## **PRODUCT / PROCESS CHANGE INFORMATION**

1. PCI basic data	
1.1 Company	STMicroelectronics International N.V
1.2 PCI No.	MICROCONTROLLERS/25/15132
1.3 Title of PCI	Enhancement of STM32C011x, STM32C031x & STM32C071x HAL settings when using internal clock at 48MHz (STM32CubeMX and STM32CubeC0)
1.4 Product Category	STM32C011x, STM32C031x, STM32C071x
1.5 Issue date	2025-01-16

2. PCI Team	
2.1 Contact supplier	
2.1.1 Name	PIKE EMMA
2.1.2 Phone	+44 1628896111
2.1.3 Email	emma.pike@st.com
2.2 Change responsibility	
2.2.1 Product Manager	Patrick AIDOUNE
2.1.2 Marketing Manager	Veronique BARLATIER
2.1.3 Quality Manager	Pascal NARCHE

3. Change		
3.1 Category	3.2 Type of change	3.3 Manufacturing Location
General Product & Design	Firmware modification : firmware is programed in the memory without effect of electrical performance at the customer (bug fix)	N.A.

4. Description of change		
	Old	New
4.1 Description	Before setting the system clock (SYSCLK) frequency to 48 MHz, the flash memory latency must be set to one wait state. However, the code generated by STM32CubeMX (versions before v6.13.0), and the project examples available in the STM32CubeC0 software packages (versions before v1.3.0), do not ensure this.	The fix consists in setting the number of wait states to one, before setting the HSI48 clock division factor to one. This fix is implemented in the following (and any subsequent) versions: - STM32CubeC0 v1.3.0 (November 2024) - STM32CubeMX v6.13.0 (November 2024) See more details in Additional Information document attached to this PCI
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	No change on the Commercial Product.	

5. Reason / motivation for change	
	Hardware Abstraction Layer bug is fixed. Limitation fix on Software tools (STM32CubeMX or HAL examples in STM32CubeC0) only.
5.2 Customer Benefit	SERVICE IMPROVEMENT

6. Marking of parts / traceability of change	
6.1 Description	not applicable - only SW is updated

7. Timing / schedule	
7.1 Date of qualification results	2024-11-03
7.2 Intended start of delivery	2024-11-03
7.3 Qualification sample available?	Not Applicable

8. Qualification / Validation	
8.1 Description	15132 _Additional information.pdf

Available (see attachment)

## Issue Date

## 9. Attachments (additional documentations)

15132 Public product.pdf 15132 \_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 4138307 STM32C011F4P6 STM32C011F4U6TR 4138308 STM32C011F6P6 STM32C011F6U6TR STM32C011J4M6 STM32C011J6M6 4138303 STM32C031C4T6 STM32C031C4U6 STM32C031C6T6 STM32C031C6U6 STM32C031F4P6 STM32C031F6P6 STM32C031G4U6 STM32C031G6U6 STM32C031K4T6 STM32C031K4U6 STM32C031K6T6 STM32C031K6U6 4562760 STM32C071CBT6 4562761 STM32C071CBT6N STM32C071CBU6 STM32C071CBU6N 4562762 STM32C071GBU6 4562763 STM32C071GBU6N 4562758 STM32C071KBT6 4562759 STM32C071KBT6N 4562764 STM32C071KBU6 4562765 STM32C071KBU6N 4562755 STM32C071RBT6 4562757 STM32C071RBT6N

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