

BGA Reballing

Friday, September 09, 2016


BGA REBALLING

Many modern ICs are often only available in RoHS/Lead Free BGA packages

However, leaded solder joints are required to ensure reliability for many demanding applications

ISI offers solutions to meet customer's configuration requirements

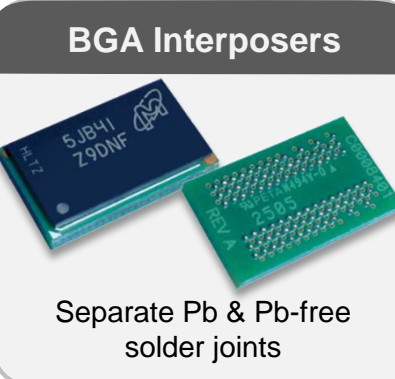
BGA Reballing



RoHS Lead-Free → Eutectic Tin/Lead

Covered in this presentation

BGA Interposers



Separate Pb & Pb-free solder joints

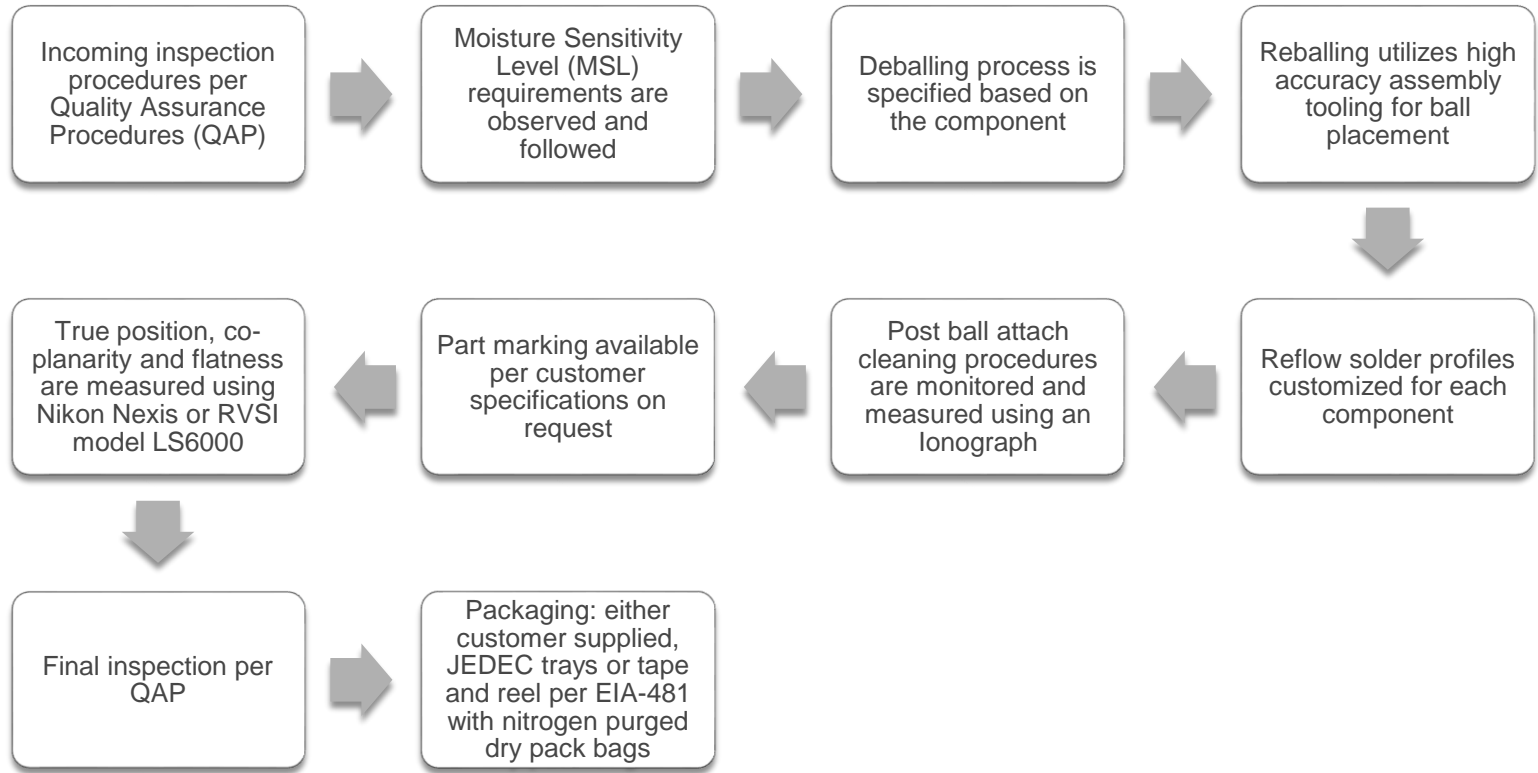
Contact ISI for additional information

ISI SOLUTION: REBALLING

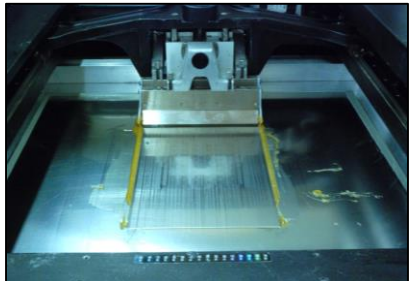
- ISI has an advanced, qualified process for removing and reballing solder spheres that is compatible to the assembly process criteria for any BGA package:
 - Tin-lead (Sn63Pb37 eutectic), Lead-free, and specialty alloys
 - Any ball size and ball pitch including Chip Scale packages
- Processes are tailored to each part. Specific control parameters are clearly defined for:
 - Detailed production process traveler
 - Controls for temperature
 - MSL / Humidity
 - ESD protection
 - Ball size/position tolerance specifications
 - Automated inspection
 - Cleanliness
 - Repackaging



REBALLING PROCESS OVERVIEW



REBALLING FACTORY TOUR



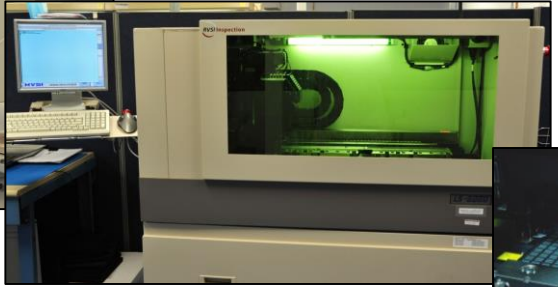
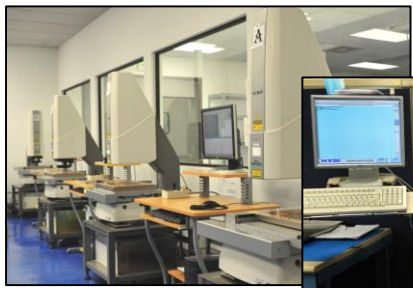
Flux Printing / Ball Attach



Conduction / Convection Oven



Ionograph Cleanliness Testing



Automated Optical Inspection

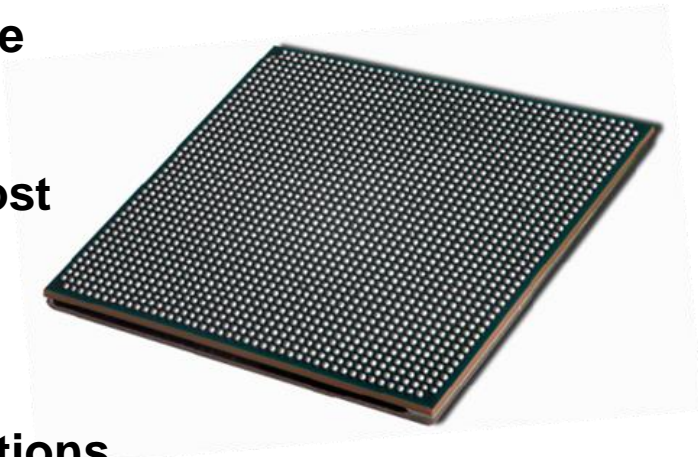
REBALLING CERTIFICATION

ISI's *Reballed Device Certification*



WHY CHOOSE ISI FOR REBALLING?

- ISI has been **audited and qualified** as a **production reballing supplier** to the leading Tier 1 defense contractors
- We certify that our reballed parts meet the most stringent industry criteria
- We reball over 100,000+ BGAs each year
- We are cost-effective for high volume applications
- Any pitch, any package, any alloy
- Quick-Turn Delivery: 3-5 day expedited turn time available



THANK YOU!

Contact ISI to engage on your next project:

Address: **741 Flynn Road / Camarillo, California 93012**
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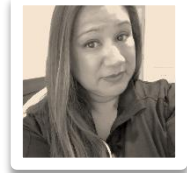
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