

Electro Form Stencils

Photo Etch offers a line of nickel-based, electroform stencils. Electroform stencils can be used for sub 20 mil pitch, 0402 or smaller components, micro BGA, wafer bumping, or extremely populated boards. Nickel stencils offer unsurpassed durability and paste release. Electroform stencils are manufactured by Photo Etch in the USA.

Laser Cut Stencils

PHOTO ETCH TECHNOLOGY offers superior quality laser cut stencils for many applications. We have multiple laser cutters providing the fastest speed and accuracy available anywhere. Laser cut stencils are usually utilized for applying paste to boards containing fine pitch components. The precision of a laser cut stencil helps eliminate bridging, improve paste release and improve consistency across the stencil.

Chem-etched and Multi Level Stencils

PHOTO ETCH TECHNOLOGY has multiple etching lines and 100% in-house capabilities to produce top-quality stainless steel stencils. We build both solderpaste and epoxy stencils, and many special application stencils. Input options include Gerber or AutoCAD files, film, and even the actual circuit board.

We have complete CAM capabilities to create files and make any modifications you may require. Our years of experience ensure that your stencils will exceed performance expectations.

All etch factors are done by our staff. All standard tooling is included in your stencil pricing. We stock all frame sizes and will produce foils to meet any special applications.

SPECIFICATIONS:

Stainless steel is 300 series and ranges from 2 mil to 25 mil thick.

Aperture opening tolerance is +/- 0.001 inch on fine pitch devices.

All stencils are Electro-polished at no additional charge.

We use polyester mesh with optional blackout to mount foil to frame

Our epoxy will withstand any known standard cleaning method.

We re-mount competitors' stencils for a nominal charge · Strict inspection procedures occur throughout the manufacturing process

Final inspection utilizes Acu-Gage inspection stations.

A copy of the inspection report and a Certificate of Compliance is shipped with all stencils.

OPTIONAL SERVICES:

Trapezoidal Etch helps facilitate paste release on fine pitch applications. A trapezoidal aperture is larger on the board/contact side and smaller on the squeegee side of the stencil.



This procedure is provided at no extra charge on laser cut stencils. Film and Board Scanning services are available should electronic data not be available. This option will allow you to produce a stencil in the absence of data and will assure that stencil matches the board.

We can also scan to generate data for circuit artwork. Centroid Data can be generated from your supplied Gerber data or film. This is a fantastic alternative to spending a day programming your pick-and-place machine by hand. We can supply center points and part rotation for all components and change the origin.

Complete data can then be sent back to you via modem, e-mail or ftp. Additional CAM capabilities are available for more complex requirements.

Precision Chemical Etching

Photo Etch Technology produces both decorative and engineered precision chemically milled parts in a variety of materials. We have complete CAM capabilities to produce artwork for photo chemical milling applications. Customer input ranges from AutoCad files to rough sketches. Our years of experience and state-of-the-art engineering tools allow us to create precision photo tools to control all phases of the manufacturing process.

SPECIFICATIONS:

Materials include copper, phosphorous bronze, brass, beryllium copper, stainless steel, and many others.

Temper includes annealed, half hard and spring temper.

Material thickness includes: 2 through 10, 12, 15, 16, 20, 21, and 25 mil

A variety of finishes are available, including gold, silver, tin, nickel, passivation and others.

We offer both prototype and production quantities - including scheduled shipments.

Parts can be delivered in panels or individual pieces.

CAM Scanning capabilities

PHOTO TOOL ENGINEERING/ PHOTO ETCH TECHNOLOGY has years of film scanning experience. We have multiple high-resolution scanners and CAM stations to enhance your tooling needs.

APPLICATION: Hand-taped artwork converted to electronic data One-up artwork scanned to produce panelized data Generation of soldermask or solderpaste data Creation of NC and/or route data Centroid data for pick-and-place machines Reverse engineering of existing circuit boards

INPUT: Silver and diazo film, paper, and existing circuit boards

OUTPUT: Gerber data, .DXF files, NC drill files, Centroid data, or laser plots (back to top)



Laser Photoplotting

PHOTO TOOL ENGINEERING/ PHOTO ETCH TECHNOLOGY has been a leading supplier of top-quality artwork and CAM services to the circuit board industry since 1987. Our reputation for providing superior service, quality and value continues to grow throughout the circuit board, metal etch and microwave industries. With multiple laser plotters, CAM stations and film scanning stations, we can quickly complete your tooling needs, and we provide the industry's fastest service.

LASER PLOTTING

1/4, 1/5 and 1/8 mil resolution
Film sizes as large as 36 x 38 inches
No premium charges for quick turn
Gerber RS274-X and RS274-D input
.DXF Gerber conversions · Silkscreen clips

CAM SERVICES

Panelization
Design Rule Check
Teardropping pads
Unused pad removal
Draw to flash conversion
AutoCAD Gerber conversions
Soldermask and Solderpaste generation
NC Drill/ route creation
Complete Gerber modifications

FILM SIZES

12 X 18 | 16 X 20 | 20 X 24 | 22 X 28 | 24 X 30 | 24 X 36 | 34 X 36 | 36 X 38 |