ALTEK
ELECTRONICS, INC.

CONTINUOUS IMPROVEMENT

Continuous Flow Manufacturing
Mistake Proofing Techniques
High Performance Work Teams
Six Sigma Techniques

Quality Teams
Visual Factory
Performance Board

6 "S"
Sort – Straighten – Shine – Standardize – Sustain - Safety

SERVICES

Lean Manufacturing
Flexible Circuit Assembly
Repair Services
Turnkey-Consignment
Chassis & System Integration
Customer Supported Layout & Design

Quick Turn Prototyping
Inspection & Testing
Kanban Services
High Mix Production
Wire & Cable Harness

CAPABILITIES

Surface Mount assembly equipment:
> Board Size Min = 50 mm x 50 mm (2" x 2")
> Board Size Max = 508 mm x 508 mm (20" x 20")

2 EKRA X4 screen printers
2 EKRA Serio 4000 volume printers
2 Parmi SigmaX Blue solder paste inspection
2 Samsung SM481 placement systems
1 Samsung SM482 placement system
2 Samsung SM 421 placement systems
1 Samsung SM485 placement system
1 Samsung SM411 placement system
1 Samsung SRF70i123 reflow oven
2 BTU Pyramax reflow ovens (models 98 & 125)

Ball Grid Array and Advanced SMD's
ERSA HR600/2
> BGA's (BGA placement up to 55mm² 1.0mm pitch)
> μBGA (0.5mm pitch)
> Ultrafine pitch components (0.4mm pitch)
> QFN/MLP
> LGA
> CSP
> 01005 chip components
> Odd Form components
> Large Connectors (up to 72mm diag.)

Soldering - Lead or Lead Free (RoHS)
> Board Size Min = 50 mm x 50 mm (2" x 2")
> Board Size Max = 400 mm x 510 mm (16" x 20")

4 Wave Solder Machines (Electrovert EPK, Electrovert Vectra Elite,
   Vitronics Soltec Delta 5, ERSA Powerflow)
1 Seho Selectline C Soldering Machine
> Board Size Max = 500mm x 500mm (19.68" x 19.68")
2 ERSA Smartflo 2020 Selective Soldering Machines (Max 18" x 24")

Through-Hole assembly equipment:
> Board Size Min = 50 mm x 50 mm (2" x 2")
> Board Size Max = 350 mm x 460 mm (14" x 18")
6 Contact Systems CS-400 Component Locators

Automated Optical Inspection
> Board Size Min = 50 mm x 50 mm (2" x 2")
> Board Size Max = 510 mm x 660 mm (20" x26")
2 Mirtec In-Line MV-6 Omni 3D
1 Mirtec In-Line MV-7U
1 Mirtec In-Line MV-7xi
2 Mirtec Desktop MV-2HTL
   15 Mega pixel downward camera with a telecentric compound lens
   10 Mega pixel side-view cameras
   Intelli-Scan Laser inspection
      (lifted lead and BGA/QFN co-planarity check)
   45mm part clearance (same for MV2-HTL)
   50mm x 50mm to 660mm x 510mm PCB capacity
   SPC data collection

X-Ray Inspection
1 FeinFocus Yxlon Y. Cougar X-Ray Inspection station

Automated Depaneling
1 Cencorp 1000BR – depaneling and high-capacity router

3D Printing
MakerBot 3D Extrusion Printer

Laser Marking
Insignum 4000 Automatic Laser Marking System

Cleaning
1 Technical Devices Nu/Clean 824 XLR-FB Inline Aqueous Wash
   Machine
> Board Size Min = n/a
> Board Size Max = 24 x 25"

PCB Conformal Coating
1 PVA6000 Conformal Coating Machine and IR2000 Curing Oven
> Board size 600mm x 600mm (23.6" x 23.6")
> Acrylic / Urethane / Silicone / Polyurethane

Potting/Encapsulation
Fisnar 3 Axis Dispensing Robot

Nitrogen Generator
1 On – Site N-150 TGN Nitrogen Generator

Circuit Board Testing
1 SPEA Flying Probe
2 Teradyne LH In-Circuit Test Stations
Functional testing on customer owned fixtures
Custom Test Fixtures

Programming
1 Data I/O 3980xpi
1 BPM Microsystems 1610

Inventory Control
1 Optical Control OC Scan CCX.3 component counter

Vayo NPI 3D DFM Software
High Voltage Soldering
Product Identification and Traceability