

# PRODUCT / PROCESS CHANGE NOTIFICATION

## 1. PCN basic data

|                      |                                                                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1 Company          |  STMicroelectronics International N.V                         |
| 1.2 PCN No.          | EMBEDDED PROCESSING/26/16266                                                                                                                   |
| 1.3 Title of PCN     | HTXA (China) additional UFQFPN5x5 32L and UFQFPN7x7 48L package assembly line for STM32G03x/G04x, STM32G05x/G07x and STM32G08x listed products |
| 1.4 Product Category | STM32G031x, STM32G041x, STM32G051x, STM32G071x and STM32G081x.                                                                                 |
| 1.5 Issue date       | 2026-07-15                                                                                                                                     |

## 2. PCN Team

|                           |                      |
|---------------------------|----------------------|
| 2.1 Contact supplier      |                      |
| 2.1.1 Name                | SCHAEFER MARC        |
| 2.1.2 Phone               | +49 89460062136      |
| 2.1.3 Email               | marc.schaefer@st.com |
| 2.2 Change responsibility |                      |
| 2.2.1 Product Manager     | Patrick AIDOUNE      |
| 2.1.2 Marketing Manager   | Marie TOURNUT        |
| 2.1.3 Quality Manager     | Pascal NARCHE        |

## 3. Change

|              |                                                                                                                                                 |                            |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 3.1 Category | 3.2 Type of change                                                                                                                              | 3.3 Manufacturing Location |
| Transfer     | Line transfer for a full process or process brick (process step, control plan, recipes) from one site to another site: Assembly site (SOP 2617) | HTXA (China)               |

## 4. Description of change

|                                                                                       |                                                                                                                    |                                                                                                                                                                   |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                       | Old                                                                                                                | New                                                                                                                                                               |
| 4.1 Description                                                                       | Assembly lines :<br>- ST Calamba (Philippines)<br>- ASE KaoHsiung (Taiwan)<br>- StatsChipPAC JSCC Jiangyin (China) | Assembly lines :<br>- ST Calamba (Philippines)<br>- ASE KaoHsiung (Taiwan)<br>- StatsChipPAC JSCC Jiangyin (China)<br>and<br>- HTXA (China) - new additional line |
| 4.2 Anticipated Impact on form,fit, function, quality, reliability or processability? | no impact on form, Fit, Function                                                                                   |                                                                                                                                                                   |

## 5. Reason / motivation for change

|                      |                                                                                                                                                                                                                                                     |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.1 Motivation       | Due to the success on the market of STM32 devices, ST General Purpose and Automotive Microcontrollers division decided to qualify an additional back-end site to maintain state of the art service level to our customers thanks to extra capacity. |
| 5.2 Customer Benefit | SERVICE IMPROVEMENT                                                                                                                                                                                                                                 |

## 6. Marking of parts / traceability of change

|                 |                                                                                                                                                                                                                                                                                        |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.1 Description | Change is visible on the marking Assembly Site code .<br>- 78: ST Calamba (Philippines)<br>- AA : ASE KaoHsiung (Taiwan)<br>- GQ : STATSChipPAC JSCC JiangYing (China)<br>- GU: HTXA (China)<br><br>Please refer to PCN 16266_Additional information.pdf document for further details. |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 7. Timing / schedule

|                                     |              |
|-------------------------------------|--------------|
| 7.1 Date of qualification results   | 2026-09-20   |
| 7.2 Intended start of delivery      | 2026-09-20   |
| 7.3 Qualification sample available? | Upon Request |

| 8. Qualification / Validation                      |                                                                                                  |            |            |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------|------------|------------|
| 8.1 Description                                    | 16266 MDRF-GPAM RER2611 PCN16266_ HTXA QFN7x7 & 5x5 CuPd wires - reliability evaluation plan.pdf |            |            |
| 8.2 Qualification report and qualification results | Available (see attachment)                                                                       | Issue Date | 2026-07-15 |

| 9. Attachments (additional documentations)                                                                                                                        |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 16266 Public product.pdf<br>16266 MDRF-GPAM RER2611 PCN16266_ HTXA QFN7x7 & 5x5 CuPd wires - reliability evaluation plan.pdf<br>16266 _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  |
|                         | STM32G031K4U3           |                          |
|                         | STM32G031K6U6           |                          |
|                         | STM32G031K8U6           |                          |
|                         | STM32G031K8U6TR         |                          |
|                         | STM32G031K8U7           |                          |
|                         | STM32G031K8U7TR         |                          |
|                         | STM32G041K8U6           |                          |
|                         | STM32G071C8U3           |                          |
|                         | STM32G071C8U6TR         |                          |
|                         | STM32G071CBU3           |                          |
|                         | STM32G071CBU3TR         |                          |
|                         | STM32G071CBU6           |                          |
|                         | STM32G071CBU6TR         |                          |
|                         | STM32G071K8U6           |                          |
|                         | STM32G071KBU3           |                          |
|                         | STM32G071KBU6           |                          |
|                         | STM32G071KBU6N          |                          |
|                         | STM32G071KBU6TR         |                          |
|                         | STM32G071KBU7           |                          |
|                         | STM32G081CBU6           |                          |
|                         | STM32G081KBU6           |                          |

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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

**PCN Title :** HTXA (China) additional UFQFPN5x5 32L and UFQFPN7x7 48L package assembly line for STM32G03x/G04x, STM32G05x/G07x and STM32G08x listed products

**PCN Reference :** EMBEDDED PROCESSING/26/16266

**Subject :** Public Products List

Dear Customer,

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

|                 |                 |                 |
|-----------------|-----------------|-----------------|
| STM32G031K4U6TR | STM32G031K8U6TR | STM32G031K8U6   |
| STM32G071CBU7TR | STM32G041K6U3TR | STM32G081KBU6   |
| STM32G071KBU3   | STM32G071K8U6   | STM32G031K6U7   |
| STM32G071C8U3TR | STM32G041K8U6   | STM32G071KBU6N  |
| STM32G041K6U3   | STM32G031K4U3   | STM32G081CBU3   |
| STM32G071CBU7   | STM32G071C8U7   | STM32G071KBU6TR |
| STM32G071C8U3   | STM32G031K8U7   | STM32G071C8U7TR |
| STM32G031K8U7TR | STM32G031K4U6   | STM32G071CBU3TR |
| STM32G071KBU7   | STM32G071CBU6TR | STM32G031K6U6   |
| STM32G071C8U6TR | STM32G071CBU3   | STM32G071CBU6   |
| STM32G031K8U3   | STM32G081CBU3TR | STM32G071KBU6   |
| STM32G031K8U3TR | STM32G081CBU6   | STM32G031K4U3TR |
| STM32G071KBU3TR | STM32G071KBU7TR |                 |

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## PRODUCT/PROCESS CHANGE NOTIFICATION

### PCN16266 – Additional information

#### HTXA (China) additional UFQFPN5x5 32L and UFQFPN7x7 48L package assembly line for STM32G03x/G04x, STM32G05x/G07x and STM32G08x listed products

#### MDRF – General Purpose and Automotive Microcontrollers (GPAM)

##### What are the changes?

Introduction of an additional assembly line to continue our path through the deployment of our Low-cost wire strategy to secure our supply chain.

Changes are described in table below:

**Table 1**

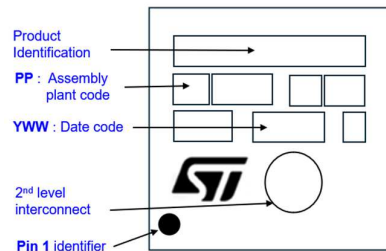
| UFQFPN5x5 32L<br>UFQFPN7x7 48L  |  | Existing back-end assembly line |                        |                                    |                      | New assembly line  |
|---------------------------------|--|---------------------------------|------------------------|------------------------------------|----------------------|--------------------|
| Assembly site                   |  | ST Calamba (Philippines)        | ASE KaoHsiung (Taiwan) | StatsChipPAC JSCC Jiangyin (China) |                      | HTXA (China)       |
| Die Attach                      |  | LOCTITE<br>ABLESTIK<br>QMI519   | EN4900G                | Ablebond<br>8290                   | EN4900GC             |                    |
| Molding compound <sup>(1)</sup> |  | 9240ZHF10<br>W                  | Sumitomo<br>EME-G631H  | Sumitomo<br>G770                   | Sumitomo<br>G700LALA | Sumitomo<br>G631BQ |
| Wire bonding                    |  | CuA 2N<br>0.8Mils               | Gold<br>4N<br>0.8Mils  | CuPd<br>0.8Mils                    | Gold 3N<br>0.8Mils   | CuPd 0.8Mils       |
| Lead frame                      |  | Copper,<br>pre-plated           | Copper, post-plated    |                                    |                      |                    |
| Leadfinishing <sup>(2)</sup>    |  | NiPdAu (e4)                     | PureTin (e3)           |                                    |                      |                    |

(1) Package darkness might change depending on molding compound. Visual aspect (color) might change depending on substrate material. Marking position and size could be different upon assembly site, without any loss of information.

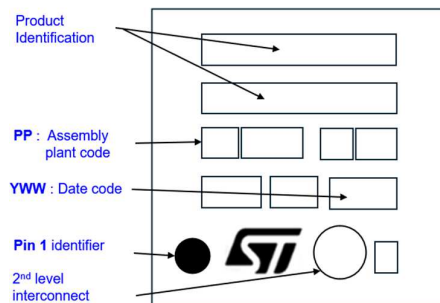
(2) Lead color and surface finish change depending on leadfinishing.

## How can the change be seen?

The standard marking fields example below  
for **UFQFPN 32L 5X5** package



for **UFQFPN 48L 7x7** package

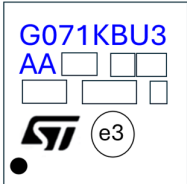
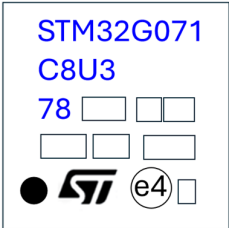


Pin1 identifier may change in terms of size and positioning however remaining near pin1's edge.  
Marking position and size may be different upon assembly site, without any loss of information.

**Table 2: Marking fields**

|                          | Existing Back-end        |                        |                                    | Added Back-End Site |
|--------------------------|--------------------------|------------------------|------------------------------------|---------------------|
| Assembly sites           | ST Calamba (Philippines) | ASE KaoHsiung (Taiwan) | StatsChipPAC JSCC Jiangyin (China) | HTXA (China)        |
| PP : Assembly plant code | "78"                     | "AA"                   | "GQ"                               | "GU"                |

**Table 3: Marking Example** with Commercial product

| Package<br>example                               | ASE KaoHsiung (Taiwan)                                                              |
|--------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>UFQFPN 32L 5X5</b><br><br>(ie: STM32G071KBU3) |   |
| <b>UFQFPN 48L 7X7</b><br><br>(ie: STM32H742ZIT6) |  |

Please refer to product [DataSheet](#) or Technical Note **TN1433** for package marking details.

## How to order samples?

For all samples request linked to this PCN, please:

- place a **Non-standard** sample order (choose Sample Non Std Type from pull down menu)
- insert the PCN number “**PCN16266**” into the NPO Electronic Sheet/**Regional Sheet**
- request sample(s) through Notice tool, indicating a single Commercial Product for each request

Partial Ship: 01 Price Pol: 05 Status: 01 Canc:

%: 0 Sample Type: Sample Non Std Type

Closing Type: Sample Std Type  
Sample Non Std Type  
Sample Non Std w Spl Tests

Lab Sheet:

SO | NPO Sample

Header

SO Nr: 8018502433 Customer: 99770200 01 ST-TOKYO SO Type: 30 Sample Order Cost Center: JT3129 SAMPLES /SALES J

PO Nr: Carrier Code: 0001 Price Policy: 05 Currency: 02 U.S. DOLLAR Req Name:

Notes: Status: 01 All items pending,ni Issuing Date: 25-JUN-2018 Ord Val: 0.0000 Sample Req Date: 25-Jun-2018

| Sch I Nr | PO I. Nr. | Finished Good | Comm Qty | Open Qty | Plant Open Qty | Reqd Qty | Unit Price | RD        | CD        | EDD       | St |
|----------|-----------|---------------|----------|----------|----------------|----------|------------|-----------|-----------|-----------|----|
| 1.1.10   | 000001    | STM32F429NIH6 | 30       | 30       | 30             | 30       | 0.0000     | 25-Jun-18 | 01-Mar-59 | 01-Mar-59 | 01 |

Final Cust: PO Item: 000001 Comm Prod: STM32F429NIH6 Qty: 30 RD: 25-Jun-18 Unit Price: 0.0000 Final Cust: 8800367006 SANSHIN/NPC

Cust Part Nr: Finished Good: Partial Ship: 01 Price Pol: 05 Status: 01 Canc:

Notes: TAM K Pieces: 0 Our Share%: 0 Sample Type: Sample Non Std Type

Project Name: Closing Date: Closing Type:

Regional Sheet: Lab Sheet:

PCN 16266

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**STRIVE**  
FOR EXCELLENCE

# **MDRF-GPAM-RER2611 PCN16266 HTXA UFQFPN 7x7 & 5x5 CuPd wire**

## **Reliability Evaluation Plan**

June 30th, 2026

MDRF GPAM Q&R

# MDRF-GPAM-RER2611 PCN16266

## HTXA UFQFPN 7x7 & 5x5 CuPd wire

### Package Test Vehicles

| Package line | Assembly Line | Package | Device (RawLine Code) | Diffusion Process/Plant | Number of Reliability Lots | Reliability      |
|--------------|---------------|---------|-----------------------|-------------------------|----------------------------|------------------|
| QFN          | UFQFN32 5x5   | 32      | MG*466                | N90/TSMC                | 1                          | Full reliability |
|              | UFQFN48 7x7   | 48      | MI*460                | N90/TSMC                | 2                          | Full reliability |

#### Qualification strategy:

- HTXA UFQFN copper wire assembly line will be qualified with 3 package reliability lots from representative test vehicles of STM32G0x products:
  - 1 Full package reliability lot of UFQFN32 5x5 with N90 TSMC
  - 2 Full package reliability lot of UFQFN48 7x7 with N90 TSMC
- N90 TSMC technology will be qualified in HTXA for UFQFN32 5x5 and UFQFN48 7x7 package size
- Refer to details in above and next tables.

# MDRF-GPAM-RER2611 PCN16266

## HTXA UFQFPN 7x7 & 5x5 CuPd wire

### Reliability plan

(\*) tests performed after preconditioning

| Reliability Trial & Standard |                                                                                | Test Conditions                                                                                    | Pass Criteria | Unit per Lot | Number of lot |
|------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------|--------------|---------------|
| PC                           | Pre Conditioning: Moisture Sensitivity Jedec Level 3<br>J-STD-020/ JESD22-A113 | Bake (125°C / 24 hrs)<br>Soak (30°C / 60% RH / 192 hrs) for level 3<br>Convection reflow: 3 passes | 3 passes MSL3 | 231          | 3             |
| Uhast(*)                     | UnBiased Highly Accelerated Temperature and Humidity Stress<br>JESD22 A118     | 130°C, 85%RH, 2.3 atm                                                                              | 96h           | 77           | 3             |
| TC(*)                        | Thermal Cycling<br>JESD22 A104                                                 | -65°C +150°C                                                                                       | 500cy         | 77           | 3             |
| THB(*)                       | Biased temperature & humidity stress<br>JESD22 A101                            | 85°C, 85% RH<br>bias                                                                               | 1000h         | 77           | 3             |
| HTSL                         | High Temperature Storage Life<br>JESD22 A103                                   | 150°C                                                                                              | 1000h         | 77           | 3             |
| Construction analysis        | ST internal specification<br>JESD 22B102<br>JESDB100/B108                      | Solderability, POA, Ball shear, pull test, IMC inspection , ST internal specification              | NA            | 50           | 2             |
| ESD                          | ESD Charge<br>Device Model<br>JEDEC JS-002                                     | Aligned with datasheet                                                                             | No failure    | 3            | 2             |

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