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Control No. PCN-14231 June 20 2014

# (ADVANCED) PRODUCT/PROCESS CHANGE NOTIFICATION

TYPE OF CHANGE:	☐ Design		☐ Other	
This notification is provided in accordance with Power Integrations policy of major change notification. If you have any questions or need further assistance, please contact your regional Power Integrations sales office.				

### **DESCRIPTION OF CHANGE**

XFAB Lubbock, Texas, USA is added as an alternative wafer fab site for TOP258 products. XFAB Lubbock, Texas, USA is one of the qualified wafer fab sites of Power Integrations products.

#### **REASON FOR CHANGE**

Improvement in the manufacturing capacity and flexibility.

### **PRODUCTS AFFECTED**

Ordering Part Numbers	Marking
TOP258EG, TOP258EN, TOP258ENAU, TOP258EN0105	TOP258EG, TOP258EN
TOP258GN, TOP258LG, TOP258LN	TOP258GN, TOP258LG, TOP258LN
TOP258MG, TOP258MN, TOP258MNAU, TOP258MN0105	TOP258MG, TOP258MN
TOP258PG, TOP258PN, TOP258PNAU, TOP258PN0004	TOP258PG, TOP258PN
TOP258YN, TOP258YNAU, TOP258YN0166	TOP258YN

# **QUALIFICATION STATUS**

See Appendix 1 for the qualification report.

### **CONFIDENTIAL**

The information in this report contains confidential and proprietary information of Power Integrations and its manufacturing partners. By receiving this report, the customer agrees to use this information for the sole purpose of addressing the issues reviewed in this report and to keep the contents confidential. If it becomes necessary for the customer to disclose this information to a third party, a non-disclosure agreement, which provides reasonable and customary protection for the disclosed information, must be executed.

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#### **EFFECT ON CUSTOMER**

No adverse impact is expected in customers' applications. The product will be guaranteed to meet the datasheet limits.

### **EFFECTIVE DATE**

September 22, 2014. This date is subject to change. Products assembled with the current production process may continue to be shipped after implementation of the above change

### **SAMPLE AVAILABILITY**

Samples are available upon request. Please send requests for samples within two weeks after receipt of this notification to the local Power Integrations sales office. For customers that request samples, a reasonable accommodation will be made in order to allow time of customer's qualification in a case-specific manner.

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# Appendix I Reliability Engineering Qualification Report

Qualification Project: E122503 Prepared By: Nick Stanco Manager, Reliability Engineering

# Project: Qualification of TOP258 Product Transfer to XFAB

### **Summary:**

The XFAB 6" wafer fab in Lubbock, Texas was previously qualified and has been in mass production since 2013. Reliability tests were performed for qualification of the TOP258 with passing results obtained in all tests. A parameter characterization study was completed with acceptable results.

Based on acceptable reliability test results, the TOP258 is now fully qualified and approved for production in the XFAB 6" fab in Lubbock, Texas.

**Qualification Vehicles: TOP258PG** 

### **Reliability Test Descriptions and Conditions**

Test Name	Conditions	<b>Reference Specification</b>
DOPL (Dynamic Operating Life Test)	Tj=125°C, Vd(peak)=560V	EIA/JESD22-A108-D
HTRB (High Temperature Reverse Bias Test)	Ta=150°C, Vd=560V, Vbp or Vc=6.2V	EIA/JESD22-A108-D
THBT (Temperature Humidity Bias Test)	85°C, 85% RH, Vd=30V, Vbp or Vc=6.2V	EIA/JESD22-A101-C
TMCL (Temperature Cycle, Air to Air)	-65°C to +150°C, air to air, unbiased	EIA/JESD22-A104-D

# **DOPL (Dynamic Operating Life)**

Product	Lot No.	Test Duration	No. Failures/Sample Size
TOP258PG	0M062C	1000 hours	0/47
TOP258PG	0W562B	1000 hours	0/47

### **HTRB** (High Temperature Reverse Bias)

Product	Lot No.	Test Duration	No. Failures/Sample Size
TOP258PG	0M062C	1000 hours	0/47
TOP258PG	0W562B	1000 hours	0/47

## **THBT** (Temperature Humidity Bias)

Product	Lot No.	Test Duration	No. Failures/Sample Size
TOP258PG	0M062C	1000 hours	0/47
TOP258PG	0W562B	1000 hours	0/47

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# **TMCL (Temperature Cycling)**

Product	Lot No.	Test Duration	No. Failures/Sample Size
TOP258PG	0M062C	1000 cycles	0/47
TOP258PG	0W562B	1000 cycles	0/47

 $\textbf{Conclusion:} \ Based \ on \ acceptable \ reliability \ test \ results, TOP258 \ products \ \ are \ fully \ qualified \ and \ approved \ for \ production \ in \ the \ XFAB \ 6" fab \ in \ Lubbock, \ Texas.$ 

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### **CUSTOMER ACKNOWLEDGEMENT**

Power Integrations requests you acknowledge the receipt of the above-mentioned PCN. If no acknowledgment is received within 30 days of this notification, Power Integrations will assume the change is acceptable. Lack of any additional response within 90 days of this notification further constitutes acceptance of the change.

Power Integrations reserves the right to ship either version manufactured after the effective date until the inventory of the earlier version has been depleted.

If you have any questions or need further assistance, please contact your regional Power Integrations sales office. Otherwise, please check the box below, acknowledging the receipt of the PCN.

The indicated Product/Process Change Notification was received by the undersigned authority.

Name/Title:	
Signature:	Date:
Email Address/Phone#:	
Company/Location:	
CUSTOMER COMMENTS	
Please email this signed form to pcn@powerint com speci	fying the PCN# in the subject

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