# Engineering Research & Capabilities Listing



# Engineering

Eagle's experienced engineering team provides complete turnkey engineering and product management. These professionals are able to conceptualize, design, prototype, test and ramp your product successfully into production. They give complete support throughout the product life cycle.

Electrical Engineers • Mechanical Engineers Manufacturing Engineers • Quality Engineers

Our engineering team continues to succeed in bringing our customer's products to market faster, more efficiently and with fewer QC issues!

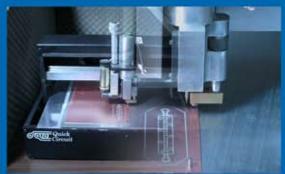
### CAD/CAM

Eagle's skilled Electrical and Mechanical engineering teams use the latest software programs to ensure your product is expediently brought to market.

- GibbsCAM
- SolidWorks
- Draftsight
- Isopro

These systems allow us to generate or revise artwork, schematics, parts lists and gerber files.

- Mastercam CAD/CAM
- Genesys



# **Prototype Assembly Equipment**

Prototypes are easy too; with the technology like the "Quick Circuit machine" that gives us the ability to transform an idea into a printed circuit board prototype within hours.

# **Model Shop Equipment**

- CNC Machines
- Milling Machines
- Lathes
- Shears
- Bending Brakes



# Manufacturing

Eagle's manufacturing utilizes the latest equipment and process technology to accurately translate your specifications to reliable parts at the lowest cost possible. Our trained and experienced staff has implemented a rigorous in-house set of quality procedures and the latest manufacturing standards to assure consistent production. These procedures enhance the quality of the product.

We have expertise in many methods of printed circuit board assembly, from through hole and mixed technology to customized fine pitch surface mount technologies.

# Soldering

- Surface Mount Technology
  - Screen Printing Fine Pitch **DEK 265 Printers**
  - General Surface Mount **Universal Instruments**
  - High Speed Placement Chipshooters **Universal Instruments**
  - Reflow Ovens
  - Heller 1800 W



- Soltec Systems
- In-Line Wave-Cut-Wave Soldering
- Resistance Soldering
- Gas-Fired Fusion Reflow System

# **Custom Cable Assemblies** Wiring Harness

- Wire Termination
- Crimping and Stripping
- Prototypes and 1st Article Parts

#### **Continuity Testing**

Harnesses are tested to ensure correct routing of all connectors, wires and splices.

#### **Polarization**

Testing is done to check polarization of all connections, ensuring proper grounding and safety.

#### **HIPOT Testing**

High voltage testing for proper isolation.











Over 40 years of PCB assembly!

# Assembly

Eagle has over 40 years of hand assembly experience, with our 100,000 Sq. Ft. facility. Eagle can help your company from small partial assembly needs to full turnkey to the box solutions for your assembly needs. Eagle services a variety of customers with contract manufacturing and private labeling needs.

## Inspection System

- TS4 Stereo Dynascope
- Process Analysis Software and Chart Production

Eagle's quality control system is committed to delivering the highest quality parts and meeting your specifications every time. Quality control is emphasized from receiving through component testing, production, final testing and shipping to insure delivery of defect-free products. We build each product as if it were our own. This commitment to quality means our customers receive the highest quality products worldwide.

# Additional Capabilities:



# Lab Testing Facilities

Eagle will accommodate mechanical and environmental functional testing as needed or specified by our customers. Our equipment allows the implementation of comprehensive test strategies for environmental stress evaluations, including shock, thermal, temperature and humidity, all in house. Additional testing capabilities include surge, EMI radiation testing, frequency, power and modulation.



# Coil Winding

- Wafios Coil Winding Machines .03 - .40 dia coils
- CNC and Tinning Capability
- Air Wound Coils
- Toroids
- Custom Windings

#### **EMI-RFI Testing:**

GTEM Chamber

#### **Surge Generation:**

- Schaffner NSG 2050
- Schaffner PNW 2050 Combo Wave Impulse Generator
- Schaffner PNW 2052 Ring Wave Impulse Generator

#### **Environmental Chambers:**

- Tenney Jr. Tenn Trol II Versa Tenn III
- Salt Fog Testing
- Drop Test
- Torque Test
- RF Network Analyzers
- Video Waveform Monitor
- Component Test Stations



- Hot Melt
- Conformal Coatings



# Quality + Innovation + Technology = Eagle Comtronics

Since 1975, Eagle Comtronics Inc. has been manufacturing electronic printed circuit board assemblies, RF assemblies and RF sub-assemblies. We have pioneered new frontiers in the electronic industry and become renowned for our excellence and for our versatility. Eagle is uniquely positioned to provide both innovation and the value that our customers demand of a full service contract manufacturer.

We have the capability to take your products from concept to reality as a one-stop-shop. We excel in a variety of volume requirements from low volume complex custom products to high volume standard products for OEM's, Contract Manufacturers, and Designers. Our product offering is from printed circuit board assembly to final box builds.

When you become a customer of Eagle, you will have access to many manufacturing services and levels of expertise.



#### **Design & Engineering**

Our team of proven professionals are here for you. We can provide initial consultation and review to get your project started out right. Invention is made easy with our state-of-the-art CAD system.



#### Testing

At Eagle Comtronics, we don't hide behind numbers. Testing is an integral part of our quality control. Testing begins with initial design and remains an integral part of the entire process. Your products will undergo custom testing procedures developed for your unique process and application. That way you can rest assured that your products will perform in the field.



#### Quality & Control:

Quality Leadership: Eagle's value added manufacturing commitment extends beyond the

corners of the manufacturing floor.

Quality Manufacturing: Quality manufacturing is a culturally driven disposition.

Quality Components: Eagle Comtronics qualifiles suppliers through rigorous quality testing.



#### Machinery

Just look through this brochure and you will see Eagle Comtronics commitment to providing the most reliable and state-of-the-art equipment available today.



#### Support

Your service team includes your account executive, project manager and engineering team. They will guide you and your project through the entire process. This team strives for one goal YOUR 100% SATISFACTION



#### **Partnership**

Now you can tap into our expertise and experience. Let Eagle Comtronics Contract Manufacturing Division help you take your ideas from concept to prototype to testing and to final production.

No one else can provide this seamless environment. One that will get you to market quicker and deliver the bottom line value you demand. It's like having your own engineering and manufacturing division!





7665 Henry Clay Blvd. Liverpool, NY 13088

1.800.448.7474 1.315.622.3800 Fax 1.315.622.3402 Local

www.eaglecomtronics.com sales@eaglecomtronics.com

