

Removal of iLGA Converters DCAN-62

iLGA Device Removal

The following procedure is a generic guideline to remove iLGA converters from a circuit board assembly. Note that the removed device will not be salvageable and cannot always be analyzed to determine mode of failure. Parts on the subject converter may be displaced during this rework.

Tools Required

- 1. Hot Plate capable of pre-heating the main circuit board to 250°C (Optional but recommended for best result)
- 2. Forced Hot Air rework station (Hakko Model 8505 or equivalent with \emptyset .125 nozzle)
- 3. Lifting lever or small flat-bladed screwdriver to lift the converter away from the main circuit board once the solder has reached liquidus state

Please see Removal Procedure on page 2. Lever or small flat-bladed screwdriver to lift converter from main circuit board Hot air workstation Hakko model 8505 or equivalent .88 1.21 0 1.00 Hot air collet (MPS #58252) fits over converter to be removed Ø.125 Nozzle Hot Air Collet Lifting lever Converter to be removed Whenever feasible, pre-heat main board on hot plate to approximately 250°C. This reduces the stress caused from heating the subject assy strictly from the top.



Removal of iLGA Converters DCAN-62

Removal Procedure

- 1. If using hot plate, place main PCB on plate and heat to approximately 250°C.
- 2. Position collet over device to be removed.
- 3. With workstation heat temp set at level 7 (out of 8) and air flow set to 6 (out of 8), insert Ø.125 tip in hole at top of collet.
- 4. Apply heat for two minutes (three minutes without hot plate) keeping collet tight against main board surface
- 5. Without disengaging workstation nozzle, use lifting lever placed under the edge of the board to be removed. If board is still firmly attached, continue to apply heat until the solder liquefies and board can be easily lifted away.

Prepare for Replacement

Carefully remove residual solder and debris from the pads using flux-coated braid and flat-tipped soldering iron or other appropriate technique. Great care must be used to prevent lifting of small pads. Clean the entire area of flux and debris.

Converter Replacement

It is suggested that solder paste be applied to the new converter. A mini solder paste stencil will ensure the proper paste thickness based on the existing reflow process but a manual application of paste is also feasible. Carefully position the pasted converter and reflow the entire assembly using standard reflow profile. No study has been performed to reliably predict the acceptability of solder joints created using this technique.

Inspect

After cool-down period, visually inspect the castellated hole around the perimeter of the new converter where applicable. When the unit is properly soldered, the solder should partially wick up into these castellations.

Murata Power Solutions, Inc. 11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A. ISO 9001 and 14001 REGISTERED

Murata Power Solutions, inc. makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein do not imply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Specifications are subject to change without notice. © 2013 Murata Power Solutions, inc.