


**PRODUCT / PROCESS CHANGE NOTIFICATION**

**1. PCN basic data**

|                             |  |                                      |
|-----------------------------|--|--------------------------------------|
| <b>1.1 Company</b>          |   | STMicroelectronics International N.V |
| <b>1.2 PCN No.</b>          | MDG/16/9942  |                                      |
| <b>1.3 Title of PCN</b>     | STM32F7x 2MB - die minor revision & Optimized substrate layout on TFBGA package only   |                                      |
| <b>1.4 Product Category</b> | Change 1 : STM32F7x 2MB family products, all products listed in this PCN.<br>Change 2 : STM32F7x 2MB family products in TFBGA package, so only STM32F7xNxH commercial products listed in this PCN. |                                      |
| <b>1.5 Issue date</b>       | 2016-11-17   |                                      |

**2. PCN Team**

|                                  |                          |
|----------------------------------|--------------------------|
| <b>2.1 Contact supplier</b>      |                          |
| <b>2.1.1 Name</b>                | ROBERTSON HEATHER        |
| <b>2.1.2 Phone</b>               | +1 8475853058            |
| <b>2.1.3 Email</b>               | heather.robertson@st.com |
| <b>2.2 Change responsibility</b> |                          |
| <b>2.2.1 Product Manager</b>     | Michel BUFFA             |
| <b>2.1.2 Marketing Manager</b>   | Daniel COLONNA           |
| <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>   |
| Die redesign        | Mask or mask set change with new die design | Change 1 : diffusion plant, Crolles 300 (France)<br>Change 2 : assembly plant, Amkor ATP3 (Philippines) |

**4. Description of change**

|  | Old  | New  |
|--|--|--|
| <b>4.1 Description</b>   | Change 1 : Die with revision A.<br><br>Change 2: LSE high driving and low driving capability is not usable for TFBGA package under certain conditions.<br><br>Both limitations are described in Errata sheet Revision 3 for STM32F76xxx STM32F77xxx products - DocID028806 | Change 1: Die with revision Z.<br><br>Change 2: New substrate layout on TFBGA package products, to fix LSE high driving and low driving limitations.<br><br>Both changes are implemented at the same time and cannot be accepted independently.<br><br>Both changes are described in Errata sheet Revision 4 for STM32F76xxx STM32F77xxx products - DocID028806. |
| <b>4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?</b> | Change 1 & 2 : Function : improvements are indicated in Errata sheet   |  |

**5. Reason / motivation for change**

|                             |  |
|-----------------------------|--|
| <b>5.1 Motivation</b>       | To increase the robustness and improve performances, the quality and the functionality of our products. We are introducing a new die revision which optimize the substrate design for the TFBGA package. |
| <b>5.2 Customer Benefit</b> | QUALITY IMPROVEMENT  |

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

|                        |   |
|------------------------|---|
| <b>6.1 Description</b> | The die revision changes from "A" to "Z". It is marked on packages of the part. |
|------------------------|---|

**7. Timing / schedule**

|  |              |
|--|--------------|
| <b>7.1 Date of qualification results</b>   | 2016-11-15   |
| <b>7.2 Intended start of delivery</b>      | 2017-02-15   |
| <b>7.3 Qualification sample available?</b> | Upon Request |

|                                      |  |  |  |
|--------------------------------------|--|--|--|
| <b>8. Qualification / Validation</b> |  |  |  |
|--------------------------------------|--|--|--|

|   |   |                   |            |
|---|---|-------------------|------------|
| <b>8.1 Description</b>                                    | PCN9942_Die_451XXXZ_Qualification_plan.pptx |                   |            |
| <b>8.2 Qualification report and qualification results</b> | Available (see attachment)                  | <b>Issue Date</b> | 2016-11-17 |

|   |  |  |  |
|---|--|--|--|
| <b>9. Attachments (additional documentations)</b> |  |  |  |
|---|--|--|--|

9942PpPrdtLst.pdf  
 PCN9942\_Die\_451XXXZ\_Qualification\_plan.pptx  
 PCN9942\_Additional information.pdf

|                           |  |  |
|---------------------------|--|--|
| <b>10. Affected parts</b> |  |  |
|---------------------------|--|--|

| 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  |
|                         | STM32F765BGT6           |                          |
|                         | STM32F765BIT6           |                          |
|                         | STM32F765IGK6           |                          |
|                         | STM32F765IGT6           |                          |
|                         | STM32F765IHK6           |                          |
|                         | STM32F765IIT6           |                          |
|                         | STM32F765NGH6           |                          |
|                         | STM32F765NIH6           |                          |
|                         | STM32F765VGT6           |                          |
|                         | STM32F765VIT6           |                          |
|                         | STM32F765ZGT6           |                          |
|                         | STM32F765ZIT6           |                          |
|                         | STM32F767BGT6           |                          |
|                         | STM32F767BIT6           |                          |
|                         | STM32F767IGK6           |                          |
|                         | STM32F767IGT6           |                          |
|                         | STM32F767IHK6           |                          |
|                         | STM32F767IIT6           |                          |
|                         | STM32F767NGH6           |                          |
|                         | STM32F767NIH6           |                          |
|                         | STM32F767VGT6           |                          |
|                         | STM32F767VIT6           |                          |
|                         | STM32F767ZGT6           |                          |
|                         | STM32F767ZIT6           |                          |
|                         | STM32F769BGT6           |                          |
|                         | STM32F769BIT6           |                          |
|                         | STM32F769IGT6           |                          |
|                         | STM32F769IIT6           |                          |
|                         | STM32F769NGH6           |                          |
|                         | STM32F769NIH6           |                          |
|                         | STM32F777BIT6           |                          |
|                         | STM32F777IHK6           |                          |
|                         | STM32F777IIT6           |                          |
|                         | STM32F777NIH6           |                          |
|                         | STM32F777VIT6           |                          |
|                         | STM32F777ZIT6           |                          |
|                         | STM32F779BIT6           |                          |
|                         | STM32F779IIT6           |                          |
|                         | STM32F779NIH6           |                          |



## Public Products List

**PCN Title :** STM32F7x 2MB - die minor revision & Optimized substrate layout on TFBGA package only

**PCN Reference :** MDG/16/9942

**PCN Created on :** 22-Sep-2016

**Subject :** Public Products List

Dear Customer,

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

|               |               |                 |
|---------------|---------------|-----------------|
| STM32F779NIH6 | STM32F769IIT6 | STM32F767VIT6   |
| STM32F769NIH6 | STM32F767NIH6 | STM32F769AIY6TR |
| STM32F767IIT6 | STM32F767IHK6 | STM32F767ZIT6   |
| STM32F767BIT6 | STM32F769BIT6 | STM32F777NIH6   |



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