



MIDWEST PRINTED CIRCUIT SERVICES

[www.MidwestPCB.com](http://www.MidwestPCB.com)

Providing interconnection solutions through innovative products.

## Highlighted Equipment

### IT/Engineering CAD/CAM

- ✓ Gerber Crescent 30 ¼ Mil Resolution Plotter
- ✓ Gerber Escort 30 Automatic Film Loader
- ✓ Fully Integrated Genesis & Pentalogix CAM Systems
- ✓ CAM, ET, AOI, Laser Plotting & Drilling Network
- ✓ M2M Management System w/ Barcode Tracking
- ✓ Kodak Kodamatic 66S+ Automatic Film Loader
- ✓ 5 CAM Stations with Design Rule Check
- ✓ Test Fixturing & Net List Extraction Software

### N.C Drilling, Routing, Milling

- ✓ Mach3 Labs Antares 700x Precision X-ray Drill
- ✓ 2 Mania Micronic 86, 200k spindles
- ✓ Excellon System 2000
- ✓ Milltronics VM3018 – Verticle Milling Machine Center
- ✓ Milltronics VKM 3 – Milling Machine Center
- ✓ Accu-Score AS-150-MAX Scoring Machine
- ✓ 3 Excellon Mark VI Drill, CNC 6
- ✓ 3 Excellon Mark VI Router, CNC 6
- ✓ Bevelmaster Beveler
- ✓ Wysong Hydraulic Laminate Shear

### Multilayer Lamination

- ✓ TMP Vacuum Lamination Press – 4 Opening
- ✓ PHI 4 Opening Hot/Cold Press w/ Vacuum Assist
- ✓ SOMACA Caul Plate Scrubber
- ✓ RAMCO Wide Belt Sander
- ✓ Multiline Inner-layer Registration Punch
- ✓ Multiline OPE-9000 - 4 Camera Automatic Post Etch Punch
- ✓ Multiline Core Punch & Depinner
- ✓ Real Time X-Ray

### Laboratory/Chemical Analysis

- ✓ Fischerscope Multiple Measuring System
- ✓ Real Time Plating Thickness Measuring
- ✓ Perkin Elmer PinAAcle 500 Spectrophotometer – AA Unit
- ✓ HACH DR/2000 Direct Reading Spectrophotometer
- ✓ Buehler Ecomet Cross Sectioning Saw
- ✓ Analytical Balance, Omega Meter 600
- ✓ UPA Microderm MP-700
- ✓ UPA Caviderm CD-8 with CPS-111B Probe Stand
- ✓ Olympus Scope and Camera with Javelin Monitor
- ✓ (3) Buehler Ecomet IV Variable Speed Polisher/Grinder
- ✓ Ohaus Precision Scale

### Quality Control/Inspection

- ✓ Camtek Phoenix-HDI AOI System
- ✓ Mania AOI T8T DTS
- ✓ Microcraft Flying Probe Electrical Tester EMMA EMX 6151
- ✓ Microcraft Flying Probe Electrical Tester EMMA ELX 6146 with High Pot Capabilities
- ✓ (3) Glenbrook X-Ray's
- ✓ Buehler/Olympus Microscope & Software System
- ✓ Oxford Instruments Advanced XRF Coating Thickness Measurement System
- ✓ Micro-Vu Q16 Precision Measurement System
- ✓ Polar Instruments CITS 880s Controlled Impedance Tester
- ✓ TTI 33,000 Test Point Universal Grid Tester
- ✓ TTI Dual Access Tester - Fine Pitch SMD Test Probes
- ✓ High Pot Tester to 5000V
- ✓ Mivro-Vu XCEL 661

### Wet Processing

- ✓ 48' Semi Automatic Electroless Copper Line with Hoist
- ✓ ENIG/Silver Line
- ✓ (2) Electrolytic Copper Pattern Plating Lines
- ✓ 75 Gallon Deep Nickel Tank
- ✓ Various Aldonex Remote Rectifiers (25 to 10,000amp)
- ✓ Serfilco Carbon and Polypro Filtration System
- ✓ Oxide Conversion System
- ✓ Technic Mini FFP Tab Plater
- ✓ AEM American Pro Wet Sanding Machine
- ✓ Chemcut 107I Oscillating Scrubber
- ✓ International Supplies Pumiflex SHD/A24
- ✓ International Supplies Board Cleaner/Washer
- ✓ DEA 24" Conveyorized Developing and Rinsing Unit
- ✓ Chemcut 547 Conveyorized Tin Stripping Line
- ✓ Chemcut 547 Conveyorized Resist Stripping Line
- ✓ Chemcut 547 XLI Alkaline Etching System
- ✓ ASI Inner Layer Scrubber
- ✓ Chemcut Desmear & Etch Back Line (Permanganate)
- ✓ Argus 5000 Conveyorized Hot Air Leveling
- ✓ Argus 5000 Hot Air Leveling RoHS Lead Free Solder Line
- ✓ In Line Pre-Clean, Fluxer and Post Clean Unit

### Imaging

- ✓ Orbotech Paragon 8800 LDI
- ✓ Orbotech Sprint 120 Inkjet Legend Printer
- ✓ Multiline Dual Camera Registration Up-Punch
- ✓ (3) Circuit Automation DP1500 LPI Solder Mask Coater
- ✓ (2) Dynachem Epic 110 Drying/Curing Tunnel Oven – (1) Tack Cure, (1) Full Cure
- ✓ Multiline Artwork Registration Film Punch
- ✓ Colight 1630, 1530, & (2) 1330 Exposure Units
- ✓ OLEC Accuprint AP30
- ✓ (2) Dynachem Dry Film Soldermask Laminator
- ✓ (2) New Dynachem 1500c Automatic Cut Sheet Laminators
- ✓ DuPont HRL 24 Air Activated Laminator
- ✓ LC-2400 Electro-Static Cleaner
- ✓ (2) Autoroll Exacta 360
- ✓ Burgess Industries 24' Ammonia Film Processor
- ✓ X-Rite Densitometer
- ✓ Anti-Static Auto Film Cleaner
- ✓ Rich Automation Vertical Developer
- ✓ Chemcut 547 LPI and Dry Film Solder Mask Developer
- ✓ Multiline Opti-Line Film Punch
- ✓ Multiline Registration Table
- ✓ Nuarc FT40V3UPNS Flip Top Plate Maker
- ✓ EI-150 Digital Exposure Integrator & Timer
- ✓ Precision Quincy LPI Oven with Chart Recorder
- ✓ (3) Blue Chip Precision Screen Presses / Backlight
- ✓ Violux 3002 Exposure Unit / Vacuum Frame

### Environmental Regulatory Assurance

- ✓ J-Mark Systems Treatment System
- ✓ Serfilco 4 Cubic Foot Filter Press
- ✓ Gravity Settler
- ✓ Sludge Dryer