

# PRODUCT/PROCESS CHANGE NOTIFICATION

PCN APM/09/4537 Notification Date 04/29/2009

New Assembly & Test location in Long Gang (China) for Products in Max247 Package

#### **Table 1. Change Implementation Schedule**

Forecasted implementation date for change	24-Aug-2009
Forecasted availability date of samples for customer	15-May-2009
Forecasted date for <b>STMicroelectronics</b> change Qualification Plan results availability	22-Apr-2009
Estimated date of changed product first shipment	31-Aug-2009

#### **Table 2. Change Identification**

Product Identification (Product Family/Commercial Product)	see attached list
Type of change	Package assembly location change
Reason for change	the Ain Sebaa (Morocco) plant closure
Description of the change	The production transfer in this new assembly and testing site located in Long Gang (China) will not affect the electrical, dimensional and thermal parameters of the products, maintaining unchanged current information published in the relevant datasheets. Manufacturing equipment and materials are the same as those formerly used in the Morocco plant. There is also no change in the packing modes and the standard delivery quantities. All verifications are included in the qualification program
Product Line(s) and/or Part Number(s)	See attached
Description of the Qualification Plan	See attached
Change Product Identification	plant will be identified by the "G4" digits indicating the assembly plant code
Manufacturing Location(s)	

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Table 3. List of Attachments	Tal	ble	3. L	ist	of	Attac	chm	ents
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Customer Part numbers list	
Qualification Plan results	

Customer Acknowledgement of Receipt	PCN APM/09/4537
Please sign and return to STMicroelectronics Sales Office	Notification Date 04/29/2009
□ Qualification Plan Denied	Name:
□ Qualification Plan Approved	Title:
	Company:
□ Change Denied	Date:
□ Change Approved	Signature:
Remark	
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### **DOCUMENT APPROVAL**

Name	Function
Marino, Carlo	Division Marketing Manager
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Vitali, Gian Luigi	Division Q.A. Manager

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# ANALOG, POWER & MEMS Group New Assembly & Test location in Long Gang (China) for Products in Max247™ Package:



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#### **WHY THIS CHANGE?**

In complement to PCN APM/09/4296 announcing the qualification of a new Assembly and Test location in **Long Gang** (China) for products in TO-220/247 packages, please be informed that this **new location** has also been approved for **products in the Max247**™ **package**.

The Long Gang plant will be able to support massive production for **IGBT**, **Power MOSFET** and **Power Rectifiers** housed in the Max247<sup>™</sup> package. The **production transfer** to the new ST site in Long Gang will also complete the relocation of the manufacturing activities related to the Ain Sebaa (Morocco) plant closure, earlier announced by APCN APM/07/3145.

The **involved product series** (by Product Family) are listed in the attached list:

Product Family	Sub-family	Product PN or Series
IGBT & Power Bipolar	Max247™	STGYxxx

Product Family	Sub-family	Product PN or Series
Power MOSFET	Max247™	STYxxx

Product Family	Sub-family	Product PN or Series	
Rectifiers	Max247™	STPSxxxxxxCY STTHxxxxCY	

Any other Product manufactured by ST in Max247<sup>™</sup> package, even if not expressly included or partially mentioned in the above tables, are affected by this change.

#### WHAT IS THE CHANGE?

The **production transfer** in this new assembly and testing site located in Long Gang (China) will not affect the electrical, dimensional and thermal parameters of the products, **maintaining unchanged current information published in the relevant datasheets**.

**Manufacturing equipment** and **materials** are the same as those formerly used in the Morocco plant. There is also no change in the packing modes and the standard delivery quantities. All verifications are included in the **qualification program**.

#### WHEN?

#### Samples availability:

**Qualification samples** of the devices produced in the China plant will be **available** as indicated in the table below.

Product Family	Samples availability	
Power MOSFET	From week <b>20-2009</b>	
IGBT & Power Bipolar	From week <b>22-2009</b>	
Power Rectifiers	From week <b>22-2009</b>	

**Other samples** are available on request for delivery within notice period if ordered within 30 days from notification.

#### Change implementation schedule:

The production start and first shipments will be implemented according to our work in progress and materials availability as indicated in the schedule below:

Product Family	Production Start	1st Shipments
Power MOSFET	From week <b>20-2009</b>	From week <b>21-2009</b>
IGBT & Power Bipolar	From week <b>25-2009</b>	From week <b>35-2009</b>
Power Rectifiers	From week <b>25-2009</b>	From week <b>35-2009</b>

#### Marking and traceability:

Unless otherwise stated by customer specific requirement, parts assembled in the new Long Gang (China) plant will be identified by the "G4" digits indicating the assembly plant code.

In addition to the marking differentiation, the traceability of the parts assembled in the China plant and the related ECOPACK grade identification will be ensured by the **Q.A. number**.

#### **Qualification plan:**

Preliminary data will be available from week 20-2009.



## QUALIFICATION PLAN

	TESTS					
Test Vehicles	HTSL		Pressure Coocker Test	Thermal Cycling		
	Prelim Results forecast	Final Results forecast	Final Results fore- cast	Prelim Re- sults forecast	Final Results forecast	
STY140NS10 (NP1N)	WK 20	WK 26	WK20	WK20	WK 25	
STY30NK90Z (EZ9N)	WK20	WK 26	WK20	WK20	WK 25	
STGY40NC60VD IV6B	WK20	WK 26	WK20	WK20	WK 25	
STPS80H100CY (NX34P02V)	Not done	Not done	Not done	WK20	WK 25	

# QUALIFICATION TEST

TEST	CONDITIONS	DURATION	NBR OF LOTS	SAMPLE SIZE	ACCEPTANCE CRITERIA
Pressure Coocker Test JESD-A102	121 degC; 2 atm	96 Hours	1	77 pcs	Zero failure
HTSL JESD22 A-103	150 degC	1K Hours	1	77 pcs	Zero failure
Thermal Cycling JESD22-A104	-55 degC / +150 degC	500 cycles	1	77 pcs	Zero failure



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