

**PCN: V10-003-480036-0B**

## Product Change Notice

Revision Date: 30<sup>th</sup> Apr 2010  
Original Issue Date: 19<sup>th</sup> Apr 2010

**Change Type:**

Fab related: Wafer backside via process second source.

**Parts Affected:**

Please refer to appendix I

**Description and Extent of Change:**

Wafer backside via process second source qualification.

**Reasons for Change:**

Supply chain optimization

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

The device specification will remain the same, which will ensure product electrical performance remains the same. Appropriate electrical characterization and reliability qualification will be performed on representative products to insure normal parametric distribution, consistent electrical performance, and reliability.

**Effective Date of Change:**

Product shipments using this change will begin around 30 July 2010. Timing of shipment of the changed part will vary by part number depending on qualification completion, customer demand and inventory levels.

**Qualification Data:**

Electrical characterization data would be available by 30 of Apr 2010.

Reliability qualification vehicle is MGA-43328. Please refer to appendix II for reliability qualification results.

---

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies procedure: Change Control and Customer Notification, A-5962-6052-80.

Please contact your Avago Technologies field sales engineer or Contact Center (<http://www.avagotech.com/contact/>) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.

## Appendix I

Part number affected:

ALM-1222-BLKG	MGA-14516-TR1G
ALM-1222-TR1G	MGA-14516-TR2G
ALM-1222-TR2G	MGA-30116-BLKG
ALM-1322-BLKG	MGA-30116-TR1G
ALM-1322-TR1G	MGA-30116-TR2G
ALM-1322-TR2G	MGA-30216-BLKG
ALM-2312-BLKG	MGA-30216-TR1G
ALM-2312-TR1G	MGA-30216-TR2G
ALM-31122-BLKG	MGA-30316-BLKG
ALM-31122-TR1G	MGA-30316-TR1G
ALM-31122-TR2G	MGA-30316-TR2G
ALM-31222-BLKG	MGA-412P8-BLKG
ALM-31222-TR1G	MGA-412P8-TR1G
ALM-31222-TR2G	MGA-412P8-TR2G
ALM-31322-BLKG	MGA-631P8-BLKG
ALM-31322-TR1G	MGA-631P8-TR1G
ALM-31322-TR2G	MGA-631P8-TR2G
ALM-42216-BLKG	MGA-632P8-BLKG
ALM-42216-TR1G	MGA-632P8-TR1G
ALM-42216-TR2G	MGA-632P8-TR2G
ALM-42316-BLKG	MGA-645T6-BLKG
ALM-42316-TR1G	MGA-645T6-SG1G
ALM-42316-TR2G	MGA-645T6-TR1G
MGA-12516-BLKG	MGA-645T6-TR2G
MGA-12516-TR1G	MGA-655T6-BLKG
MGA-12516-TR2G	MGA-655T6-TR1G
MGA-13516-BLKG	MGA-655T6-TR2G
MGA-13516-TR1G	MGA-675T6-BLKG
MGA-13516-TR2G	MGA-675T6-TR1G
MGA-14516-BLKG	MGA-675T6-TR2G
QMGA-0018-PR1	QMGA-0023-PR1

---

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies procedure: Change Control and Customer Notification, A-5962-6052-80.

Please contact your Avago Technologies field sales engineer or Contact Center (<http://www.avagotech.com/contact/>) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.

## Appendix II

### (Updated Mar 18<sup>th</sup>, 2010) RF Amplifier

### Qualification Report for

Wafer backside via process second source qualification (PCN: V10-003-480036-0A)

Avago Technologies P/Ns:  
Please refer to PCN Appendix I

### Qualification Results:

Stress Test	Stress Condition	Duration	Number of Devices	Results
High Temperature Operating Life (HTOL)	Tj=150°C; Vdd=5V, Vsd =1.42V, Vc = 1.9V 50% Duty cycle	1000 hours	96pcs	Passed
Wet High Temperature Operating Life (WHTOL)	85°C/85%RH; Vdd=5V, Vsd =1.42V, Vc =1.9V	1000 hours	81pcs	Passed
Low Temperature Storage Life	-40°C	500 hours	84pcs	Passed
High Temperature Storage Life	125°C	500 hours	84pcs	Passed
Wet & High Temperature Storage Life	85°C/85%RH	500 hours	84pcs	Passed
Thermal Cycle	-55/125°C, 15mins dwell, 10min transfer	500 cycles	82pcs	Passed
Thermal Shock	-65°C /150°C, 5mins dwell, 10secs transfer	500 cycles	84pcs	Passed

### Qual Vehicle

MGA-43328

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies procedure: Change Control and Customer Notification, A-5962-6052-80.

Please contact your Avago Technologies field sales engineer or Contact Center (<http://www.avagotech.com/contact/>) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.