

**DESIGN AND MANUFACTURING SERVICES** 



#### our mission statement

to satisfy OUR CUSTOMERS by: supplying TOP QUALITY assemblies,

> in a TIMELY manner, at a COMPETITIVE price.

#### company history

Polyfusion Electronics, located in Lancaster, NY has been serving the needs of varied industries since its incorporation in 1975. These industries include manufacturers of robotics, medical equipment, energy management equipment, LED lighting, and others in need of circuitry for industrial process controls and automation.

Polyfusion has grown from a two man. "basement operation", into a multi-million dollar company employing dedicated professionals. Our High-Tech custom designed, 20,000 sq. ft. facility provides an environment conductive to excellent productivity and when coupled with stringent process control, results in the production of superior products.

Focusing on the design and production of low to moderate volume specialized electronic assemblies, Polyfusion is serving a niche market. In addition to its OEM work, Polyfusion produces a product line of its own for the Sound Reinforcement industry.

Whether designing, manufacturing or assembling for tis Contract Customers or its own product line, Polyfusion adheres to ISO 9000 standards to insure reliable and consistent products. Our Test and Inspection Department work hand in hand with the Production Shop to maintain the highest quality level and strive for customer satisfaction.

With over 37 years of experience, Polyfusion Electronics has developed into a well respected design and manufacturing company.

Specialty: Design and Manufacture of low to moderate volume, simple, complex, and ultra-sophisticated electronic systems, sub assemblies, and boards level products.

## design

CAD design of Printed Circuit boards, mechanical assemblies, enclosures, panel layouts, construction drawings, and test fixtures.



#### r+d

Our Research and Development lab, well equipped to facilitate robust design and accurate performance analysis, is staffed with experienced professionals.



#### schematic

Schematics, flow charts, block diagrams drawn in Auto-CAD for clarity, accuracy, and ease of updating.



#### SML

## design and manufacturing services



Stencil Printing of Solder paste and Adhesives is done by full automation to ensure accuracy and repeatability.

Thru-Hole components are installed on Radial and Axial insertion machines or by hand as required.



Pick and Place of surface mount components accomplished by precision, high speed robotics.



ELECTRONICS, INC.



Reflow Soldering is accomplished in a 10 zone, custom profile, Convection / Infra-Red combo oven.

Chassis , Panel, and Circuit Board wiring, electro-mechanical integration.







Hand craftsmanship of top level assemblies, where robotics are impractical.





## Inspect

## visual

Visual Inspection using Stereo Projection Microscopes, and miniature Cameras.



# automated optical inspection

Automated Optical Inspection (AOI) compares unit being inspected with Ideal Image in memory. Reading part numbers, color code, polarity indicators, and solder formations rapidly and accurately.



## automated

Automated Testing for complex, multifunction circuitry. Software driven for failure analysis and diagnosis.



### X-ray

X-Ray, with 90kV power, capable of seeing through ceramic, aluminum, copper, thin steel and all pcb materials to inspect concealed solder joints as found under BGA's, or power devices with bottom heatsink surfaces.







Manual testing of simple circuits for proper functionality and spec compliance.



#### Custom Fixturing

Custom test Platforms and Fixtures for application specific Testing.



30 WARD ROAD · LANCASTER, NY 14086 PHONE: (716) 681-3040 · FAX: (716) 681-2763 www.polyfusion.us