

PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.		MDG/22/13483
1.3 Title of PCN		STM32G050x, STM32G051x and STM32G061x 64K - product enhancement
1.4 Product Category		STM32G050x, STM32G051x, STM32G061x
1.5 Issue date		2022-06-28

2. PCN Team

2.1 Contact supplier	
2.1.1 Name	ROBERTSON HEATHER
2.1.2 Phone	+1 8475853058
2.1.3 Email	heather.robertson@st.com
2.2 Change responsibility	
2.2.1 Product Manager	Ricardo Antonio DE SA EARP
2.2.2 Marketing Manager	Veronique BARLATIER
2.2.3 Quality Manager	Pascal NARCHE

3. Change

3.1 Category	3.2 Type of change	3.3 Manufacturing Location
General Product & Design	Die redesign : Mask or mask set change with new die design like metallization (specifically chip frontside) or bug fix	TSMC FAB14 (Taiwan) ST Crolles (France)

4. Description of change

	Old	New
4.1 Description	STM32G050x, STM32G051x and STM32G061x 64K - (Die456- cut1.0 revision A) product has limitation as described in Errata Sheets. - ES0544 (Rev 1 - December 16 2020) for STM32G050x6/x8 device - ES0545 (Rev 1 - December 16 2020) for STM32G051x6/x8 device - ES0546 (Rev 1 - December 16 2020) for STM32G061x6/x8 device	STM32G050x, STM32G051x and STM32G061x 64K - (Die456 – cut1.1 revision Z) product enhancement fixes those limitations as described in Errata Sheets. - ES0544 (Rev 2 - April 12 2022) for STM32G050x6/x8 device - ES0545 (Rev 2 - April 12 2022) for STM32G051x6/x8 device - ES0546 (Rev 2 - April 12 2022) for STM32G061x6/x8 device
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	Impact on functionality as indicated in Errata Sheets: ES0544, ES0545 & ES0546	

5. Reason / motivation for change

5.1 Motivation	Improvements was implemented to increase robustness, performances and quality of our products.
5.2 Customer Benefit	SERVICE IMPROVEMENT

6. Marking of parts / traceability of change

6.1 Description	Traceability ensured by ST internal tools. Die revision changes from "A" to "Z" on Package Marking
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7. Timing / schedule

7.1 Date of qualification results	2022-08-31
7.2 Intended start of delivery	2022-10-03
7.3 Qualification sample available?	Upon Request

8. Qualification / Validation

8.1 Description	13483 RER2012 STM32G0 Die 456XXXZ cut1.1 - qual plan.pdf		
8.2 Qualification report and qualification results	Available (see attachment)	Issue Date	2022-06-28

9. Attachments (additional documentations)

13483 Public product.pdf
 13483 RER2012 STM32G0 Die 456XXXZ cut1.1 - qual plan.pdf
 13483 PCN13483_Additional information.pdf

10. Affected parts

10. 1 Current		10.2 New (if applicable)
10.1.1 Customer Part No	10.1.2 Supplier Part No	10.1.2 Supplier Part No
	STM32G050C8T6	
	STM32G050K8T6	
	STM32G051C8T6	
	STM32G051C8U6	
	STM32G051K6T6	
	STM32G051K8T6	
	STM32G051K8U6	
	STM32G061C8T6	

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**STM32G050x, STM32G051x
and STM32G061x 64K - product enhancement**

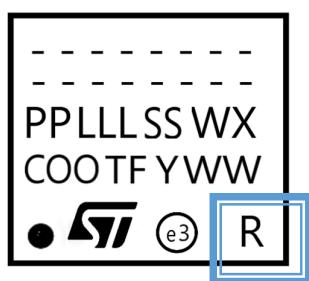
MDG – General Purpose Microcontrollers Division (GPM)

What are the changes?

Changes described in table below:

STM32G050x, STM32G051x, STM32G061x	Current Cut1.0	New Cut1.1
Die revision Marking R	“A”	“Z”

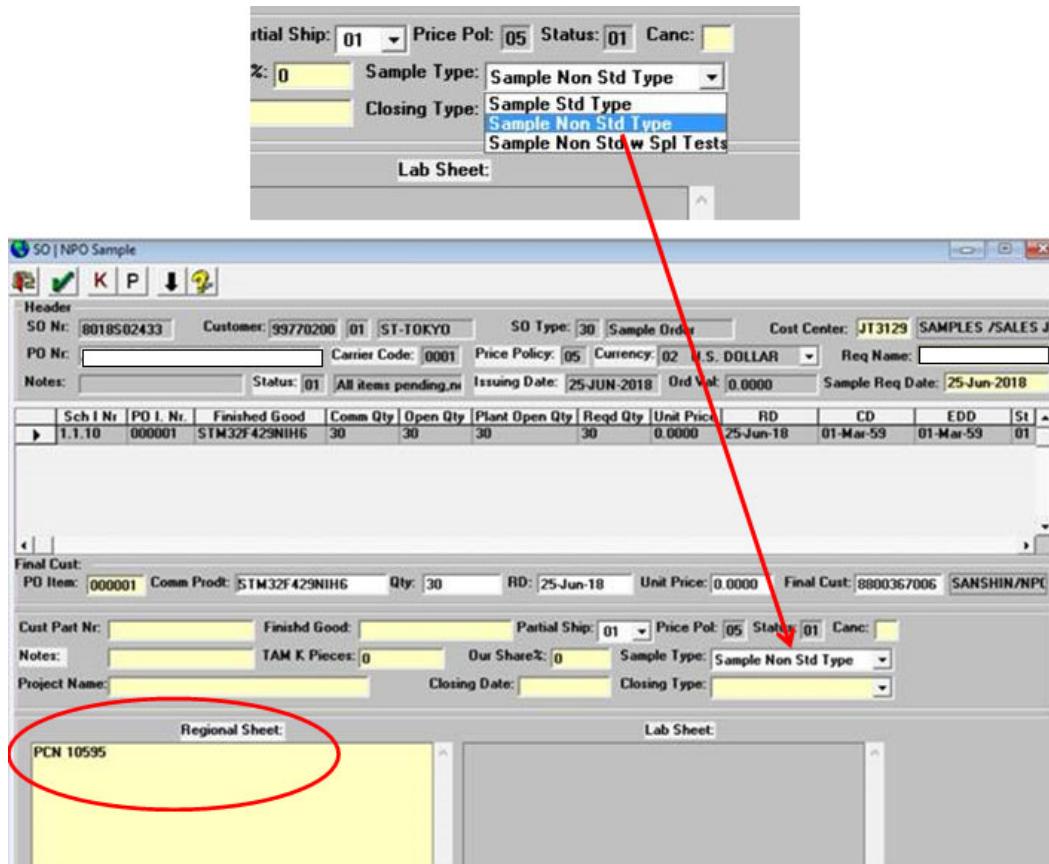
Example: Marking on package UFQFPN 7X7X0.55 48L



How to order samples?

For all samples request linked to this PCN, please:

- place a Non-standard sample order (choose Sample Non Std Type from pull down menu)
- insert the PCN number “**PCN13483**” into the NPO Electronic Sheet/**Regional Sheet**
- request sample(s) through Notice tool, indicating a single Commercial Product for each request



SO | NPO Sample

Header

SO Nr: 8018502433 Customer: 39770200 01 ST-TOKYO SO Type: 30 Sample Order Cost Center: JT3129 SAMPLES /SALES J

PO Nr: Carrier Code: 0001 Price Policy: 05 Currency: 02 U.S. DOLLAR Req Name:

Notes: Status: 01 All items pending, no Issuing Date: 25-JUN-2018 Ord Val: 0.0000 Sample Req Date: 25-Jun-2018

Sch I Nr	PO I. Nr.	Finished Good	Comm Qty	Open Qty	Plant Open Qty	Reqd Qty	Unit Price	RD	CD	EDD	St
1.1.10	000001	STM32F429NIH6	30	30	30	30	0.0000	25-Jun-18	01-Mar-59	01-Mar-59	01

Final Cust:

PO Item: 000001 Comm Prod: STM32F429NIH6 Qty: 30 RD: 25-Jun-18 Unit Price: 0.0000 Final Cust: 8800367006 SANSHIN/NPC

Cust Part Nr: Finished Good: Partial Ship: 01 Price Pol: 05 Status: 01 Canc:

Notes: TAM K Pieces: 0 Our Share%: 0 Sample Type: Sample Non Std Type

Project Name: Closing Date: Closing Type:

Regional Sheet: Lab Sheet:

PCN 10595



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Public Products List

Public Products are off the shelf products. They are not dedicated to specific customers, they are available through ST Sales team, or Distributors, and visible on ST.com

PCN Title : STM32G050x, STM32G051x and STM32G061x 64K - product enhancement

PCN Reference : MDG/22/13483

Subject : Public Products List

Dear Customer,

Please find below the Standard Public Products List impacted by the change.

STM32G051C6U6	STM32G050K6T6TR	STM32G061F8Y6TR
STM32G050K8T6	STM32G051K8U7	STM32G061G8U6
STM32G051C8U6	STM32G061C6T6	STM32G051K6U7
STM32G051C6T6	STM32G061K6U6	STM32G061C6U6
STM32G050C6T6	STM32G061K8U6	STM32G061C8T6
STM32G051K6T6	STM32G051K8U6	STM32G051G8U3TR
STM32G051C8T6	STM32G051G8U6	STM32G050C8T6
STM32G051K6U6	STM32G051K8T6	STM32G061G6U6
STM32G061K8T6	STM32G050K6T6	STM32G051G6U6
STM32G051G8U3	STM32G061C8U6	STM32G051K8U7TR
STM32G061K6T6	STM32G051K6U7TR	STM32G051F8Y6TR
STM32G051F8P6	STM32G051F6P6	STM32G061F6P6
STM32G050F6P6	STM32G061F8P6	



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PCN13483 RERMCD2012 – Die 456XXXZ Cut 1.1 TSMC CMOS90 – Reliability Plan

Reliability Plan

June 16th, 2022

MDG GPM Quality & Reliability Department

RERMCD2012 – Die 456XXXZ Cut 1.1

TSMC CMOS90nm

Trial	Test1	Method	Conditions	package	Sample x lot
Die	HTOL	MIL-STD-883 Method 1005 JESD22A108	T _j 130°C Ta = 125°C 168h 3.6V	LQFP7x7 48L pitch 0.5	456XXXZ (Cut 1.1) 77 x 1
	LU	0018695 JESD78	T _j 130°C	LQFP7x7 48L pitch 0.5	3 x 1
	ESD HBM	ANSI/ESDA/JEDEC JS-001	Ta 25°C Min 1KV (Class 1C) Target 2KV (Class 2)	LQFP7x7 48L pitch 0.5	3 x 1
	ESD CDM	ANSI/ESDA/ JEDEC JS-002	Ta 25°C Min 250V (class C3) Target 500V (Class C4)	LQFP7x7 48L pitch 0.5	3 x 1

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