



# **PRODUCT/PROCESS CHANGE NOTIFICATION**

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PCN MPA-MIC/06/2053  
Notification Date 11/15/2006

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**STR71x family minor improvement**

**MIC - MICROCONTROLLERS**

Table 1. Change Identification

Product Identification (Product Family/Commercial Product)	STR71x family
Type of change	Product design change
Reason for change	Functionality improvement
Description of the change	Functionnality specified in the datasheet remains unchanged except the pin P0.10/U1.RX/U1.TX/SC.DATA which has been modified to offer TRUE OPEN DRAIN functionality when in smartcard mode. When adresssing 5V cards, the SCDATA line can now be connected directly to the card I/O. No more open drain buffer is needed. This modification is backward compatible with the previous designs, and no modification is required for customers using the previous revision. For samples delivery request prior to Dec 1st, 2006, please contact your local Sales or Marketing.
Product Line(s) and/or Part Number(s)	See attached
Description of the Qualification Plan	See attached
Change Product Identification	From revision Z to revision X (see page 4)
Manufacturing Location(s)	

Table 2. Change Implementation Schedule

Forecasted implementation date for change	13-Feb-2007
Forecasted availability date of samples for customer	01-Dec-2006
Forecasted date for <b>STMicroelectronics</b> change Qualification Plan results availability	01-Dec-2006
Estimated date of changed product first shipment	13-Feb-2007

**Table 3. Change Responsibility**

	Name	Signature	Date
Division Product Manager	J Nicholas		Nov.13 ,06
Division Q.A. Manager	F. Demingo		Nov.13 ,06
Division Marketing Manager	D. Colonna		Nov.13 ,06

**Table 4. List of Attachments**

Customer Part numbers list	
Qualification Plan results	

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Customer Acknowledgement of Receipt		PCN MPA-MIC/06/2053	
Please sign and return to STMicroelectronics Sales Office		Notification Date 11/15/2006	
<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 ..... ..... ..... ..... .....			

## 4 Product history

There are three versions of the STR710F series products. All versions are functionally identical and differ only with the points listed below.

Version "A" was the first version produced and delivered. Version "Z" was the second in production replacing version "A". Version "Z" has lower power consumption in STOP mode.

Version "X" is the latest introduced.

### Marking

The difference between versions is visible on the marking of the product as shown in the four examples in [Figure 41](#) through [Figure 44](#).

Figure 41. LQFP144 STR710 version "A"



Figure 42. LQFP64 STR712 version "Z"



Figure 43. BGA144 STR710 version “Z”

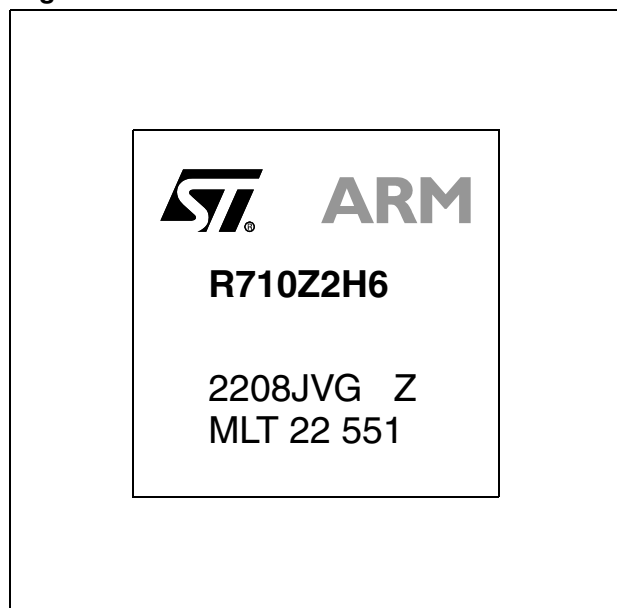


Figure 44. BGA64 STR711 version “X”

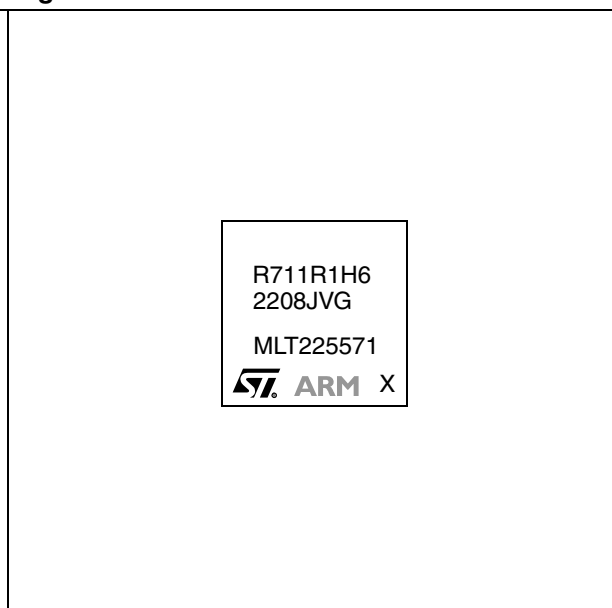


Table 39. A, Z and X version differences

Feature	A version	Z version	X version
ARM7TDMI core device Identification (ID) code register (see ARM7TDMI Technical Reference Manual)	Version bits [31:28] = 0001	Version bits [31:28] = 0010	Version bits [31:28] = 0010
Low power mode consumption in STOP mode at 25 °C	Not guaranteed Typical 49 µA	50 µA maximum at 25°C. Less than 30 µA at 25 °C for 99.730020% of parts	Same as Z.
SC.DATA pin	Not TRUE open drain When addressing 5V cards, the SCDATA Line must be connected to an open drain buffer.		Pin P0.10/U1.RX/U1.TX/SC. DATA has been modified to offer TRUE OPEN DRAIN functionality when in SmartCard mode. When addressing 5V cards, the SCDATA line can now be connected directly to the card I/O. This modification is backward compatible with previous designs, and no board modification is required.

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