


**PRODUCT / PROCESS CHANGE NOTIFICATION**

**1. PCN basic data**

<b>1.1 Company</b>		STMicroelectronics International N.V
<b>1.2 PCN No.</b>	MDG/22/13306	
<b>1.3 Title of PCN</b>	STM32G03 and STM32G04 64K - product enhancement	
<b>1.4 Product Category</b>	STM32G030x, STM32G031x, STM32G04x	
<b>1.5 Issue date</b>	2022-04-26	

**2. PCN Team**

<b>2.1 Contact supplier</b>	
<b>2.1.1 Name</b>	NEMETH KRISZTINA
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<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) ST Crolles (France)

**4. Description of change**

	Old	New
<b>4.1 Description</b>	<p>STM32G030x, STM32G031x and STM32G04x - (Die466 – cut1.1 revision Z) product has limitation as described in Errata Sheets.</p> <ul style="list-style-type: none"> <li>- ES0486 (Rev 3 - Feb 2021) for STM32G030 device</li> <li>- ES0487 (Rev 3 - Feb 2021) for STM32G031 device</li> <li>- ES0488 (Rev 3 - Feb 2021) for STM32G04 device</li> </ul> <p>What are the limitations:</p> <ol style="list-style-type: none"> <li>1. Device lock in case of OPT bytes mismatch</li> <li>2. Flash memory PCROP area weakness (STM32G030 device not concerned)</li> <li>3. TIM16 and TIM17 are unduly clocked by SYSCLK</li> <li>4. ADC Offset calibration improvements</li> <li>5. Under RDP Level 1, booting from Main Flash memory selected through PA14 BOOT0 pin is not functional</li> <li>6. DMAMUX cannot be synchronized or triggered by EXTI</li> </ol>	<p>STM32G030x, STM32G031x and STM32G04x - (Die466 – cut1.2 revision Y) product enhancement fixes those limitations as described in Errata Sheet.</p> <ul style="list-style-type: none"> <li>- ES0486 (Rev 4 - Apr 2022) for STM32G030 device</li> <li>- ES0487 (Rev 4 - Apr 2022) for STM32G031 device</li> <li>- ES0488 (Rev 4 - Apr 2022) for STM32G04 device</li> </ul> <p>What are the enhancements:</p> <ol style="list-style-type: none"> <li>1. Device lock in case of OPT bytes mismatch - fixed</li> <li>2. Flash memory PCROP area weakness – fixed (note STM32G030 device is not concerned by this issue)</li> <li>3. TIM16 and TIM17 are unduly clocked by SYSCLK - fixed</li> <li>4. ADC Offset calibration improved</li> <li>5. Under RDP Level 1, booting from Main Flash memory selected through PA14 BOOT0 pin is functional</li> <li>6. DMAMUX can be synchronized or triggered by EXTI</li> <li>7. Device IDCODE updated</li> </ol>
<b>4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?</b>	Impact on functionality as indicated in Errata Sheets: ES0486, ES0487 & ES0488	

**5. Reason / motivation for change**

<b>5.1 Motivation</b>	Improvements was 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 "Z" to "Y" on Package Marking
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**7. Timing / schedule**

<b>7.1 Date of qualification results</b>	2022-03-30
<b>7.2 Intended start of delivery</b>	2022-05-26
<b>7.3 Qualification sample available?</b>	Upon Request

**8. Qualification / Validation**

<b>8.1 Description</b>	13306 MDG-MCD-RER1808 V2 - STM32G031x - Die 466XXXY - Reliability evaluation report.pdf		
<b>8.2 Qualification report and qualification results</b>	Available (see attachment)	<b>Issue Date</b>	2022-04-26

**9. Attachments (additional documentations)**

13306 Public product.pdf  
13306 MDG-MCD-RER1808 V2 - STM32G031x - Die 466XXXY - Reliability evaluation report.pdf  
13306 PCN13306\_Additional information.pdf

**10. Affected parts**

<b>10. 1 Current</b>		<b>10.2 New (if applicable)</b>
<b>10.1.1 Customer Part No</b>	<b>10.1.2 Supplier Part No</b>	<b>10.1.2 Supplier Part No</b>
	STM32G031F8P6	
	STM32G031G6U6	
	STM32G031G8U6	
	STM32G031K8T6	

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