

Product Change Notice

Issue Date: 07 March 2016
Revision Date: 14 April 2016

Change Type:

Wire bond Related Change: Add wire bonding.

Parts Affected:

MGA-13116-TR1G, MGA-13116-BLKG
MGA-13216-TR1G, MGA-13216-BLKG
MGA-13316-TR1G, MGA-13316-BLKG

Description and Extent of Change:

Avago Technologies is adding a wire bond from die to ground pad on lead frame (W9). Please review diagram in Appendix for details.

Reasons for Change:

To stabilize the Idd2 parameter and for continuous product improvement.

Effect of Change on Fit, Form, Function, Quality, or Reliability:

The device specification will remain the same. Electrical characterization and reliability qualification has been performed on representative products to ensure normal parametric distribution, consistent electrical performance, and reliability.

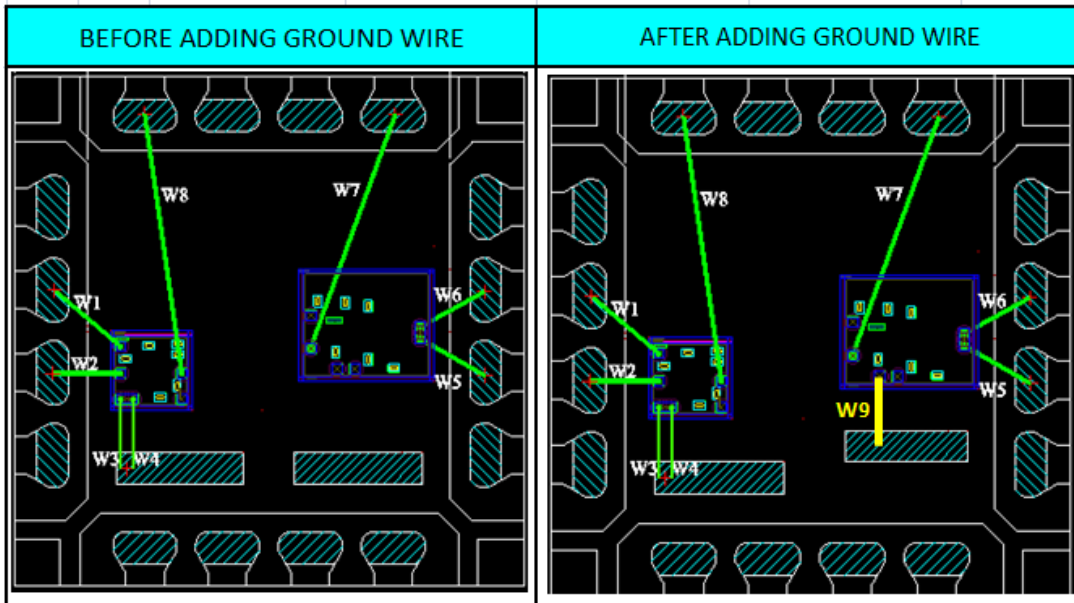
Effective Date of Change:

Product shipment with this change is targeted to begin in June 2016, but timing of shipment of the changed part will depend on customer demand and inventory levels.

Qualification Data:

Qualification has been completed and passed as per table in Appendix.

Appendix



Qualification Data:

| Reliability Test | Sample Size | Duration | Remarks |
|--|-------------|------------|---------|
| High Temperature Operating Life (HTOL) T _j =150degC, V _{dd} = 5V JESD22-A108 | 32 pcs | 500 hrs | Passed |
| Temperature Cycle (TMCL) -65/150degC, 10 mins dwell, 0 min transfer JESD22-A104 | 60 pcs | 500 cycles | Passed |
| High Temperature Storage Life (HTSL) 150degC JESD-22-A103 | 60 pcs | 500 hrs | Passed |

These changes have been reviewed and approved by Broadcom Limited engineers and managers per Broadcom Limited' procedure: Change Control and Customer Notification, 5962-6052-80.

Please contact your Broadcom Limited field sales for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.