

# PRODUCT/PROCESS CHANGE NOTIFICATION

PCN MMS-MIC/11/6485 Notification Date 06/20/2011

STM8S20x improvement

#### Table 1. Change Implementation Schedule

Forecasted implementation date for change	01-Oct-2011
Forecasted availabillity date of samples for customer	01-Sep-2011
Forecasted date for <b>STMicroelectronics</b> change Qualification Plan results availability	01-Oct-2011
Estimated date of changed product first shipment	01-Oct-2011

#### Table 2. Change Identification

Product Identification (Product Family/Commercial Product)	STM8S20x family
Type of change	Product design change
Reason for change	Yield and manufacturing capability improvement to secure the production
Description of the change	Design improvement that is affecting the upper connection layers is implemented in order to improve the yield and manufacturing capability. The functionality and the parametric figures remain unchanged. The implementation is software and hardware compatible with the previous revisions.
Product Line(s) and/or Part Number(s)	See attached
Description of the Qualification Plan	See attached
Change Product Identification	See attached description at page 5
Manufacturing Location(s)	

#### Table 3. List of Attachments

Customer Part numbers list	
Qualification Plan results	

Customer Acknowledgement of Receipt	PCN MMS-MIC/11/6485
Please sign and return to STMicroelectronics Sales Office	Notification Date 06/20/2011
Qualification Plan Denied	Name:
Qualification Plan Approved	Title:
	Company:
🗖 Change Denied	Date:
Change Approved	Signature:
Remark	

Name	Function	
Colonna, Daniel	Division Marketing Manager	
Buffa, Michel	Division Product Manager	
Narche, Pascal	Division Q.A. Manager	

## **DOCUMENT APPROVAL**

### How can the change be seen?

Traceability of the change is ensured by ST internal tools. New Finish good identification is printed on the labels. The new revision letter is changed as follows:

- For Rousset plant, X or Y to W
- For Global Foundry plant, 6 to 7

### Sample ordering process

The following process should be followed when ordering samples:

- 1. Wait until the forecasted availability date for samples for customer in table 1 has passed.
- Enter a NON STANDARD samples order with a note indicating the PCN reference 'MMS-MIC/11/6485'. This is important in order to ensure that samples are manually scheduled with the correct product revision.

Involved Commercial Products						
STM8S207C6T6	STM8S207M8T6B	STM8S207S6T6CTR				
STM8S207C6T6TR	STM8S207MBT6B	STM8S207S8T3C				
STM8S207C8T3	STM8S207R6T6	STM8S207S8T3CTR				
STM8S207C8T6	STM8S207R8T3	STM8S207S8T6C				
STM8S207C8T6TR	STM8S207R8T3TR	STM8S207S8T6CTR				
STM8S207CBT3	STM8S207R8T6	STM8S207SBT6C				
STM8S207CBT6	STM8S207R8T6C	STM8S208C6T3				
STM8S207CBT6TR	STM8S207R8T6TR	STM8S208C8T6				
STM8S207K6T3C	STM8S207RBT6	STM8S208CBT6				
STM8S207K6T3CTR	STM8S207RBT6C	STM8S208MBT6B				
STM8S207K6T6C	STM8S207RBT6TR	STM8S208R8T6				
STM8S207K6T6CTR	STM8S207S6T3C	STM8S208RBT6				
STM8S207K8T6C	STM8S207S6T3CTR	STM8S208S6T3C				
STM8S207K8T6CTR	STM8S207S6T6C	STM8S208S6T6C				

### List of the involved Sales Types for the PCN MMS-MIC/11/6485

# MMS MCD Qualification Plan RERMCD1111 STM8S105 revX (RS8F) or rev7 (CH6F) STM8S20x revW (RS8F) or rev7 (CH6F) CMOSF9 RS8F & CH6F

Product / Process information					
Commercial product	STM8S105xxxxx STM8S20xxxxxx				
Product line	766X19 765X19				
Product description	STM8S105 STM8S20x				
Finish Good Code	8S105xxxx\$xx 8S20xxxxx\$xx				
Production Mask Set revision	F766XXXX & F766XXX7 F765XXXW & F765XXX7				
Product Division	Microcontrollers Division (MCD)				
Silicon process technology	CMOSF9 GO1				
Wafer fabrication location	RS8F – ST Rousset 8", France CH6F – Global Fondry - Singapor				
Electrical Wafer Sort test plant location	RS8F – ST Rousset 8", France Ang Mo Kio EWS, Singapor				

# 1.1 Objectives

The aim of this document is to present the qualification plan to assess the new mask revisions of the STM8S105 & STM8S20x.

# 1.2 Reliability Plan

Short description						
Descript.	Test/Method	Conditions	Sample Size	Criteria	Read out /Duration	Lot 1

Electrosta	Electrostatic discharge - Human Body Model						
ESD HBM	0060102 JESD22-A114	LQFP48	3 x 1 [3 x 1]	2KV [4KV]	2KV [4KV]		
Electrosta	Electrostatic discharge - Charge Device Model						
ESD CDM	0060102 JESD22-C101	LQFP48	3 x 1	1000V class III	1000V		

LATCH UF	>					
LU	0018695 JESD78	LQFP48	6 x 1	A0/R1	125°c	

NVM Endurance & Data Retention - 10K program / 300k data EW @ 125°C then Storage							
EDR	JESD22-A117 JESD22-A103	HTSL 150°c	80 x 1	A0/R1 10K/300K + 168h	168h		

High Temperature Operating Live							
HTOL	MIL-STD-883 Method 1005 JESD22-A108	140°c , 5v5	80 x 1	A0/R1 500h	500h		

[....] Monitoring

#### Please Read Carefully:

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or services or any intellectual property contained therein.

UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE (AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS EXPRESSLY APPROVED IN WRITING BY AN AUTHORIZED ST REPRESENTATIVE, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners

© 2011 STMicroelectronics - All rights reserved.

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan -Malaysia - Malta - Morroco - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

www.st.com