



PRODUCT/PROCESS CHANGE NOTIFICATION

PCN MMS-MIC/14/8432
Dated 25 Apr 2014

**STM32L15x & STM32L16x & STM32L100RCT6 Products
improvement - ref list products below**

Table 1. Change Implementation Schedule

Forecasted implementation date for change	25-Jul-2014
Forecasted availability date of samples for customer	18-Apr-2014
Forecasted date for STMicroelectronics change Qualification Plan results availability	30-Apr-2014
Estimated date of changed product first shipment	25-Jul-2014

Table 2. Change Identification

Product Identification (Product Family/Commercial Product)	Products listed below
Type of change	Product marking change
Reason for change	To increase the robustness and improve performances
Description of the change	In order to align the performances of products listed below with the target specification and to provide a better service to our customers, ST MCD division is announcing a new die revision on those products.
Change Product Identification	Die revision from "A" to "X"
Manufacturing Location(s)	

DOCUMENT APPROVAL

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



PRODUCT/PROCESS CHANGE NOTIFICATION

STM32L15x & STM32L16x & STM32L100RCT6 Products improvement – ref list products below

MMS - Microcontrollers Division (MCD)

Dear Customer,

In order to align the performances of products listed below, with the target specification and to provide a better service to our customers, ST MCD division is announcing a new die revision on those products.

What is the change?

Last metal interconnection layers are changed.

Limitations faced on the previous revision A and listed in the errata sheets (DM00105474 and DM00106315) are corrected with this new revision:

- Enhanced ESD performance,
- Enhanced ADC linearity conversion,
- Fully functional power consumption range 3
- Range 1 of dynamic voltage scaling availability from 1.71 V.

Why ?

The purpose of this change is to increase the robustness and improve performances of these products.

When ?

The production on the new "X" revision will start **Week 30 2014**.

How will the change be qualified?

This change will be qualified using the standard STMicroelectronics Corporate Procedures for Quality and Reliability, in full compliancy with the JESD-47 international standard.

You can find below the qualification results document.

How can the change be seen?

Traceability of the change is ensured by ST internal tools.

The new die revision letter is changed from "A" to "X". You can find this marking on the package.

We remain available to discuss any concern that you may have regarding this Product Change Notification.

With our sincere regards.

Michel Buffa

Microcontroller Division General Manager

List of Commercial Products impacted:

STM32L152CCU6D
STM32L152CCU6
STM32L100RCT6
STM32L151CCT6
STM32L151CCU6
STM32L151CCU6TR
STM32L151RCT6
STM32L151UCY6DTR
STM32L151UCY6STR
STM32L151UCY6TR
STM32L151VCH6
STM32L151VCH6TR
STM32L151VCT6
STM32L151VCT6D
STM32L151VCT6TR
STM32L152CCT6
STM32L152CCT6D
STM32L152RCT6
STM32L152RCT6D
STM32L152UCY6TR
STM32L152VCH6
STM32L152VCH6D
STM32L152VCT6
STM32L152VCT6D
STM32L162RCT6
STM32L162VCH6
STM32L162VCT6
STM32L162VCT6D



STM32L1xx – SCORPIO2 256k – Rev. X

Reliability Results

April, 09th 2014

MMS MCD Quality & Reliability Department

- **Context:**
 - In order to align the performances of STM32L15xCCx/RCx/UCx/VCx & STM32L162RCx/VCx & STM32L100RCT6 products with the target specification and to provide a better service to our customers, ST MCD division is announcing a new die revision on those products.
 - Last metal interconnection layers are changed.
 - Limitations faced on the previous revision A and listed in the errata sheets (DM00105474 and DM00106315) are corrected with this new revision:
 - Enhanced ESD performance,
 - Enhanced ADC linearity conversion,
 - Fully functional power consumption range3
 - Range1 of dynamic voltage scaling availability from 1.71 V.

Reliability results on new die revision X:

TRIAL	Test	Method	Criteria	Conditions	Package	Results
DIE	LU	0018695 JESD78	A0/R1 ⁽¹⁾	105° C	LQFP100	0/6
	ESD HBM	0060102 JESD22-A114	A0/R1 ⁽¹⁾	25° C 2kV (class II)	LQFP100	0/3
	HTOL 168h	MIL-STD-883 Method 1005 JESD22-A108	A0/R1 ⁽¹⁾	125° C	LQFP100	0/77
PACKAGE	ESD CDM	0060102 (ANSI/ESD STM5.3.1)	A0/R1 ⁽¹⁾	25° C / 500V (class III)	LQFP100 LQFP64 LQFP48 UFQFPN48 UFBGA100	0/3
				Min @ 250V (class II)	WLCSP63	W18-14

(1) : ACCEPTED 0 FAIL / REJECTED 1 FAIL

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