsar fx PROFESSIONAL

4611 Crow Creek Dr, Colorado Springs, CO 80922-4615

For more information about our techniques we invite you to visit our main website at PulsarProFX.com or call us at (850) 926-2009, 9am-5pm MST