



# PRODUCT/PROCESS CHANGE NOTIFICATION

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PCN APM-SLI/08/3788  
Notification Date 06/19/2008

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**Additional SOT23-5L Assembly&Testing Line in DIODES Inc.**

**SLI - LINEAR & INTERFACE**

**Table 1. Change Implementation Schedule**

Forecasted implementation date for change	10-Sep-2008
Forecasted availability date of samples for customer	12-Jun-2008
Forecasted date for <b>STMicroelectronics</b> change Qualification Plan results availability	12-Jun-2008
Estimated date of changed product first shipment	18-Sep-2008

**Table 2. Change Identification**

Product Identification (Product Family/Commercial Product)	see attached list
Type of change	Package assembly location change
Reason for change	In order to increase capacity
Description of the change	A new Assembly and Testing line for SOT23-5L package has been installed in Subcontractor DIODES Inc. for Voltage Regulators. This new additional line will increase production capacity in order to satisfy our Customers demand. No change in electrical and mechanical characteristics. Samples of LD2980CM33TR are already available for qualification, while we will have two additional types by week 28 (LK112M50TR and LD2985BM33R). The only difference is about the marking, DIODES will mark the products only on the top face of the package.
Product Line(s) and/or Part Number(s)	See attached
Description of the Qualification Plan	See attached
Change Product Identification	See "GD" in the Traceability Code as identification of Assy&Testing Plant.
Manufacturing Location(s)	

**Table 3. List of Attachments**

Customer Part numbers list	
Qualification Plan results	



Customer Acknowledgement of Receipt		<b>PCN APM-SLI/08/3788</b>
Please sign and return to STMicroelectronics Sales Office		<b>Notification Date 06/19/2008</b>
<input type="checkbox"/> Qualification Plan Denied <input type="checkbox"/> Qualification Plan Approved  <input type="checkbox"/> Change Denied <input type="checkbox"/> Change Approved	Name: <hr/> Title: <hr/> Company: <hr/> Date: <hr/> Signature: <hr/>	
Remark ..... ..... ..... ..... ..... ..... ..... ..... ..... ..... .....		

## DOCUMENT APPROVAL

Name	Function
Riviera, Antonio	Division Marketing Manager
Naso, Lorenzo	Division Product Manager
Lisi, Giuseppe	Division Q.A. Manager



**IMS (Industrial & Multisegment Sector)**  
**APM (Analog, Power, MEMS) Group**  
**Voltage Regulator, Interface, Advanced logic & Power RF**  
**Quality & Reliability**

**Reliability Evaluation Plan and final results**  
**on LD2980 in DIODES INC**

**REL-6043.106.08W**

**Line.. RR33**  
**Package. SOT23-5L**

Test	Conditions	S.S.	Requirement	Results
PRECONDITIONING OF SMD DEVICES BEFORE TC/THB/PPT	DRYNG 1H @ 125°C STORE 168H @ TA=85°C RH=85% IR REFLOW 3 CYCLES @ 260°C+0 -0 °C	231	Parameter within spec. limits at end of preconditionings after go no go test.	No parameter deviation at end of preconditionings.
H.T.S.	TA=150 °C	77 x 1 Lot	Parameter deviation within spec. limits	No parameter deviation at 1000 hours.
T.H.B.	<i>D.U.T. SMD PRECONDITIONED</i> <i>LEVEL 1 JEDEC</i> TA=85°C - RH=85% Vbias= 16V	77 x 1 Lot	Parameter deviation within spec. limits	No parameter deviation at 1000 hours.
PRESSURE POT	<i>D.U.T. SMD PRECONDITIONED</i> <i>LEVEL 1 JEDEC</i> TA=121°C – PA=2Atm	77 x 1 Lot	Parameter deviation within spec. limits	No parameter deviation at 168 hours.
THERMAL CYCLES AIR TO AIR	<i>D.U.T. SMD PRECONDITIONED</i> <i>LEVEL 1 JEDEC</i> TA=-65°C TO 150°C 1 HOUR / CYCLE	77 x 1 Lot	Parameter deviation within spec. limits	No parameter deviation at 500 cy
SMD MOISTURE INDUCED STRESS	DRYNG 1H @ 125°C STORE 168H @ TA=85°C RH=85% IR REFLOW 3 CYCLES @ 260°C+0°C -0°C	25 x 1 Lot	Parameter deviation within spec. limits at end of test.	No parameter deviation at end of test.

**Comments:** The reliability tests results are aligned to our STD production

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