

## PRODUCT/PROCESS CHANGE INFORMATION

**SUBJECT**      **M55 MICROCONTROLLERS: 2D MARKING INTRODUCTION  
ON QFP 10X10 PACKAGES (ST MALTA)**

<p><b>IMPACTED PRODUCTS</b></p>	<p>ST M55 Technology Microcontrollers assembled in the following packages:</p> <table border="1" data-bbox="545 764 1365 1257"> <thead> <tr> <th data-bbox="545 764 1045 804">PACKAGE DESCRIPTION</th> <th data-bbox="1050 764 1365 804">PRODUCT</th> </tr> </thead> <tbody> <tr> <td data-bbox="545 810 1045 850" rowspan="9">TQFP 64 10x10x1.0 1.0 ExPad Down</td> <td data-bbox="1050 810 1365 850">SPC570S40E1CEFAR</td> </tr> <tr> <td data-bbox="1050 856 1365 896">SPC570S40E1CEFAY</td> </tr> <tr> <td data-bbox="1050 903 1365 942">SPC570S40E1CEFBR</td> </tr> <tr> <td data-bbox="1050 949 1365 989">SPC570S40E1CEFBY</td> </tr> <tr> <td data-bbox="1050 995 1365 1035">SPC570S50E1CE1AR</td> </tr> <tr> <td data-bbox="1050 1041 1365 1081">SPC570S50E1CEFAR</td> </tr> <tr> <td data-bbox="1050 1087 1365 1127">SPC570S50E1CEFAY</td> </tr> <tr> <td data-bbox="1050 1134 1365 1173">SPC570S50E1DEFAR</td> </tr> <tr> <td data-bbox="1050 1180 1365 1220">SPC570S50E1DEFAY</td> </tr> <tr> <td data-bbox="545 1226 1045 1266" rowspan="2">TQFP-EP 80L 10X10X1.0 EXPADDOWN</td> <td data-bbox="1050 1226 1365 1266">SPC572L64F2BC6AR</td> </tr> <tr> <td data-bbox="1050 1272 1365 1312">SPC572L64F2BC6AY</td> </tr> </tbody> </table>	PACKAGE DESCRIPTION	PRODUCT	TQFP 64 10x10x1.0 1.0 ExPad Down	SPC570S40E1CEFAR	SPC570S40E1CEFAY	SPC570S40E1CEFBR	SPC570S40E1CEFBY	SPC570S50E1CE1AR	SPC570S50E1CEFAR	SPC570S50E1CEFAY	SPC570S50E1DEFAR	SPC570S50E1DEFAY	TQFP-EP 80L 10X10X1.0 EXPADDOWN	SPC572L64F2BC6AR	SPC572L64F2BC6AY
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<p><b>MANUFACTURING STEP</b></p>	<p>Assembly</p>															
<p><b>INVOLVED PLANT</b></p>	<p>ST Malta Plant</p>															
<p><b>CHANGE REASON</b></p>	<p>Quality improvement, by introducing additional traceability information at marking level. Extended traceability will allow better backward analyses and more detailed feedbacks on process performance.</p>															



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**CHANGE DESCRIPTION**

Additional 2D marking on component (further to the standard one), allowing progressive enhancement of product traceability (diffusion lot, wafer number, dice coordinates, etc.). Given the package dimension, current standard marking (contents unchanged) has been reallocated to provide additional room for the 2D mark. An example is shown below:

Current Marking



New 2D Marking



**TRACEABILITY**

Date Code 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**

Three months from this change information.