

## Printed Circuit Board Production Division & System Production (P.P.D.)

### SERVICES:

- Printed Circuit Board Assembly
  - SMT, BGA, Radial/Axial
- Review of Product Design for Manufacturability
- System Assembly Integration & Testing
- Testing According to Customer Specifications & Software
  - In-Circuit Testing, Function & Automated Optical Inspection
- Burn-In of Products
- Motherboard Design & Production



## Machine Parts Division (M.P.D.)

### SERVICES:

- Design of Metal & Plastic Parts
- Engineering Design-Review of Customer Drawings
- Metal Stamping
  - Press, Turret
- Plastic Injection Molding
- In-House Die and/or Fixture Fabrication, Repair & Maintenance
- Powder Coating



## California Manufacturing Facilities

ISO 9001: 2000 Certified – Quality Management System

ISO 14001: 2004 Certified – Environmental Management System



**Tustin Building No.1**  
Systems Production  
HQ and Copier Production Operation  
Footage: 146,125 sq. ft.



**Tustin Building No.2**  
Printed Circuit Board Assembly  
Remanufacturing and Custom Configuration Center  
Footage: 172,333 sq. ft.



**Irvine Building No.1**  
Manufactured Parts and Injection Mold Parts  
Manufacturing Operation  
Footage: 100,000 sq. ft.



Note: There are 4 other locations within a 3 mile radius from HQ not displayed.

## Green Electronics Manufacturing Services



Turnkey Manufacturing

Design Solutions

Quality Management Systems

Global Network Support

Environmental/Sustainable Management

## Global Manufacturing Services & Solutions

### RICOH GROUP WORLD-WIDE NETWORK



- Turnkey Production
- Systems Production
- Parts Production
- Design Solutions
- Inventory Management
- Green Procurement
- Logistics Services
- Remanufacturing
- Supply-Chain Management
- Custom-Tailored Manufacturing
- Quality Management System-Sigma E



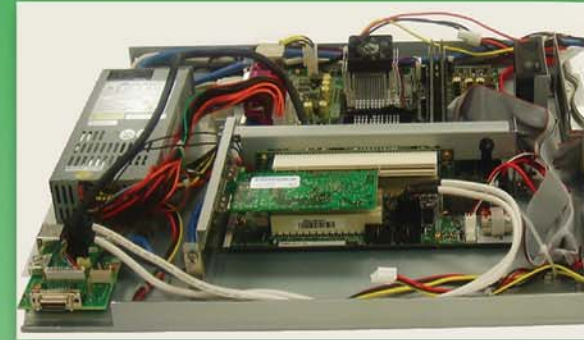
WEC 2003 Gold Medal Recipient

35 YEARS OF MANUFACTURING IN THE US



## Design Solutions

### SYSTEMS



Imaging Controller



MFP

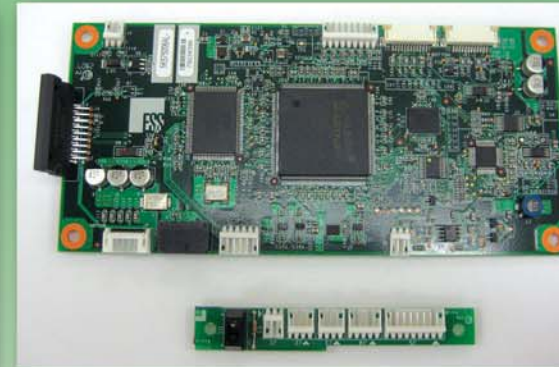


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### SUB-ASSEMBLIES



Paper Transporter



Scanner & Sensor Boards



Power Supplies

At Ricoh Electronics, Inc., we believe environmental protection is an important part of our operations. We continually work to develop and implement environmental protection activities that will lead to prevention of pollution and more efficient use of our natural resources. Additionally, we will meet or exceed applicable environmental laws and regulations, as well as other established requirements.



#### Environmental Activities Include:

- GREEN Procurement/Chemical Management System
- RoHS Compliant Manufacturing
  - RoHS Confirmation Lab
- **Zero Waste to Landfill Program**
- Energy Reduction Activities
  - Electricity & Water Usage
- 5-R Program
  - Refuse, Reduce, Reuse, Return & Recycle
- Recycling Operations
  - Reuse of toner cartridges

## Manufacturing Solutions

BEFORE	AFTER	RESULT
		<ul style="list-style-type: none"> <li>• Reduced EMI</li> <li>• Reduced Assembly Time</li> <li>• Reduced Cables and Costs</li> </ul>
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		<ul style="list-style-type: none"> <li>• Eliminated EMI box</li> <li>• Reduced Assembly Time</li> <li>• Reduced Costs</li> <li>• Improved Assembler Safety</li> </ul>
		<ul style="list-style-type: none"> <li>• Changed 3 parts to 1</li> <li>• Reduced Costs</li> <li>• Reduced Assembly Time</li> </ul>
		<ul style="list-style-type: none"> <li>• Changed 2 parts to 1</li> <li>• Reduced Costs</li> <li>• Reduced Assembly Time</li> </ul>