



PRODUCT/PROCESS CHANGE NOTIFICATION

PCN CRP/08/4093
Notification Date 12/22/2008

**Change of component orientation in carrier tape for QFP
and HIQUAD Square Packages Packing in ST and ST Sub-contractors**

Table 1. Change Implementation Schedule

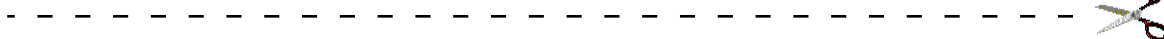
Forecasted implementation date for change	02-Apr-2009
Forecasted availability date of samples for customer	02-Apr-2009
Forecasted date for STMicroelectronics change Qualification Plan results availability	22-Dec-2008
Estimated date of changed product first shipment	02-Apr-2009

Table 2. Change Identification

Product Identification (Product Family/Commercial Product)	all products sold in Tape & Reel packing
Type of change	Packing (tray, tube, reel)
Reason for change	Compliance to the standard EIA 481-C
Description of the change	Change of component orientation in carrier tape for the packing of Square QFP and Square HIQUAD packages in Muar, Malta plants and ST Subcontractors. The pin 1 will be right facing the sprocket side according to the EIA 481-C Standard
Product Line(s) and/or Part Number(s)	See attached
Description of the Qualification Plan	See attached
Change Product Identification	The two characters 'OR' will be added in the Finished Good codification
Manufacturing Location(s)	

Table 3. List of Attachments

Customer Part numbers list	
Qualification Plan results	



Customer Acknowledgement of Receipt		PCN CRP/08/4093
Please sign and return to STMicroelectronics Sales Office		Notification Date 12/22/2008
<input type="checkbox"/> Qualification Plan Denied <input type="checkbox"/> Qualification Plan Approved <input type="checkbox"/> Change Denied <input type="checkbox"/> Change Approved	Name:	
	Title:	
	Company:	
	Date:	
	Signature:	
Remark		

DOCUMENT APPROVAL

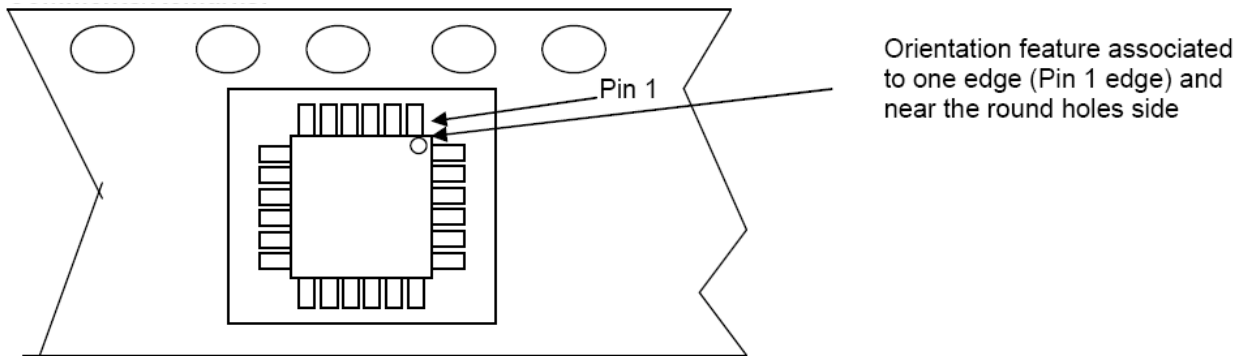
Name	Function
Sibille, Marie-Helene	Corporate Quality Manager
Buffa, Michel	Process Owner
Low, Patrick	Process Owner
Romero-liceras, Antonio	Process Owner
Vitali, Gian Luigi	Process Owner
Yackowlew, Nicolas	Process Owner

Change of Component Orientation in carrier tape for the packing of Square QFP and Square HIQUAD packages

WHAT:

The orientation of components in the carrier tapes for the packing of square QFP and square HIQUAD packages is going to be modified in order to be compliant with the international standard EIA 481-C

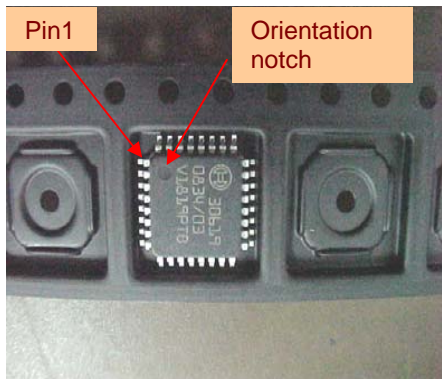
This modification will impact the products manufactured in the ST manufacturing sites located in Muar (Malaysia), Malta, and at our subcontractors as well.



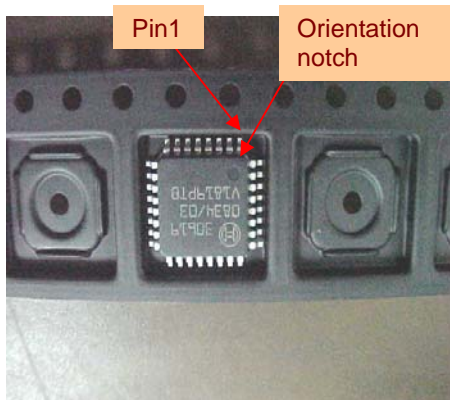
Graphical representation of the change on QFP square package: the pin 1 is right facing the sprocket side

The below pictures describes the change for both packages.

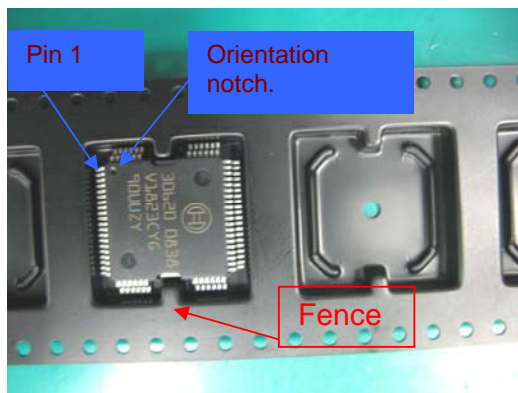
QFP Current Orientation.



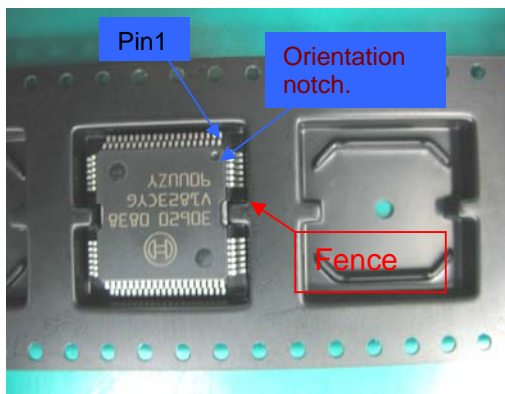
QFP new Orientation



HIQUAD Current Orientation.



HIQUAD new Orientation



There will be no change concerning the carrier tape materials for the QFP packages. For HIQUAD carrier tapes, the fence position is changed in order to be aligned with the unit orientation (see picture above).

Carrier tape parameters remain unchanged.

WHY:

The purpose of this change is to be compliant with the Standard EIA 481-C about packing requirements.

HOW:

The carrier tape containing products with this new orientation will be identified by a change in the codification of the Finished Good: two characters 'OR' will be introduced among the last characters of the Finished Good codification. The picture below shows an example of a label.



The two characters "OR" will be introduced among the last characters of the Finished Good code to identify a carrier tape with the new orientation.

In addition to the modification of the Finished Good code, stickers identifying the new specific orientation will be applied during a 6-month period on the plastic reel, the dry bag and the inner box.

The customer should note that the criterion for identifying the new orientation remains the Finished Good code with the 2-character "OR". The absence of stickers shall not be considered as a cause of litigation therefore the customer shall put in place the adequate incoming control.

WHEN:

This change will be implemented in the production lines starting from April 2nd 2009 onward and will be gradually extended to all concerned packages.

Depending of the availability of stock, the customers are required to check label information about product orientation for shipments received after April 2nd 2009

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