

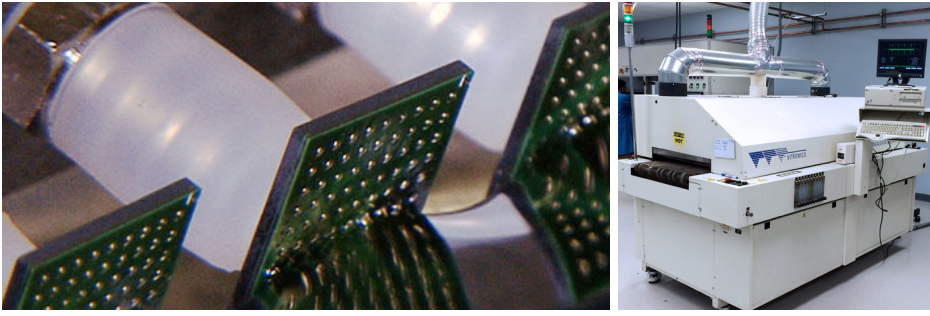


microcross

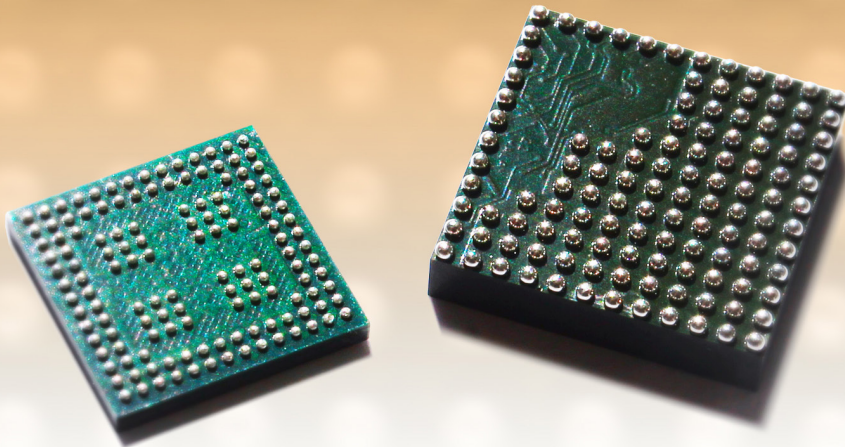
one source. one solution.™

BGA Reballing

Center of Excellence



Corfin is the industry-recognized leader in innovative component modification technologies and is now integrated with Microcross to provide a one source solution.



Industry-leading
Turnaround Times &
Guaranteed Yields

Conversion to leaded spheres
for Hi-Rel applications

Conversion to
RoHS Compliance

Proprietary Robotic Hot Solder Dip Equipment
removes solder spheres from
BGA substrate

BGA Reballing converting
RoHS BGA's to Sn/Pb or
Sn/Pb to SAC 305

Ball Attach to LGA, QFN
and DFN packages

LGA Gold Removal
and Ball Attach

Robotic Hot Solder Dip Ball Removal

- Our proprietary robotic equipment ensures repeatability, consistent immersion depth, regulated temperature exposure, even solder thickness, coplanarity and process cleanliness.
- Five-step process integrates flux, preheat, solder ball removal, water rinse and dry.
- Robotic equipment employs dynamic solder wave technology and contamination-free solder baths.
- Established Robotic Hot Solder Dip Center of Excellence in Manchester, NH (63,000 sq. ft.) and BGA Reballing Center of Excellence in Round Rock, TX. Pioneered Robotic Hot Solder Dip Technology (RHSD) in 1984.
- RHSD for tin whisker risk elimination, gold removal, restoration of solderability.

Flux Application, Solder Ball Placement and Reflow

- Custom stencils are created for each package to ensure consistent flux volume and accurate ball placement.
- Our proprietary BGA sphere attachment process can be customized quickly, ensuring proper package and sphere tolerances are met for each BGA and creating the highest possible yield for each reballing job.
- Reflow profiles are custom developed for each package based on manufacturer's data sheets.
- Reflow is done using a precise, automated reflow system in a N2 environment.

Post Process Inspection and Qualification Testing

- Industry-leader offering the most precise and repeatable process available. Reballs BGAs using process parameters in accordance with the IEC TS 62647-4 Standard.
- Optical microscope and comparator examination confirm ball condition: physical outline, size, sphere integrity, luster and uniformity evaluated.
- Additional testing available include: Acoustic Microscopy, XRF for alloy confirmation, DPA: cross-sectioning and ball shear testing, ionic cleanliness and automated scan for sphere size and location.

Additional Process Features

- Components baked and packaged according to moisture sensitivity level (MSL) per J-STD-033.
- Package sizes as small as 1.2 mm, pitch from 0.5 mm and experience with plastic and ceramic components, including flip chip and multi-chip modules.

Quality

- Quality System is AS9100 / ISO 9001
- ITAR-Registered
- Full ESD environment (JESD625 compliant)
- Certified for Class 0 ESD processing to ANSI/ESD S20.20
- NADCAP AC7120 Certified (Manchester facility)
- Fully compliant to GEIA-STD-0006 and IEC TS62647-4
- Temperature and humidity controls
- Fully traceable documentation

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.