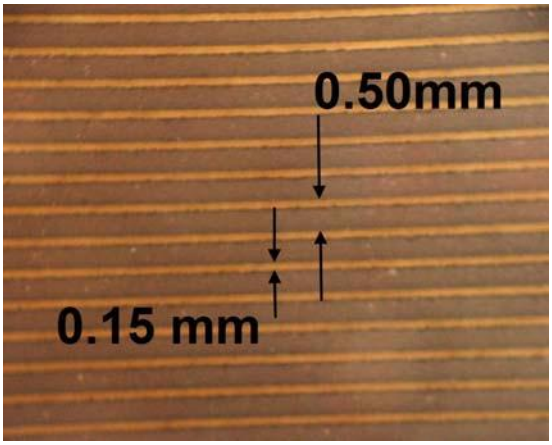
FlexAblaser
A Polymer film Ablation Machine

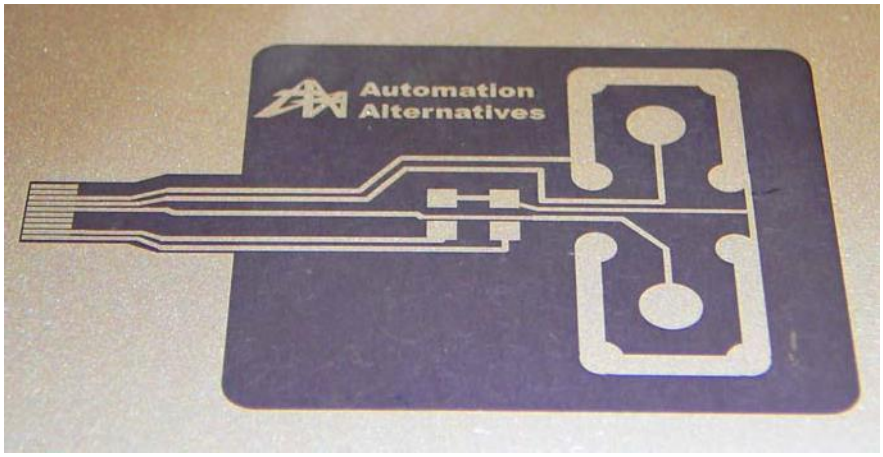
FlexAblaser is capable of fine line and mass ablation of common film polymers. Developed primarily for ITO ablation, this new system is capable of micro-ablating other conductive and non-conductive inks, including silver and carbon. A solid silver, carbon or carbon over silver print can be rapidly converted into a high definition circuit by FlexAblaser. Something impossible to do with conventional screen printing or ink jet processes. Avoid the registration issues with printing carbon over silver in a Ziff tail application! Simply print carbon over all of the silver traces, and let FlexAblaser remove the carbon from between the silver conductors. With camera registration carbon removal will separate conductors and guarantee that the remaining carbon will seal the silver, thereby preventing migration. Speed of the process has shown that FlexAblaser can ablate the carbon from all 12 conductors in a Ziff connector tail in less than 1/2 of a second!

Illustration showing Ablated carbon on PET film



Separation between conductors can be as small as 30 micron (1.2 mil). Standard Algorithms are available for 100 and 200 microns of separation. Other ablation widths can be programmed and

stored in a library for use in other applications. Mass ablation patterns can also be easily created by the software. Whether for Production or Prototyping, FlexAblaser's low cost of entry to demanding markets will surprise you.



Example of Silver ablation from 5 mil polyester. Excellent for fine line definition of 0.5mm pitch tails and Prototype production.

A You Tube video demonstrating the above circuit being created is available at:

http://www.youtube.com/watch?v=Pn6vMJ-GufQ