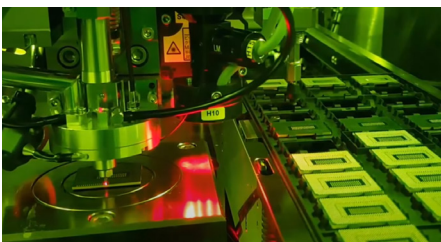


REBALLING

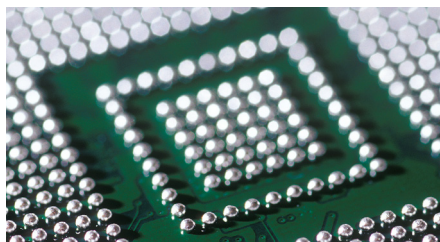
Retronix has delivered our Reballing services to the High Reliability industries for 30 years and as a result we are experts in reballing techniques and applications. Our knowledge of reballing processing excellence is a direct result of honing our processes to deliver exceptional results on a variety of electronic component packages.

Every sector and organisation has its own internal mandates to qualify the correct processes and methods of rework. That's why Retronix offers both top-of-the-line Laser Reballing and IPC Certified Reflow Reballing to serve our customer's industry needs and requirements. Whilst, Laser Reballing offers reflow-free reballing, each process has its advantages, Reflow Reballing is qualified and selected by several High Reliability organisations.



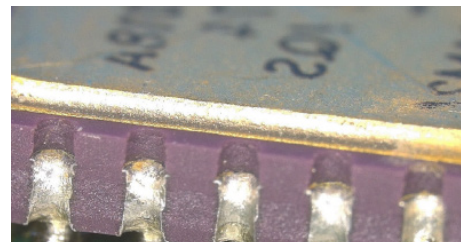
LASER REBALLING

- No Reflow Cycles
- Automated Process
- Approved by top OEMs



REFLOW REBALLING

- J-STD & IPC Standards
- Time Tested Results
- Cost Effective



APPLICATION REBALLING

- Application Specific
- Mitigate CTE Issues
- Bespoke Solution

We are the only organisation with approvals from Martin-Baker Aircraft Company, Leonardo, BAE Systems, Mercury Systems. Many more High Reliability organisations are realising the need to minimise component reflow and using a laser to perform the reballing is the only way to guarantee no long-term damage to the silicon.

LASER REBALLING

Retronix is the only company to offer a Laser Reballing service, mitigating the need for an additional reflow and protecting the device. Retronix has a top-of-the-line system that sets the benchmark for an advanced and reliable reballing service. This system provides repeatable solder bumping technology for packaging optoelectronic devices, MEMS, sensors, BGA's, CLCC's, CSP's and Flip Chips. The solder ball attachment is performed by a laser system using an infrared wavelength. All components of the system are integrated into a single cabinet.

We follow a strict Reballing procedure:

1. 100% quality pre-inspection on all parts.
2. All parts are entered into custom factory management system & then pre-baked.
3. Old spheres, or remaining solder, is removed using the non-contact de-soldering system.
4. An initial 5 part sample is completed & signed off as passed by QC operator.
5. Automated mechanical checks are performed on reballed parts.
6. Quality control - Final inspection.
7. Passed parts - Post baked, vacuum sealed then packed & shipped.



NO REFLOW
CYCLE



AUTOMATED
PROCESS



APPROVED BY TOP
DEFENCE OEM's

FEATURES & BENEFITS

No additional reflow required

In-line capability & high throughput

Automated fiducial alignment

3D camera – Height auto measurement

Integrated laser power sensor

Automatic handling/robot system

High solder alloy flexibility

High accuracy axis system

Ball rework & repair capability

2D bump-inspection systems

Solder rework & reballing station

Tray unit

FIND OUT MORE:

W: retronix.com

E: contact@retronix.com

T: +44 (0) 1236 433 345