



Power Integrations

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PRODUCT/MANUFACTURING CHANGE NOTIFICATION

Control No. PCN-07441

Date: 13-Nov-2007

Type of Change: **Design:** ☐ **Manufacturing** ☒ **Other** ☐

In accordance with Power Integrations policy of critical change notification and JEDEC standard EIA/JESD-46 guidelines, we take this opportunity to serve you this notice. If you have any questions or need further assistance, please contact your area sales manager.

DESCRIPTION OF THE CHANGES:

Addition of XFab Wafer Foundry, Dresden, Germany for fabrication of TinySwitch-III product family.

XFab wafer foundry has been previously qualified to fabricate wafers in high volume for other PI products for several years.

EFFECT ON PRODUCTS PREVIOUSLY SHIPPED: None

EFFECT ON PRODUCT QUALITY: None. Reliability testing results are included in the attached reliability report. There are no reliability issues. XFab have been manufacturing wafers in high volume for other PI products for several years with excellent quality and reliability records.

PART NUMBERS AFFECTED:

The following products will be fabricated at XFab Wafer Foundry, Dresden, Germany for the first time TNY274-278 with PN, GN package options.

REASON FOR CHANGE: To increase manufacturing capacity and to ensure supply from multiple sources.

EFFECTIVE DATE: 12-Feb-2008

Please note that products with the above changes may begin to be shipped after the effective date stated above without further notice.

Power Integrations



Reliability Engineering Qualification Report

Qualification Report No: Q071501

Date: 10/15/2007

Author: Nick Stanco

Product Engineer: Binh Cao

Project Title: Qualification of TNY274-278 (TinySwitch-III) Wafer Fabrication at XFab	
Summary: Reliability testing was conducted per qual plan Q071501 to qualify TNY274-278 (TinySwitch-III) products for fabrication at XFab (formerly Z-Foundry). TNY278PN device was used as the qualification vehicle. Four TNY278PN qualification lots were subjected to a full set of reliability stress tests with satisfactory reliability results. Product parameter characterization was performed on all lots with acceptable results. Based on acceptable reliability stress test results and parameter characterization results, TNY274-278 products fabricated at XFab are now fully qualified and approved for production release. This release covers both PN and GN packages at all previously qualified assembly sites.	
Qualification Vehicles: TNY278PN	
Justification: Additional wafer fabrication site for selected TinySwitch-III products	
Material Affected: TNY274, TNY275, TNY276, TNY277 and TNY278 in the PN and GN packages	
Fabs XFab, Dresden, Germany	Package: DIP-08C

TNY278PN Reliability Test Results (rejects/sample size)

Test Name	TNY278PN Xfab Lot 1 Lot 45677A	TNY278PN Xfab Lot 2 Lot 46068A	TNY278PN Xfab Lot 3 Lot 46081A	TNY278PN Xfab Lot 4 Lot 46081B	Duration & Conditions
DOPL	0/36	0/36	0/36	0/35	1000 Hrs, Tj=125°C, Vd(peak)=560V
HTRB	0/47	0/47	0/47	0/47	1000 Hrs, 150°C, Vd=560V
THBT	0/47	0/47	0/47	0/47	1000 Hrs, 85°C/85 RH, Vd=30V
TMCL	0/47	0/47	0/47	0/47	1000 Cycles, -65/150°C
Parameter Characterization over Temperature	Passed	Passed	Passed	Passed	

Conclusion:

Based on acceptable reliability stress test results as well as acceptable parameter characterization and analysis results, TNY274-278 products fabricated at XFab are now fully qualified and approved for production release. This release covers both PN and GN packages at all previously qualified assembly sites.

Approvals

Approved By	Signature	Date
Reliability Engineer:	On File	On File
Product Engineering Manager:	On File	On File
Reliability Engineering Manager:	On File	On File
Director of Technology Development:	On File	On File
Director of Quality:	On File	On File