



Micron Laser Technology, Inc.

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Guidelines for order submission

Data preparation:

- Files should be Excellon II (EX2) format as specified in the standard: ANSI/IPC-NC-349.
- Use the job number to name the drill files (laserdrill.ex2 is not informative)
- Set fiducials as a separate tool in Excellon II (EX2) file (eg: T12) or (T1).
- Make each separate via depth and hole size a different tool identifier.
- Make all coordinates positive.
- 1 panel will be used to establish process parameters unless a singulated circuit is provided. A coupon set may be used if it includes different tools for all different types of field vias.
- Transmit data as an e-mail attachment, note the units used as well as any scaling.

Dielectric (only) Ablation, Panel Requirements:

- Three point alignment with an angle of 90 degrees to the three (3) fiducials: .050 - .070 diameter circles with .003" -.009" line width cross hairs fiducial or bowtie in Copper.
- The lower left most fiducial is ideally (.500, .500) or greater from the edge of the panel.

Additional Copper Ablation, Panel Requirements:

- Four (4) fiducials for each Copper target layer; robust fiducials; asymmetric layout.
- Fiducials: 7 to 12 mil line width in large (0.375" dia.) format [bowtie or crosshair],
- All tooling holes (aoi) must be indicated on each Diazo and/or in file(s).
- Indication of both top and bottom layer can be tooling holes, chamfered corner or other.
- Via Access opening sizes will be determined by the SIS submitted with the order.

Order submission Guidelines (Materials to be included with ALL shipped orders):

- A completed **Subcontract Information Sheet**
 - Via Depth, Diameter, Count, Dielectric type and Reinforcement (if applicable).
 - Outer layer as well as target layer(s) Copper thicknesses.
 - Panel Orientation information and the drill file names, as submitted by email.
- For copper drilling, **Diazos** for each (drilled to) target layer, unless provided earlier.

