Pulsar TONER TRANSFER SYSTEM

Make instant circuit boards using any laser printer or photocopier!

Simple 3-Step Process:
1. Print circuit layout directly to TTS paper
2. Iron the image to copper-clad board
3. Soak in water to remove paper; now ready to etch!

NO DARKROOM!
NO NEGATIVES!
NO CHEMICALS!
NO LOST TIME!

• Detailed instructions included for making single and double sided PCB's
• Also shows how to make custom full color decals for any application
• Sheet size: 8-1/2" x 11" (21.59cm x 27.94cm)

182-1003-ND (10 Sheet Pack) **$14.95**

NEW! PCB Fabrication Starter Kit

Everything that you need to make high quality single and double sided PCB's in 15 minutes.
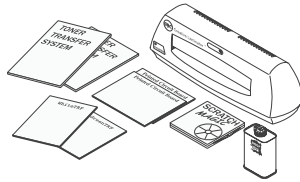
Kit Includes:
• 20 Sheets of TTS paper
• Green TRF
• White TRF
• 2 - 8 x 10 x .032" Single Sided PCB's
• 2 - 8 x 10 x .032" Double Sided PCB's
• 9" TIA Laminator - 120VAC

182-1024-ND   Complete PCB Fabrication Starter Kit for PCB's **$128.56**

NEW! DecalPro "Mini" Starter Kit

Everything to make B/W or full color decals. Perfect for adding an overlay to your box or project panel.

Kit Includes: • 20 Sheets of TTS paper • "Carrier" TRF (15') • 60' Foil Samples • KK-2000 adhesive spray • 3M "Low Tack" tape • 4.2 oz. Cleaner • Sample Images

182-1025-ND   DecalPro "Mini" Starter Kit for panels and box graphics **$57.12**

Toner Foils "Green TRF"

Simple 4-Step Process: 1. Transfer image to copper surface using the TTS paper 2. Iron on the Green TRF film 3. Pour 2 ounces Ferric Chloride into tray 4. Using an etchant soaked sponge, rub away the unwanted copper. (Disposable gloves required)

• Works in conjunction with TTS paper • Completely seals the toner • ZERO pitting • Able to use heavier copper boards • Size: 8" Wide x 15'

182-1021-ND **$8.95**

Toner Foils "White TRF"

Use the White TRF for adding "silkscreen" artwork to your board! Simply place the white TRF paper over your exposed toner "silkscreen" and apply heat to transfer the white pigment onto the toner which is fused to your PCB. Perfect for finishing off your prototype boards and giving them a professionally silkscreened appearance. • Size: 8" Wide x 15'

182-1022-ND **$8.95**

Printed Circuit Boards - 2 Pack

Copper Clad Boards
1/2 oz. Copper

8.00

10.00
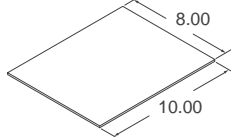
182-1020-ND	PCB Double Sided, .064", "8x10", 1/2 oz., 2 Panels	**$24.95**
182-1017-ND	PCB Single Sided, .032", "8x10", 1/2 oz., 2 Panels	**$16.95**
182-1018-ND	PCB Double Sided, .032", "8x10", 1/2 oz., 2 Panels	**$17.95**

GC ELECTRONICS
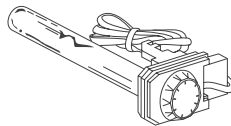
Etching Solution Heater

Fits in tank and heats solution up to 38°C (100°F). Used to further reduce etching time. Built-in adjustable thermostat controls temperature continuously to 100°F (38°C). 120V AC/100 W Max.

GC392-ND **$20.47**
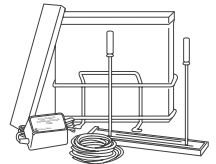
Etch Resist Ink Pens

Black felt tip pen for making resist circuits directly on PC boards. Dries instantly for neat, easy application.

GC220-ND   Standard Size - draws lines approximately 1/32" (.79mm) wide **$4.19**
GC222-ND   Fine Line - draws lines as thin as 1/64" (.40mm) wide **$4.46**

GC ELECTRONICS

Professional PC Board Power Etching System

A semi-automatic etching device for use in labs, schools, prototype shops and for limited PC board production. Air pump agitates etching solution for fast, very even etches. Handles up to two 8" x 10" (20.32cm x 25.40cm) PC boards at a time, either single or double sided.

Kit Contains: • 1 Etching Tank (1.25 Gallon capacity; 4.73 Liters) and Reservoir Lid, 12"H x 2 1/2"W x 10 1/2"L (30.48cm x 6.35cm x 26.67cm), (Molded Polyethylene — ABS PC Board Holder), Capacity • 1 Etch-O-Matic Power Agitating Pump, 120V AC Operation • 1 Permanent or Portable Tip-Free Base • 1 PC Board Holder and Handle • 4 Feet (1.22 Meters) of Supply Hose

GC394-ND **$96.03**

VECTOR ELECTRONICS & TECHNOLOGY, INC. Specialty Prototyping Boards

Fig. 1 · Fig. 2 · Fig. 3 · Fig. 4 · Fig. 5 · Fig. 6 (Front/Back views)
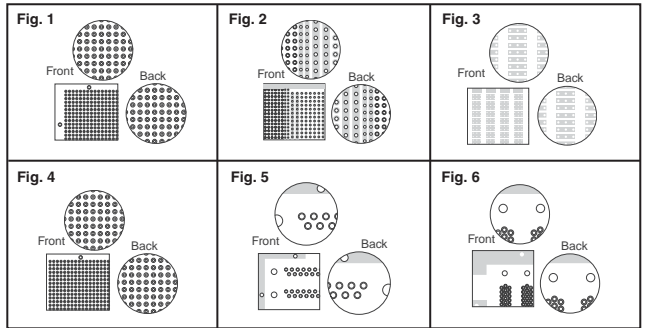
Material: FR-4

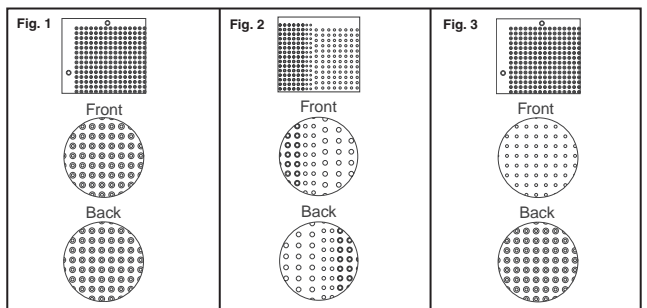| Fig.	Description	Dimensions W x L x H	Digi-Key Part No.	Price Each 1	10	25
1	Prototype Board, 2mm Grid, Pad-Per-Hole with J1 Connector,.025" holes plated thru	3.94" x 6.3" x .062"	V1253-ND	25.03	22.00	19.53
2	Combo Board, 2mm/.100" Grid, Pad-Per-Hole with J1, 0.25" and .042" holes plated thru	3.94" x 6.3" x .062"	V1254-ND	29.03	25.52	22.65
3	Prototype Board, 2mm Grid, Three Hole Solder Pads, 0.25" holes plated thru	3.94" x 6.3" x .062"	V1255-ND	17.53	15.41	13.68
4	Combo Board, 2mm/.100"/.050" Pad-Per-Hole 3-Grid Combo, 0.25" & 0.42" holes plated thru	3.94" x 6.3" x .062"	V1256-ND	17.53	15.41	13.68
5	Prototype Board, Standard Density 25, 15, 9 Pin, D-Sub, 0.39" Diameter Holes	3.94" x 6.3" x .062"	V1251-ND	20.00	17.59	15.61
6	Prototype Board, High Density 15, 26, 44, 62, 78, and 104 Pin, D-Sub, 0.39" Diameter Holes	9.19" x 6.3" x .062"	V1252-ND	26.01	22.87	20.30

Prototyping Boards

Fig. 1 · Fig. 2 · Fig. 3 (Front/Back views)

Fig.	Description	Dimensions W x L x H	Digi-Key Part No.	Price Each 1	10	25	Vector Part No.
1	Prototype Board, 2mm Grid, Pad-Per-Hole 0.25" Double Sided, PTH	3.94" x 6.3" x .062"	V2013-ND	17.53	15.41	13.68	8017
2	Combo Board, 2mm/.100" Grid, Pad-Per-Hole Double Sided, PTH	3.94" x 6.3" x .062"	V2014-ND	17.49	15.38	13.65	8018
1	Prototype Board, 1mm Grid, Pad-Per-Hole 0.25" Double Sided, PTH	3.94" x 6.3" x .062"	V2016-ND	34.03	29.92	26.56	8020
1	Low Cost Double Sided, .100 x .100" Grid, Pad-Per-Hole, PTH	4.00" x 6.00" x .062"	V2009-ND	11.52	10.13	8.99	8015
3	Low Cost Single Sided, .100 x .100" Grid, Pad-Per-Hole, PTH	4.00" x 4.00" x .062"	V2010-ND	7.33	6.45	5.73	8015-1
1	Low Cost Double Sided, .100 x .100" Grid, Pad-Per-Hole, PTH	6.00" x 9.00" x .062"	V2011-ND	16.93	14.88	13.21	8016
3	Low Cost Single Sided, .100 x .100" Grid, Pad-Per-Hole, PTH	6.00" x 6.00" x .062"	V2012-ND	10.59	9.32	8.27	8016-1

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