



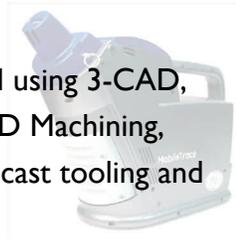
# Integrated Solutions for Custom Electro-Mechanical Components

Lupton Associates has provided build-to-print solutions since 1969. We are a manufacturing solutions provider of custom engineered components. If your design challenges include reduced lead-time, material specifications, dimensional accuracy or unit cost reduction, through domestic or offshore outsourcing, Lupton Associates can provide the most appropriate solution including:

- **Prototyping**
- **Metal Fabrication**
- **Short run stamping**
- **Machined Components**
- **Thermoplastic and Thermoset Molding**
- **Electronic Manufacturing Services (EMS)**
- **Castings**
- **Cable and Wire Harness Assembly**

## Prototyping

Quick development of a model using 3-CAD, Stereo Lithography, CNC/CAD Machining, traditional pattern techniques, cast tooling and component fabrication.



## Metal Fabrication

Precision metal fabrication technologies, from low-volume processes (sheet metal fabrication to plasma cutting) to high-volume, off-shore progressive die stamping for consumer goods.



## Short Run Stamping

Unique stamping process reduces costs and improves part-to-part repeatability. Steel die inserts are fitted in a master die holder to blank, pierce and form sheet metal using traditional mechanical stamping presses.



## Machined Components

Extensive knowledge and capabilities in the machining of aluminum extrusions, castings, polymers, liquid cooled cold plates and exotic high strength alloys.



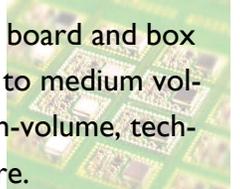
## Thermoplastic and Thermoset Molding

CAD/CAM design for thermoforming, injection molding, rotomolding, blow molding, compression molding, reaction injection molding (RIM), and plastic fabrication.



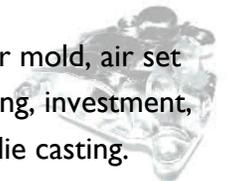
## Electronic Manufacturing Services (EMS)

A total solution for printed circuit board and box build assemblies. Answers for low to medium volume projects domestically and high-volume, technically challenging projects off-shore.



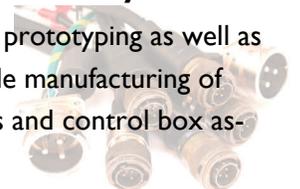
## Casting

Process expertise includes plaster mold, air set sand, aluminum and zinc die casting, investment, and aluminum and zinc graphite die casting.



## Cable and Wire Harness Assembly

Using domestic engineering and prototyping as well as off-shore production, we provide manufacturing of cable assemblies, wire harnesses and control box assemblies.



When time to market and product cost objectives are critical, Contact Lupton Associates

