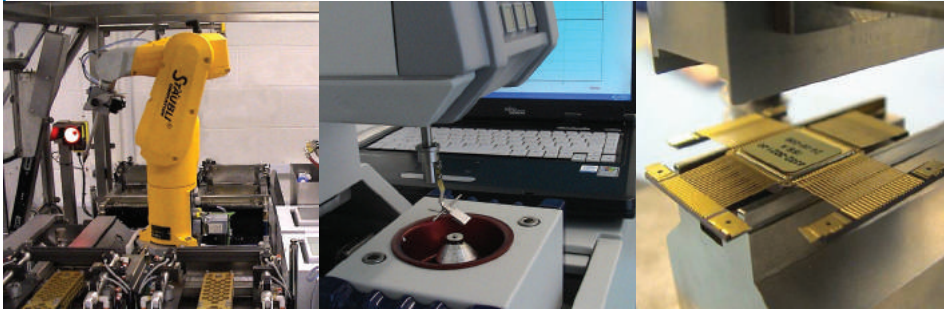
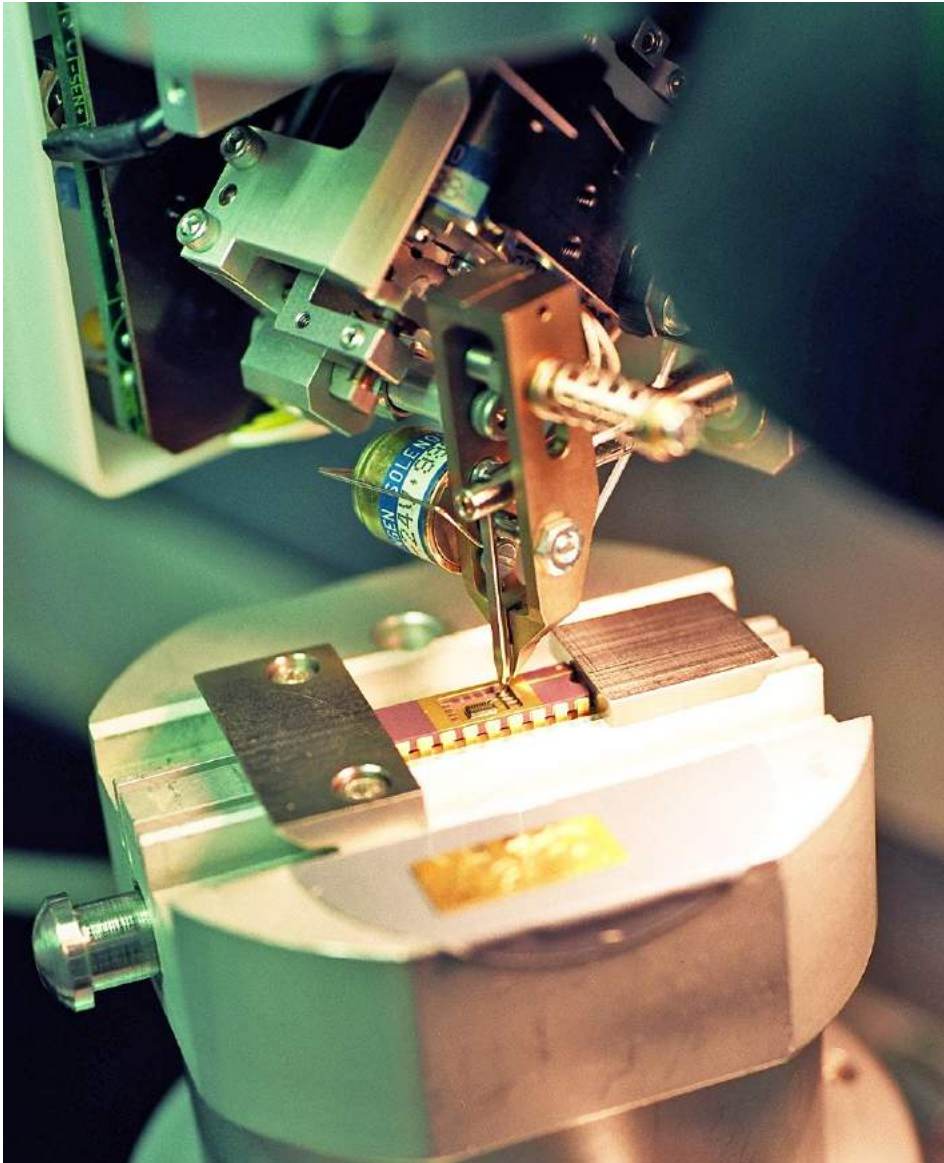




Robotic Terminal Conversion Solder Dipping



Solder Exchange Technology is a robotic, automated solder-dipping process developed by Microcross to increase component reliability and mitigate tin-whisker formation.



PB & PB-FREE FINISH

**CONFORMANCE WITH
GEIA-0006 STANDARD**

AUTOMATED DIPPING

6-AXIS ROBOT

NITROGEN BLANKET

SOLDER LEVEL SENSING

TIN & OTHER PLATING REMOVAL

SOLDERABILITY TESTING

J-STD-002

TRIM AND FORM

FULLY CUSTOMIZABLE
LEAD FORMING

PTH TO SMT

FLAT PACK CONVERSION

QFP & SOIC

One Source. One Solution.™

KEY SERVICES

- Deballing/Reballing BGA Components
- Lead Attach & Form
- Package Trim & Form
- Tape & Reel, 3D Scan
- Lead Conditioning
- Axial & Radial Straightening
- SMT Lead Alignment
- PIND Testing
- XRF Screening
- Hermeticity (Fine & Gross Leak)
- Solderability
- Ionic Cleanliness
- Ball Shear

LEAD ALIGNMENT

- QFP, SOIC component leads realigned using fully automated computer controlled equipment
- Reworked and packaged to quality standards suitable for machine placement

QUALITY

- Quality System is AS9100 Certified
- Full ESD environment (JESD625B compliant)
- Temperature and humidity controls
- Fully traceable documentation
- Integrated production control system



TESTING

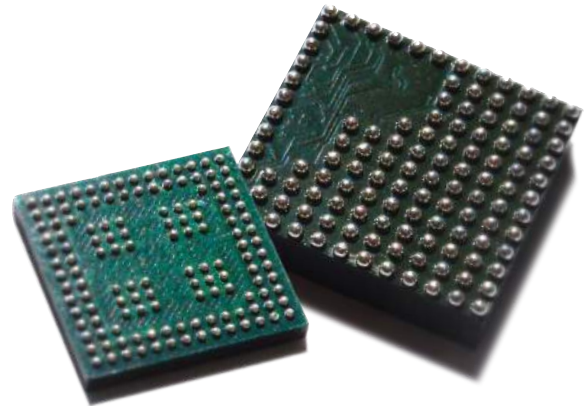
- Solderability Testing per J-STD-002/MIL-STD-883, Method 2003
- Ionic Cleanliness Testing per IPC-TM-650-2.3.25
- XRF Testing of solder composition and thickness per MIL-PRF-38535
- Reports available

PACKING

- Tape and Reel to EIA 481 Standard
- Peel strength test completed on all batches
- Capability to reel all package styles in volume and as component attrition
- Special custom design service available
- Component baking/dry pack to J-STD-033
- Customized labeling available

BGA REBALLING

BGA components reballed using Pb and Pb-free spheres in high volume down to 0.4mm ball pitch and 0.3mm ball diameter.



ABOUT MICROSS

Micross is the global one-source provider of Bare Die & Wafers, Advanced Interconnect Technology, Custom Packaging & Assembly, Component Modification Services, Electrical & Environmental Testing and Hi-Rel Products to manufacturers and users of semiconductor devices. In business for more than 40 years, our extensive hi-reliability capabilities serve the Aerospace & Defense, Space, Medical and Industrial markets. Micross possesses the sourcing, packaging, assembly, engineering, test and logistics expertise needed to support an application throughout its entire program cycle.