

7711 Rework Revision: Date: 10/11

BGA Reballing Procedure

Polyimide Solder Ball Stencil Carrier

Board Type: R, C

See 1.4.2

Skill Level: Advanced

ee 1.4.3

Level of Conformance: High

See 1.5.1

GENERAL REQUIREMENTS

Clauses 1.7 (Basic Considerations), 1.8 (Workstations, Tools, Materials and Processes) and 1.9 (Lead Free) provide important information and guidance about the use of this procedure, including but not limited to tin-lead and lead-free alloys. This procedure is also applicable to lead free products.

EQUIPMENT REQUIRED

Solder removal system Convective reflow station

OPTIONAL EQUIPMENT

Reflow oven

Bake-out (vacuum, convection) oven

MATERIALS

Flux

Cleaner

Tissues/wipes

Polyimide solder ball stencil carrier to suit component

NOTE

Moisture sensitive components (as classified by IPC/JEDEC J-STD-020 or equivalent document procedure) must be handled in manner consistent with J-STD-033 or an equivalent documented procedure.

CAUTION

Verify component can withstand multiple reflow cycles. Multiple reflow cycles may degrade the component and the PWB.

PROCEDURE

- 1. Remove excess solder in accordance with procedures 4.1.2, 4.1.3, or 4.2.1 (see Figure 1).
- 2. Clean and inspect BGA for coplanarity.
- 3. Apply flux to lands on BGA (see Figure 2).
- 4. Place BGA on top of polyimide solder ball stencil carrier (solder balls up and white tape down) (see Figure 3).
- 5. Place BGA and carrier onto the reflow station or into a reflow oven and reflow using established profile.
- 6. Allow BGA to cool for 30 60 seconds and remove polyimide solder ball stencil carrier from BGA (see Figure 4).
- 7. Clean and inspect the BGA.
- 8. Bake BGA as necessary.

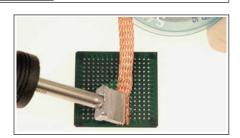


Figure 1

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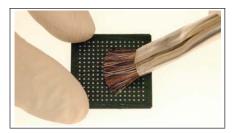


Figure 2

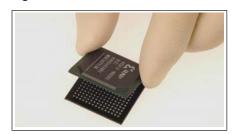


Figure 3



Figure 4

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NOTES