

## PRODUCT / PROCESS CHANGE NOTIFICATION

### 1. PCN basic data

|                      |   |                                      |
|----------------------|---|--------------------------------------|
| 1.1 Company          |  | STMicroelectronics International N.V |
| 1.2 PCN No.          |   | MDG/19/11298                         |
| 1.3 Title of PCN     |   | STM32WB55 products improvements      |
| 1.4 Product Category |   | STM32WB55 products                   |
| 1.5 Issue date       |   | 2019-04-01                           |

### 2. PCN 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     | Ricardo Antonio DE SA EARP |
| 2.2.2 Marketing Manager   | Veronique BARLATIER        |
| 2.2.3 Quality Manager     | Pascal NARCHE              |

### 3. Change

| 3.1 Category             | 3.2 Type of change   | 3.3 Manufacturing Location |
|--------------------------|--|----------------------------|
| General Product & Design | Die redesign : Mask or mask set change with new die design like metallization (specifically chip frontside) or bug fix | TSMC T14F Taiwan           |

### 4. Description of change

|   | Old  | New  |
|---|--|--|
| 4.1 Description   | limitations described in PCN11298 additional document<br>(2.2.10) SMPS not calibrated in production<br>(2.2.11) Wrong data returned when following an access to PWRCTRL<br>(2.2.12) Secure Flash memory and RSS can be cleared by Cortex M4 application or debug tools<br>(2.2.13) CPU1 cannot access the DBGMCU register if the Debugger probe is not attached<br>(2.3.1) RF reference voltage non-functional at high VDD or at low temperature<br>(2.3.2) RF slot lost due to RF PLL calibration algorithm error<br>(2.3.3) BLE receiver extra power consumption<br>(2.3.4) BLE ADV Stop due to RF PLL VCO amplitude calibration and FSM error | limitations described in PCN11298 additional document are fixed<br>(2.2.10) SMPS not calibrated in production<br>(2.2.11) Wrong data returned when following an access to PWRCTRL<br>(2.2.12) Secure Flash memory and RSS can be cleared by Cortex M4 application or debug tools<br>(2.2.13) CPU1 cannot access the DBGMCU register if the Debugger probe is not attached<br>(2.3.1) RF reference voltage non-functional at high VDD or at low temperature<br>(2.3.2) RF slot lost due to RF PLL calibration algorithm error<br>(2.3.3) BLE receiver extra power consumption<br>(2.3.4) BLE ADV Stop due to RF PLL VCO amplitude calibration and FSM error |
| 4.2 Anticipated Impact on form,fit, function, quality, reliability or processability? | Function: improvements are indicated in PCN11298 additional document.  |  |

### 5. Reason / motivation for change

|                      |   |
|----------------------|---|
| 5.1 Motivation       | The strategy of ST MCD Division is to increase the robustness and improve performances, quality and functionality of our products. This is achieved by introducing new die revision for STM32WB55 products. |
| 5.2 Customer Benefit | QUALITY IMPROVEMENT   |

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

|                 |   |
|-----------------|---|
| 6.1 Description | The die revision changes from "B" to "Y". It is marked on packages of the part. |
|-----------------|---|

### 7. Timing / schedule

|                                   |            |
|-----------------------------------|------------|
| 7.1 Date of qualification results | 2019-02-05 |
|-----------------------------------|------------|

|                                     |              |
|-------------------------------------|--------------|
| 7.2 Intended start of delivery      | 2019-06-19   |
| 7.3 Qualification sample available? | Upon Request |

#### 8. Qualification / Validation

|  |  |            |            |
|--|--|------------|------------|
| 8.1 Description                                    | 11298 PCN11298_Die_495XXY_Qualification_plan.pdf |            |            |
| 8.2 Qualification report and qualification results | Available (see attachment)                       | Issue Date | 2019-04-01 |

#### 9. Attachments (additional documentations)

11298 Public product.pdf  
 11298 PCN11298\_Die\_495XXY\_Qualification\_plan.pdf  
 11298 PCN11298\_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  |

STM32WB55CEU6

**IMPORTANT NOTICE – PLEASE READ CAREFULLY**

Subject to any contractual arrangement in force with you or to any industry standard implemented by us, STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved



## 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

**PCN Title :** STM32WB55 products improvements

**PCN Reference :** MDG/19/11298

**Subject :** Public Products List

Dear Customer,

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

|                 |                 |               |
|-----------------|-----------------|---------------|
| STM32WB55CEU6   | STM32WB55RGV7TR | STM32WB55RGV7 |
| STM32WB55CCU6TR |                 |               |



### **IMPORTANT NOTICE – PLEASE READ CAREFULLY**

Subject to any contractual arrangement in force with you or to any industry standard implemented by us, STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved