

PRODUCT / PROCESS CHANGE INFORMATION

1. PCI basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCI No.	ADG/18/11114	
1.3 Title of PCI	M10 Microcontrollers: 2D Marking Introduction on QFP and BGA Packages (ST Malta)	
1.4 Product Category	see list	
1.5 Issue date	2018-09-28	

2. PCI 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	Luca RODESCHINI
2.1.2 Marketing Manager	Daniele Alfredo BRAMBILLA
2.1.3 Quality Manager	Alberto MERVIC

3. Change

3.1 Category	3.2 Type of change	3.3 Manufacturing Location
Methods	Traceability (marking content, company logo, etc...)	ST Kirkop (Malta)

4. Description of change

	Old	New
4.1 Description	No 2D marking	Additional 2D marking
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	No impact	

5. Reason / motivation for change

5.1 Motivation	Quality improvement, by introducing additional traceability information at marking level. Extended traceability will allow better backward analysis and more detailed feedbacks on process performance
5.2 Customer Benefit	QUALITY IMPROVEMENT

6. Marking of parts / traceability of change

6.1 Description	Date code and direct product marking
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7. Timing / schedule

7.1 Date of qualification results	2018-09-26
7.2 Intended start of delivery	2018-10-31
7.3 Qualification sample available?	Upon Request

8. Qualification / Validation

8.1 Description			
8.2 Qualification report and qualification results	In progress	Issue Date	

9. Attachments (additional documentations)

11114 Public product.pdf
11114 Details.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
	SPC560B40L5C6E0X	
	SPC560B50L3B4E0X	
	SPC560B50L5C6E0Y	
	SPC560B54L5B6E0Y	
	SPC560C50L3C6E0X	
	SPC560P40L3CEFAR	
	SPC560P40L3CEFBR	
	SPC560P44L3CEFAR	
	SPC560P50L3BEABR	
	SPC560P50L3CEFAR	
	SPC560P50L5CEFAR	
	SPC563M64L5COAR	
	SPC564A80L7CFAR	
	ST10F272M-4T3	

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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

PCI Title : M10 Microcontrollers: 2D Marking Introduction on QFP and BGA Packages (ST Malta)

PCI Reference : ADG/18/11114

Subject : Public Products List

Dear Customer,

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

SPC564A70L7COCY	SPC56EC74L7C9ECY	SPC56EL60L5CBFQY
SPC560B50L3C6E0Y	SPC560P50L5BEAAY	SPC56EC64L7B9E0Y
SPC56EL70L5CBFSR	SPC563M64L5COAR	SPC56EC64L7B9E0X
SPC560P44L3BEAAR	SPC56AP54L3BEFBY	SPC560B40L3C6E0X
SPC563M64L7COBY	SPC56AP60L5CEFAY	SPC560C50L3B4E0X
SPC564B70L7C9E0X	SPC560B50L5C6E0Y	SPC560P50L5BEFAR
SPC560P40L3BEAAR	SPC560B40L5B6E0X	SPC56EL54L5CBFSR
SPC56EC70L7C9E0X	ST10F272M-4T3	SPC564L70L5BBOSR
SPC564L54L3BCOQY	SPC560P40L3CEFBY	SPC56EC70L7C800Y
SPC56AP60L3BEAAY	SPC564B64L7C800Y	SPC564B64L7C800X
SPC56EL70L5CBOSR	SPC560B60L3C6E0Y	SPC560B50L3B4E0X
SPC56EL60L5CBFSY	SPC560B50L3B6E0X	SPC564A80L7COBR
SPC564L60L5CCFQR	SPC56AP60L3BEABR	SPC56AP60L5BEFAY
SPC56EL60L3CBFQY	SPC564A80L7COBY	SPC560P40L3CEAAR
SPC560P60L5CEAAR	SPC560B64L5C6E0X	SPC560B50L5B6E0X
SPC56EL60L3CCFQR	SPC560P44L3BEAAY	SPC560B60L7B6E0Y
SPC560P44L3CEABR	SPC56EL60L5CBOSY	SPC56AP60L5CEFAR
SPC564L54L3BCOQR	SPC560P50L5CEFAR	SPC560B60L3B6E0X
SPC564A70L7CFAY	SPC560B40L3C4E0X	SPC564L54L5CBFSY
SPC560C50L3B6E0X	SPC560B50L3C4E0X	SPC564B64L7B8E0X
SPC56EL60L5CCOSR	SPC560P54L5BEAAR	SPC560P60L3BEABY
SPC564A70L7COBY	SPC563M64L7COAR	SPC564B64L7C9E0X
SPC56AP54L3BEFBR	SPC564L70L3CBFSR	SPC560P50L3BEABR
SPC560P54L5CEAAR	SPC56EC64L7C9ECY	SPC564B74L7C9ECY
SPC560B50L5B4E0X	SPC564A70L7CFBR	SPC560P40L3CEFAY
SPC560B64L7C6E0Y	SPC560P50L3BEABY	SPC560P54L5BEAAY
SPC560P54L3BEABR	SPC563M60L5COBR	SPC560B60L5B6E0Y
SPC564L54L5CBFSR	SPC560P50L3CEFBY	SPC564B74L7B9ECX
SPC56AP60L3BEFBR	SPC560P60L3CEFAR	SPC564L70L5BBOSY
SPC560D30L3B4E0X	SPC560P44L3CEFAR	SPC560B64L7B6E0X
SPC563M60L5COAR	SPC564B74L7B8E0X	SPC560B54L5B6E0X
SPC560B50L3C6E0X	SPC560P60L5CEFAR	SPC560B60L5C6E0X
SPC560P60L3BEABR	SPC564B70L7B9ECX	SPC56EL70L3CBFSY
SPC560C50L3C6E0X	SPC56EL70L5CBFSY	SPC56EL54L3CBFSR
SPC564A70L7CFBY	SPC560P54L3BEABY	SPC56AP60L5CEFBR
SPC560B60L7C6E0X	SPC564L54L3CCFQR	SPC560P40L3CEFAR



Public Products List

SPC564L60L5BCOQR	SPC560B54L3B6E0X	SPC560P50L5CEFAY
SPC560P44L3CEFAY	SPC560B54L3C6E0X	SPC564A80L7CFBY
SPC560D40L3B3E0X	SPC560P50L3CEFAR	SPC56EC70L7C800X
SPC560B54L3B4E0X	SPC560B40L3B6E0X	SPC560P40L3BEAAY
SPC564A70L7CFAR	SPC560P44L3BEFAR	SPC564B64L7C8E0X
SPC560B60L3C6E0X	SPC564L70L3BCOSY	SPC564L54L3BCFQR
SPC564A70L7COCR	SPC564A70L7COBR	SPC560D40L3C4E0Y
SPC56AP60L3BEABY	SPC560B50L5C6E0X	SPC56EL60L3CBFQR
SPC560P40L3CEAAY	SPC563M64L5COAY	SPC560C40L3C6E0X
SPC560P50L3BEFAR	SPC560P60L5CEAAY	SPC560B40L5C6E0X
SPC56EL60L3CCFQY	ST10F273M-4T3	SPC560B54L5B6E0Y
SPC564L70L3BCOSR	SPC560B64L7C6E0X	SPC56EL54L3CBFSY
SPC56EL60L5CBFQR	SPC564A80L7CFAR	SPC560B64L5C6E0Y
SPC560P44L3CEABY	SPC564B64L7C8ECX	SPC56EL60L5CBOSR
SPC564A80L7CFAY	SPC560D40L3B3E0Y	SPC564L54L3BCFQY
SPC560P40L3CEFBR	SPC56AP60L3BEAAR	SPC560B40L3B6E0Y
SPC560D40L3B4E0X	SPC560P50L3BEFAY	SPC563M64L7COAY
SPC56EL60L3CBFSR	SPC564A80L7CFBR	SPC560B40L3B4E0X
SPC560P50L3CEFAY	SPC560P60L5CEFAY	SPC56EL60L3CBFSY
SPC56EL70L3CBFSR	SPC560B54L3C6E0Y	SPC560B60L7B6E0X
SPC56AP60L5BEFAR	SPC564L54L3CCFQY	SPC560P60L3CEFAY
SPC56EL70L5CBOSY	SPC560B54L5C6E0X	SPC560B64L3B6E0X
SPC560D40L3C4E0X	SPC560P50L5BEAAR	SPC563M64L7COBR
SPC564L60L3BCOQR	SPC560P50L5BEABR	SPC56EL60L5CCOSY
SPC56AP60L3BEFBY	SPC56AP60L5CEFBY	SPC560P50L5BEFAY
SPC564L70L3CBFSY	SPC560P50L3CEFBY	SPC560D30L3B3E0X
SPC560P54L5CEAAY	SPC564B74L7C8E0X	SPC560P50L5BEABY
SPC56EC74L7C800X	SPC560C50L3C6E0Y	SPC560B50L3B4E0Y
SPC560B60L5B6E0X	SPC56EL54L5CBFSY	SPC564L60L5CCFQY



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PRODUCT/PROCESS CHANGE INFORMATION

SUBJECT M10 MICROCONTROLLERS: 2D MARKING INTRODUCTION ON QFP AND BGA PACKAGES (ST MALTA)

IMPACTED PRODUCTS

ST M10 Technology Microcontrollers assembled in the following packages:

LQFP 100 14x14x1.4			LQFP 144 20X20X1.4	
SPC560B40L3B3E0X	SPC560P40L3BEAAR	SPC560P60L3CEFAY	RPC56EL70L5CBFSY	SPC563M64L5C2OAR
SPC560B40L3B3EDX	SPC560P40L3BEAAY	SPC564L54L3BCFQR	SPC560B40L5B4ET	SPC563M64L5CBOAR
SPC560B40L3B4E0X	SPC560P40L3C2FAR	SPC564L54L3BCFQY	SPC560B40L5B6E0X	SPC563M64L5CBOAY
SPC560B40L3B4EDX	SPC560P40L3C2FAY	SPC564L54L3BCOQR	SPC560B40L5B6E0Y	SPC563M64L5COAR
SPC560B40L3B6E0X	SPC560P40L3C2FBR	SPC564L54L3BCOQY	SPC560B40L5C6E0X	SPC563M64L5COAY
SPC560B40L3B6E0Y	SPC560P40L3C2FBY	SPC564L54L3CCFQR	SPC560B44L5B4EVX	SPC564L54L5CBFSR
SPC560B40L3C4E0X	SPC560P40L3CEAAR	SPC564L54L3CCFQY	SPC560B50L5B4E0X	SPC564L54L5CBFSY
SPC560B40L3C6E0X	SPC560P40L3CEAAY	SPC564L60L3BCOQR	SPC560B50L5B6E0X	SPC564L60L5BCOQR
SPC560B44L3B4EVX	SPC560P40L3CEFAR	SPC564L60L3BCOQY	SPC560B50L5C6E0X	SPC564L60L5BCOQY
SPC560B50L3B4E0X	SPC560P40L3CEFAY	SPC564L64L3CBFSR	SPC560B50L5C6E0Y	SPC564L60L5CCFQR
SPC560B50L3B4E0Y	SPC560P40L3CEFBR	SPC564L64L3CBFSY	SPC560B54L5B4E0X	SPC564L60L5CCFQY
SPC560B50L3B6E0X	SPC560P40L3CEFBY	SPC564L70L3BCOSR	SPC560B54L5B6E0X	SPC564L70L5BBOSR
SPC560B50L3C4E0X	SPC560P44L3BEAAR	SPC564L70L3BCOSY	SPC560B54L5B6E0Y	SPC564L70L5BBOSY
SPC560B50L3C6E0X	SPC560P44L3BEAAY	SPC564L70L3CBFSR	SPC560B54L5C6E0X	SPC56AP60L5BEFAR
SPC560B50L3C6E0Y	SPC560P44L3CEABR	SPC564L70L3CBFSY	SPC560B60L5B6E0X	SPC56AP60L5BEFAY
SPC560B54L3B4E0X	SPC560P44L3CEABY	SPC56AP54L3B2FBR	SPC560B60L5B6E0Y	SPC56AP60L5CEFAR
SPC560B54L3B6E0X	SPC560P44L3CEFAR	SPC56AP54L3B2FBY	SPC560B60L5C6E0X	SPC56AP60L5CEFAY
SPC560B54L3C6E0X	SPC560P44L3CEFAY	SPC56AP54L3BEFBR	SPC560B64L5C6E0X	SPC56AP60L5CEFBR
SPC560B54L3C6E0Y	SPC560P50L3B1ABR	SPC56AP54L3BEFBY	SPC560B64L5C6E0Y	SPC56AP60L5CEFBY
SPC560B60L3B6E0X	SPC560P50L3B1ABY	SPC56AP60L3B2FBR	SPC560P50L5BEAAR	SPC56EL54L5CBFSR
SPC560B60L3C6E0X	SPC560P50L3B2ABR	SPC56AP60L3B2FBY	SPC560P50L5BEAAY	SPC56EL54L5CBFSY
SPC560B60L3C6E0Y	SPC560P50L3B2ABY	SPC56AP60L3BEAAR	SPC560P50L5BEABR	SPC56EL60L5BBGQR
SPC560B64L3B4E0X	SPC560P50L3B2FAR	SPC56AP60L3BEAAY	SPC560P50L5BEABY	SPC56EL60L5BBGQY
SPC560B64L3B6E0X	SPC560P50L3B2FAY	SPC56AP60L3BEABR	SPC560P50L5BEFAR	SPC56EL60L5CBFQR
SPC560C40L3C6E0X	SPC560P50L3BEABR	SPC56AP60L3BEABY	SPC560P50L5BEFAY	SPC56EL60L5CBFQY
SPC560C50L3B4E0X	SPC560P50L3BEABY	SPC56AP60L3BEFBR	SPC560P50L5CEFAR	SPC56EL60L5CBFSR
SPC560C50L3C6E0X	SPC560P50L3BEFAR	SPC56AP60L3BEFBY	SPC560P50L5CEFAY	SPC56EL60L5CBFSY
SPC560C50L3C6E0Y	SPC560P50L3BEFAY	SPC56EL54L3CBFSR	SPC560P50L5ENQCU	SPC56EL60L5CBGQR
SPC560D30L3B3E0X	SPC560P50L3C2FBR	SPC56EL54L3CBFSY	SPC560P54L5BEAAR	SPC56EL60L5CBGQY
SPC560D30L3B4E0X	SPC560P50L3C2FBY	SPC56EL60L3CBFQR	SPC560P54L5BEAAY	SPC56EL60L5CBOSR

SPC560D40L3B3E0X	SPC560P50L3CEFAR	SPC56EL60L3CBFQY	SPC560P54L5C2AAR	SPC56EL60L5CBOSY
SPC560D40L3B3E0Y	SPC560P50L3CEFAY	SPC56EL60L3CBFSR	SPC560P54L5C2AAY	SPC56EL60L5CBPSR
SPC560D40L3B4E0X	SPC560P50L3CEFBR	SPC56EL60L3CBFSY	SPC560P54L5CEAAR	SPC56EL60L5CBPSY
SPC560D40L3C4E0X	SPC560P50L3CEFBY	SPC56EL60L3CCFQR	SPC560P54L5CEAAY	SPC56EL60L5CCOSR
SPC560D40L3C4E0Y	SPC560P50L3ENGCU	SPC56EL60L3CCFQY	SPC560P60L5CEAAR	SPC56EL60L5CCOSY
SPC560G50L3B6E0X	SPC560P54L3BEABR	SPC56EL70L3CBFSR	SPC560P60L5CEAAY	SPC56EL70L5CBFSR
SPC560P40L3B2FAR	SPC560P54L3BEABY	SPC56EL70L3CBFSY	SPC560P60L5CEFAR	SPC56EL70L5CBFSY
SPC560P40L3B2FAY	SPC560P60L3BEABR		SPC560P60L5CEFAY	SPC56EL70L5CBGQR
SPC560P40L3B2FBR	SPC560P60L3BEABY		SPC563M60L5COAR	SPC56EL70L5CBGQY
SPC560P40L3B2FBY	SPC560P60L3CEFAR		SPC563M60L5COBR	SPC56EL70L5CBGSR
			SPC56EL70L5CBGSY	SPC56EL70L5CBOSY
				SPC56EL70L5CBOSR

LQFP 176 24x24x1.4		LFBGA145Q1.7 208+49
SPC560B60L7B6E0X	SPC564B70L7C9E0X	SPC56HK70C3CAAR
SPC560B60L7B6E0Y	SPC564B74L7B8E0X	SPC56HK70C3CAAY
SPC560B60L7C6E0X	SPC564B74L7B9ECX	
SPC560B64L7B6E0X	SPC564B74L7C8E0X	
SPC560B64L7C6E0X	SPC564B74L7C9ECY	
SPC560B64L7C6E0Y	SPC56EC64L7B9E0X	
SPC563M64L7C2OAR	SPC56EC64L7B9E0Y	
SPC563M64L7COAR	SPC56EC64L7C9ECY	
SPC563M64L7COAY	SPC56EC70L7C800X	
SPC563M64L7COBR	SPC56EC70L7C800Y	
SPC563M64L7COBY	SPC56EC70L7C9E0X	
SPC564A70L7C2FAR	SPC56EC74L7C800X	
SPC564A70L7C2OBR	SPC56EC74L7C9ECY	
SPC564A70L7CFAR	SPC564A80L7CGMCY	
SPC564A70L7CFAY	SPC564A80L7CGMR	
SPC564A70L7CFBR	SPC564A80L7CGMY	
SPC564A70L7CFBY	SPC564A80L7COBR	
SPC564A70L7COBR	SPC564A80L7COBY	
SPC564A70L7COBY	SPC564B64L7B8E0X	
SPC564A70L7COCR	SPC564B64L7C800X	
SPC564A70L7COCY	SPC564B64L7C800Y	
SPC564A80L7C2FAR	SPC564B64L7C8E0X	
SPC564A80L7CFAR	SPC564B64L7C8ECX	
SPC564A80L7CFAY	SPC564B64L7C9E0X	
SPC564A80L7CFBR	SPC564B70L7B9E0X	
SPC564A80L7CFBY	SPC564B70L7B9ECX	
SPC564A80L7CGMCR		

INVOLVED PLANT	ST Malta Plant															
CHANGE REASON	Quality improvement, by introducing additional traceability information at marking level. Extended traceability will allow better backward analysis and more detailed feedbacks on process performance.															
CHANGE DESCRIPTION	Additional 2D marking on component, allowing progressive enhancement of product traceability (diffusion lot, wafer number, dice coordinates, etc.). Current standard marking (layout and contents) remains unchanged; additional 2D mark has been introduced in the free available area of the different packages. Examples are shown below: <table><tr><th>Package</th><th>Current Marking</th><th>New 2D Marking</th></tr><tr><td>LQFP 100 14x14x1.4</td><td></td><td></td></tr><tr><td>LQFP 144 20x20x1.4</td><td></td><td></td></tr><tr><td>LQFP 176 24x24x1.4</td><td></td><td></td></tr><tr><td>LFPGA 14x14x1.7</td><td></td><td></td></tr></table>	Package	Current Marking	New 2D Marking	LQFP 100 14x14x1.4			LQFP 144 20x20x1.4			LQFP 176 24x24x1.4			LFPGA 14x14x1.7		
Package	Current Marking	New 2D Marking														
LQFP 100 14x14x1.4																
LQFP 144 20x20x1.4																
LQFP 176 24x24x1.4																
LFPGA 14x14x1.7																
TRACEABILITY	Datacode and direct product marking.															

VALIDATION	Change concerns product appearance only, with no impact on form, fit and function. No changes in process and / or equipment are required.
CURRENT PRODUCTS	New 2D marking will be progressively implemented on all concerned products and will definitively replace the current one.
REPORTS	Not applicable.
IMPLEMENTATION	Progressively, one month from this change information.