

Ball Grid Array and CCGA Rework and Repair

Services offered:

- BGA Remove and Placement
- CCGA Remove and Placement
- Wire add and trace repair
- Re-balling
- Solder Mask Repair
- Level Three Pad Repair
- BGA Re-Balling
- BGA Inspection

Types of BGA and CCGA components reworked:

- PBGA (Plastic Ball Grid Array)
- TBGA (Tape Ball Grid Array)
- uBGA (Micro BGA)
- CCGA (Ceramic Column Grid Array)
- CBGA (Ceramic Ball Grid Array)
- CPGA (Ceramic Pin Grid Array)
- Interposers
- Double stacked components
- Ball Grid Array Connectors
- Grounded QFP (Quad Flat Pack)
- Grounded SOIC (Small Outline Integrated Circuits)
- Lead Free BGA (Ball Grid Array)

Inspection /X-Ray Services

- Post Production Validation
- Fault Detection and Evaluation

PCB Assembly Aids and Automated Fixtures

- PCB Assembly Aid Design and Documentation
- PCB Assembly Aid Fabrication and Test
- Automated Fixture Design and Documentation
- Automated Fixture Design and Fabrication
- CAD Concept Design and Documentation
- Custom Ball Grid Array Rework Nozzle design and fabrication
- Custom rework tools and fixtures
- Precision Machining
- Reverse Engineering
- Prototyping
- Tool and Die design and fabrication
- Component prep and tooling

PCB Testing and Board Repair Service

- Out of Production/Non-Current Electronic Equipment and Component Repair
- Repair and validation of component boards
- Board Repair through Reverse Engineering
- Onsite Solder Technicians
- OEM Warranty and Call Center Outsourcing Solutions
- Re-box and Re-label Services
- Failure Analysis
- Printed Circuit Board Troubleshooting
- Printed Circuit Board Testing
- ECN - Upgrade - Up Rev

Types of equipment repaired:

- Test equipment
- Calibration equipment
- Communication Equipment
- Computer Components
- Industrial Electronics
- Commercial Audio / Visual Equipment

