


**PRODUCT / PROCESS CHANGE NOTIFICATION**

**1. PCN basic data**

|                             |   |                                      |
|-----------------------------|---|--------------------------------------|
| <b>1.1 Company</b>          |  | STMicroelectronics International N.V |
| <b>1.2 PCN No.</b>          | MDG/18/10945  |                                      |
| <b>1.3 Title of PCN</b>     | Mitsubishi (MGC) stop halogenated core material for BGA products                  |                                      |
| <b>1.4 Product Category</b> | V542 product  |                                      |
| <b>1.5 Issue date</b>       | 2018-09-24  |                                      |

**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>     | Danilo RIGAMONTI         |
| <b>2.1.2 Marketing Manager</b>   | Flavio Giancarlo BENETTI |
| <b>2.1.3 Quality Manager</b>     | Morgan CASON             |

**3. Change**

|                     |   |                                   |
|---------------------|---|-----------------------------------|
| <b>3.1 Category</b> | <b>3.2 Type of change</b>   | <b>3.3 Manufacturing Location</b> |
| Materials           | Any change on substrate (part number, supplier, plant, design or composition of any layer, etc..) | 9991 ASE TAIWAN                   |

**4. Description of change**

|  |   |   |
|--|---|---|
|  | <b>Old</b>  | <b>New</b>  |
| <b>4.1 Description</b>   | Mitsubishi MGC Halogen substrate core material: HL832 | Mitsubishi MGC Halogen Free substrate core material: HL832NX(A) |
| <b>4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?</b> | no impact on Form, Fit or Function                    |   |

**5. Reason / motivation for change**

|                             |   |
|-----------------------------|---|
| <b>5.1 Motivation</b>       | Mitsubishi MGC sent a PTN (Product Termination Notification) to announce end of production for Halogen core substrates, impacting V542 product. |
| <b>5.2 Customer Benefit</b> | SERVICE CONTINUITY  |

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

|                        |  |
|------------------------|--|
| <b>6.1 Description</b> | Change will be identifiable through ST traceability system |
|------------------------|--|

**7. Timing / schedule**

|  |              |
|--|--------------|
| <b>7.1 Date of qualification results</b>   | 2018-06-06   |
| <b>7.2 Intended start of delivery</b>      | 2018-10-11   |
| <b>7.3 Qualification sample available?</b> | Upon Request |

**8. Qualification / Validation**

|   |  |                   |            |
|---|--|-------------------|------------|
| <b>8.1 Description</b>                                    | 10945 V542_Stop_halogenated_core_material.pptx |                   |            |
| <b>8.2 Qualification report and qualification results</b> | Available (see attachment)                     | <b>Issue Date</b> | 2018-09-24 |

**9. Attachments (additional documentations)**

10945 Public product.pdf  
10945 V542 BGA Halogen Free Substrate.docx  
10945 V542\_Stop\_halogenated\_core\_material.pptx

**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  |
|                         | SPEAR600-2              |                          |



## 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** : Mitsubishi (MGC) stop halogenated core material for BGA products

**PCN Reference** : MDG/18/10945

**Subject** : Public Products List

Dear Customer,

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

|            |  |  |
|------------|--|--|
| SPEAR600-2 |  |  |
|------------|--|--|



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