

Multilayer Technology

Master Equipment List

Information Systems

- Computerized JQS Job Quote System by Bacon Software
- Computerized JTS Job Trac Systems by Bacon Software
- Barcode tracking system

CAD/CAM & Photoplotting

- CAD/CAM & Photoplotting
- Networked Dell Precision 360 Windows XP CAM Stations
- Genesis 2000 Engineering/CAM software by Orbotech with Panelization, Scale Factor, DRC, DFM, Auto Drill & Auto Rout Automation
- UCAM Engineering/CAM software by ManiaBarco with Panelization, Scale Factor, DRC, DFM, Auto Drill & Auto Rout Automation
- Cam350 Engineering/CAM Software by Downstream Technologies
- AutoCad LT 2005 CAD Software
- Gerber Model Crescent 30 Photoplotter with Prism XP front-end on Dell Workstation
- HP Design Jet 450C Drawing Printer
- Gluntz & Jensen/ Dupont Easy Compact 72 Film Processor
- 369T X-Rite Densitometer
- RH-411 Temperature & Humidity meter by Omega

AOI / Electrical Test

- Barco Accumatch 2 AOI Station with Ucam (2)
- ManiaBarco ARGOS 8008 AOI System with 2 Mil Line/Space Technology capabilities
- Orbotech Genesis 2000 with Test Automation & IPC 2221/Impedance Coupon Generator
- Mania Technologies Ultim8 Flying Probe Tester
- ManiaBarco UCAM Testing software Test Automation
- CircuitLine Precise 2S Bare Board Tester, with simultaneous Netlist SMT Clamshell testing (2)
- New Systems Model S22-25-PZ Flying Grid Netlist Tester (1)
- New Systems S24-25 PZ Grid Flying Netlist Tester
- Lavenir Netlist / FixMaster, Repair Master with verification
- Circuit Line FRS2000 Fault verification system
- Polar Instruments Si8000m Impedance Design System (Calculator)
- Polar Instruments SB200a Professional PCB Stack up design and documentation Software
- Polar Instruments Si8000 Field Quicksolver Package
- Polar Instruments CITS 500s Controlled Impedance Test System, Acc230 Datalog Generator, ACC 264 Probe/Cable
- Polar Instruments Tome OH-950 Fault Locator

Drilling / Routing / Scoring

- Pluritec Multistation Automated Driller with 4 mils drilling capabilities (5)
- Excellon Model MARK V Driller/Router machine (5 spindle)
- Excellon Model EX2000 driller/router
- Accu-Score numerically controlled V-Groove Scoring Machine with Jump Score (1)
- Barnaby Model 802F pinning systems
- BevelMate Model 035 Bevel machine by Radoll Design
- EdgeMate by Radoll Design
- Glenbrook Technologies RTX-113HV Real-time X-Ray Inspection System with Image Processor, Zoom PG Camera & Video Printer
- Machines networked with all departments
- Departments fully equipped with Tooling, Measurement and Other Support Equipment

Film / Image Transfer

- C.A. Picard PinLam Post Etch Tooling
- Olec AT30 high resolution printer w/ dual drawers
- Olec Model AP-30 high resolution dual drawer printer
- Olec Model Imagemaster 5000 high resolution dual drawer printer
- Atotech Chemcut 547XL photo resist developer
- Tecnilith Model 6000 film developer
- Western Magnum XRL-180 & XRL-240 photo resist Laminators
- TEKNEK MICRO KLEAN 24 Pre Cleaner for Dry Film Laminators
- Byers Digi-Scope measuring system
- Dynachem Vacuumax 724 Dry Film Solder Mask Laminator
- Dupont ASL-24 Auto Sheet Laminator
- Custom Photo-Tool Filing/Storage System
- Omega OS520 Handheld Infrared Pyrometer

Multilayer Lamination

- TMP 30x30 HVP Vacuum Press Lamination System with WonderWare Real-Time Data Monitor/Logger Software on PC
- Wabash 30x30 hydraulic press
- C.A. Picard Lamination Plates up to 22 x 28 Panel Size
- FEP, Teflon and Hybrid substrate bonding/lamination capabilities
- Complete layup and prepreg storage department

Plating

- Atotech/Chemcut 547XL Alkaline Etch System
- Atotech/Chemcut 547XL Resist Developer
- Advanced Plasma Systems APS PWB-8-209 Etchback System
- IS PUMEX-PUMIFLEX 2000 SERIES Pumice/Alumina scrubbing system with Filter
- Lantronic 2005 Model TT30 Lead-Free Hot Air Solder Level (HASL) with SMT Package TruTrack system
- Lantronic Model 208 Hot Air Solder Leveler (HASL) w/SMT Package TruTrack System
- Atotech/Chemcut 547XL Resist Developer
- IPS Platamate Automatic Post Cleaner with rinse/dryer
- IPS Horizontal Resist Stripper with Turbo Dryer
- High pressure washer Omikron White-Tin line (1)
- IPS XRD-24 board/panel Final Rinser with Turbo Dryer
- 750 gallon 40:1 High Aspect Ratio copper plating tank (2)
- IPS Permanganate Desmear Line 2005
- 550 gallon copper plating tank
- 550 gallon tin plating tank
- 120 gallon deep nickel-Gold plating Line
- 120 gallon electroplate tin/lead tank
- 50 gallon MacDermid Sterling Immersion Silver Line
- 50 gallon Palladium Plating Line
- 50 gallon ATOTECH immersion Gold Line
- MacDermid electroless copper line
- Micro plate nickel-gold tab line
- Sulfuric etchback line
- Pre-Clean Line
- Tin/Solder Strip Line
- Alternate Oxide Coating Line
- Proheco hot oil fuseline w/preheat and rinse system
- ASI 950 30" conveyORIZED copper scrubber
- Grieve Model 333 curing ovens (2)
- Sethco Carbolator

Soldermask & Legend

- LPI/Thermal Silkscreen Printer
- GYREX LPI Spray Coater Model 2500
- GYREX IR Tack Dryer Model 8300
- New System NewPrint Direct Imaging UV Curable Legend Ink Printer
- Lantronics 2005 TruCure TC243 IR Curing System
- Integrated Process Systems (IPS) developer
- Barnaby screening station (3)
- Colight DMVL 930 stencil exposure unit
- Grieve Model 333 & 343 curing oven

Laboratory / Quality Assurance

- Oxford Instruments CMI 900 X-Ray fluorescence plating thickness measurement system with solution analysis
- Optek V-Series Video Inspection & Measurement System
- CMI PTX hand-held gauge system
- Struers Rotopol – 31 & Rotoforce-3 Microsection Polishing
- OPTEM ZOOM 100 Precision Measurement system with Ultrak color camera and Monitor
- PAXcam USB 2.0 Digital Camera System with PAX-it Enhanced Measurement, Image Analysis and Image Management
- Omega Meter Model 600 SMD (Heated) Ionic Contamination System
- Gramatech GVS3000 Vacuum Sealer Systems
- TEW TISF400 package sealer
- Buehler microsection grinding and polishing table
- Grieve LW-201C lab oven (1)
- PerkinElmer Atomic Absorption Photo Spectrometer
- Complete QC inspection & measurement tools – NIST traceable and calibrated
- Full in house laboratory

Facility

- 25,000 square foot facility
- State-of-the-art Novell & Microsoft Network Infra-structure
- High Reliability Redundant 1.5TB Storage Area Network (SAN)
- Novell GroupWise Email System
- Enterprise Level Symantec Anti-Virus
- Protection Enterprise Edition GWIA Spam Filter
- Cisco Router with Sonic Wall Firewall in T1 Circuit
- Management Information Systems
- Bacon Job Quote System
- Bacon Job Tracking System
- Bacon Job Invoice System
- Certified clean-rooms with humidity and temperature control (5 departments)
- Ingersoll-Rand air compressor with refrigerated compressed air dryer
- Saylor-Beall air compressor
- Spencer turbine vacuum system 30HP
- Spencer turbine vacuum system 60HP
- Complete in-house continuous waste water treatment systems
- Kinetico CIX-2000 DI Water Recycling System
- IPS 4500 CFM Fume Scrubber
- Full plating ventilation system and plating area air conditioned
- Full in-house maintenance and repair capabilities
- Fire alarm and sprinkler system