


**PRODUCT / PROCESS CHANGE NOTIFICATION**

**1. PCN basic data**

<b>1.1 Company</b>		STMicroelectronics International N.V
<b>1.2 PCN No.</b>	MDG/24/14485	
<b>1.3 Title of PCN</b>	STM32U59x & STM32U5Ax - product Enhancement	
<b>1.4 Product Category</b>	STM32U595xx STM32U599xx STM32U5A5xx STM32U5A9xx	
<b>1.5 Issue date</b>	2024-04-11	

**2. PCN Team**

<b>2.1 Contact supplier</b>	
<b>2.1.1 Name</b>	PIKE EMMA
<b>2.1.2 Phone</b>	+44 1628896111
<b>2.1.3 Email</b>	emma.pike@st.com
<b>2.2 Change responsibility</b>	
<b>2.2.1 Product Manager</b>	Ricardo Antonio DE SA EARP
<b>2.1.2 Marketing Manager</b>	Veronique BARLATIER
<b>2.1.3 Quality Manager</b>	Pascal NARCHE

**3. Change**

<b>3.1 Category</b>	<b>3.2 Type of change</b>	<b>3.3 Manufacturing Location</b>
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)

**4. Description of change**

	<b>Old</b>	<b>New</b>
<b>4.1 Description</b>	STM32U59x and STM32U5Ax (Die481 - cut3.1 revision X) product shows some limitations.	STM32U59x and STM32U5Ax (Die481 - cut 3.2 revision W) fixes those limitations as described in Errata Sheet (ES0553 Rev 4.0 / April 2024).
<b>4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?</b>	Functionality enhancement	

**5. Reason / motivation for change**

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

**6. Marking of parts / traceability of change**

<b>6.1 Description</b>	traceability ensured by ST internal tools Die revision changes from "X" to "W" on Package Marking.
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**7. Timing / schedule**

<b>7.1 Date of qualification results</b>	2024-04-20
<b>7.2 Intended start of delivery</b>	2024-07-08
<b>7.3 Qualification sample available?</b>	Upon Request

**8. Qualification / Validation**

<b>8.1 Description</b>	14485 PCN14485_MDG-MCD-RER2007_STM32U5 4M - Die 481 Plan.pdf		
<b>8.2 Qualification report and qualification results</b>	Available (see attachment)	<b>Issue Date</b>	2024-04-11

**9. Attachments (additional documentations)**

14485 Public product.pdf  
14485 PCN14485\_MDG-MCD-RER2007\_STM32U5 4M - Die 481 Plan.pdf  
14485 PCN14485\_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
	STM32U599NIH6Q	

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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 :** STM32U59x & STM32U5Ax - product Enhancement

**PCN Reference :** MDG/24/14485

**Subject :** Public Products List

Dear Customer,

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

STM32U5A9NJH3QTR	STM32U595QJ16QTR	STM32U595VIT6QTR
STM32U5A5ZJY3QTR	STM32U599NIH6QTR	STM32U5A9BJY6QTR
STM32U595RJT6	STM32U595ZJT6Q	STM32U5A5ZJT6TR
STM32U595QJ16	STM32U5A5RJT6Q	STM32U595RIT6
STM32U595ZIT6Q	STM32U595ZIY6QTR	STM32U5A5QJ16Q
STM32U595QI16	STM32U599ZIT6Q	STM32U595ZJY6QTR
STM32U5A5AJH6	STM32U595VIT6Q	STM32U595RJT6Q
STM32U5A5AJH3TR	STM32U595AIH6Q	STM32U599ZJT6Q
STM32U5A5QJ13Q	STM32U5A9NJH3Q	STM32U595AJH6Q
STM32U595VJT6Q	STM32U595VJT3Q	STM32U5A5QJ16
STM32U5A5ZJT6	STM32U5A5QI13Q	STM32U599VIT6Q
STM32U5A9NJH6Q	STM32U599VJT6Q	STM32U5A5AJH6TR
STM32U5A9ZJY6QTR	STM32U595VIT6	STM32U595AIH6
STM32U5A5AJH6Q	STM32U5A5VJT6Q	STM32U5A5AJH3
STM32U595RIT6Q	STM32U595AJH6	STM32U599BJY6QTR
STM32U5A5ZJY6QTR	STM32U599ZJY6QTR	STM32U595VJT6
STM32U5A5VJT6	STM32U599ZIY6QTR	STM32U595QJ16Q
STM32U595ZJT6	STM32U599VJT6	STM32U5A5ZJT6Q
STM32U599NIH6Q	STM32U5A9ZJT6Q	STM32U595QI16Q
STM32U595AJH3	STM32U5A5RJT6	STM32U599NJH6Q
STM32U5A9VJT6Q	STM32U595ZIT6	

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**PRODUCT/PROCESS  
CHANGE NOTIFICATION  
PCN14485– Additional information**

**STM32U5xx and STM32U5xx 4M - product enhancement**

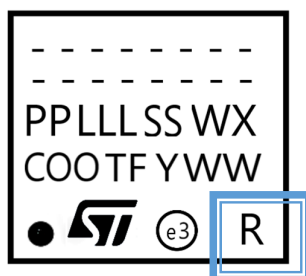
**MDG – General Purpose Microcontrollers Division (GPM)**

**What are the changes?**

Changes described in table below:

STM32U5xx STM32U5xx	Current <b>Die 481 CUT 3.1</b>	New <b>Die 481 CUT 3.2</b>
Die revision Marking <b>R</b>	"X"	"W"

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





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## 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 "**PCN14485**" into the NPO Electronic Sheet/**Regional Sheet**
- request sample(s) through Notice tool, indicating a single Commercial Product for each request

Partial Ship: 01 Price Pol: 05 Status: 01 Canc:

Sample Type: Sample Non Std Type

Closing Type: Sample Std Type  
Sample Non Std Type  
Sample Non Std w Spl Tests

Lab Sheet:

SO | NPO Sample

Header  
SO Nr: 0018502433 Customer: 99770200 01 ST-TOKYO SO Type: 30 Sample Order Cost Center: JT3129 SAMPLES /SALES J

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

Notes: Status: 01 All items pending. 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-53	01-Mar-53	01

Final Cust:  
PO Item: 000001 Comm Prod: STM32F429NIH6 Qty: 30 RD: 25-Jun-18 Unit Price: 0.0000 Final Cust: 0000367006 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:

PCN14485



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# **PCN 14485 RER2007 Die 481XXXW Cut 3.2 TSMC40ULP 40nm Reliability Plan**

February 15<sup>th</sup>, 2024

MDG GPM Quality & Reliability Department

# RER2007 – Die 481XXXW Cut 3.2

## TSMC40ULP 40nm

Trial	Test	Method	Conditions	Package	Bounding option	Sample x lot
						481 Rev W (Cut 3.2)
Die	HTOL	MIL-STD-883 Method 1005 JESD22A108	Tj 130°C 168h	TFBGA 13x13x1.2 216L P0.8mm	SMPS	77 x 1
	LU	0018695 JESD78	Tj 130°C	TFBGA 13x13x1.2 216L P0.8mm	SMPS	3 x 1
	ESD HBM	ANSI/ESDA/JEDEC JS-001	Ta 25°C Min 1kV (Class 1C) Target 2kV (Class 2)	TFBGA 13x13x1.2 216L P0.8mm	SMPS	3 x 1
	ESD CDM	ANSI/ESDA/ JEDEC JS-002	Ta 25°C Min 250V (class C1) Target 500V (Class C2a)	TFBGA 13x13x1.2 216L P0.8mm	SMPS	3 x 1

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