# PRODUCT / PROCESS CHANGE INFORMATION

## 1. PCI basic data

| | |
|---|---|
| **1.1 Company** | STMicroelectronics International N.V |
| **1.2 PCI No.** | MDG/22/13712 |
| **1.3 Title of PCI** | ST25R3916/17/18/16B/17B, NFC Reader IC new product introduction with non-wettable thin QFN package |
| **1.4 Product Category** | ST25R3916/17/18/16B/17B-AQWT |
| **1.5 Issue date** | 2022-10-11 |

## 2. PCI 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** | Benoit RODRIGUES |
| **2.1.2 Marketing Manager** | Sylvain FIDELIS |
| **2.1.3 Quality Manager** | Rita PAVANO |

## 3. Change

| 3.1 Category | 3.2 Type of change | 3.3 Manufacturing Location |
|---|---|---|
| Materials | (Not Defined) | ams OSRAM AG, Austria<br>TSMC Shanghai, China<br>JSCC, China |

## 4. Description of change

| | Old | New |
|---|---|---|
| **4.1 Description** | The ST25R3916/17/18/16B/17B-AQWT currently assembled at UTAC (Thailand) in wettable flank QFN package... | ...will be assembled & tested in non-wettable flank thin QFN at JSCC (China) with a new product ordering code ST25R3916/17/18/16B/17B-AQET. |
| **4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?** | - Form: Marking change<br>- Fit: Package dimensions: Package thickness change and dimension of solder pin.<br>- Function: No change | |

## 5. Reason / motivation for change

| | |
|---|---|
| **5.1 Motivation** | ST is committed to ensure delivery to its customers and needs to react to market situations trying to mitigate any potential delivery bottlenecks in advance to ensure best delivery times and availability to customers. |
| **5.2 Customer Benefit** | SERVICE IMPROVEMENT |

## 6. Marking of parts / traceability of change

| | |
|---|---|
| **6.1 Description** | See details |

## 7. Timing / schedule

| | |
|---|---|
| **7.1 Date of qualification results** | 2022-11-11 |
| **7.2 Intended start of delivery** | 2022-11-04 |
| **7.3 Qualification sample available?** | Upon Request |

## 8. Qualification / Validation

| | | | |
|---|---|---|---|
| **8.1 Description** | | | |
| **8.2 Qualification report and qualification results** | In progress | **Issue Date** | |

| 9. Attachments (additional documentations) |
|---|
| 13712 Public product.pdf<br>13712 PCI NEW PRODUCT ST25R3916-18-16B-17B-AQET.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 |
| | ST25R3916-AQWT | |
| | ST25R3916B-AQWT | |
| | ST25R3917-AQWT | |
| | ST25R3917B-AQWT | |
| | ST25R3918-AQWT | |

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# PRODUCT CHANGE INFORMATION

## ST25R3916/17/18/16B/17B, NFC Reader IC new product introduction with non-wettable thin QFN package

**What is the change?**
The ST25R3916/17/18/16B/17B-AQWT currently assembled at UTAC (Thailand) in wettable flank QFN package will be assembled & tested in non-wettable flank thin QFN at JSCC (China) with a new product ordering code ST25R3916/17/18/16B/17B-AQET.
The ST25R3916/17/18/16B/17B-AQET are fully compatible with current AQWT versions with same functionalities and electrical features.
Package size of the new non-wettable flank thin QFN package is compatible with current QFN package. Package thickness of the new non wettable flank thin QFN is reduced from 1mm to 0.6mm. Refer to the datasheet for a list of all dimensions.

Concurrent to this change, the ams OSRAM wafer fab 8 (Austria) will be implemented as a second source for the new products ST25R3916/17/18/16B/17B-AQET in addition to the TSMC wafer fab 10 (China), wafer fab process flow and equipment do not change.
Customers will be informed in time before this second source will be activated.

Current ST25R3916/17/18/16B/17B-AQWT will only be available for low volumes, not recommended for new designs, ST recommends the new ST25R3916/17/18/16B/17B-AQET for faster availability and to secure demand.

**Why?**
ST is committed to ensure delivery to its customers and needs to react to market situations trying to mitigate any potential delivery bottlenecks in advance to ensure best delivery times and availability to customers.

**When?**
First products can be shipped by wk44 2022. Flow used and final good delivered is at the discretion of ST.

**How will the change be qualified?**
The new product has been qualified using the standard STMicroelectronics Corporate and MMY (Memory) division Procedures for Quality and Reliability.
The Qualification Report RERMMY2202 will be available on request after Week 45/2022.

**What is the impact of the change?**

- **Form:** Marking change (see details next page)

- **Fit:** Package dimensions: Package thickness change and dimension of solder pin.

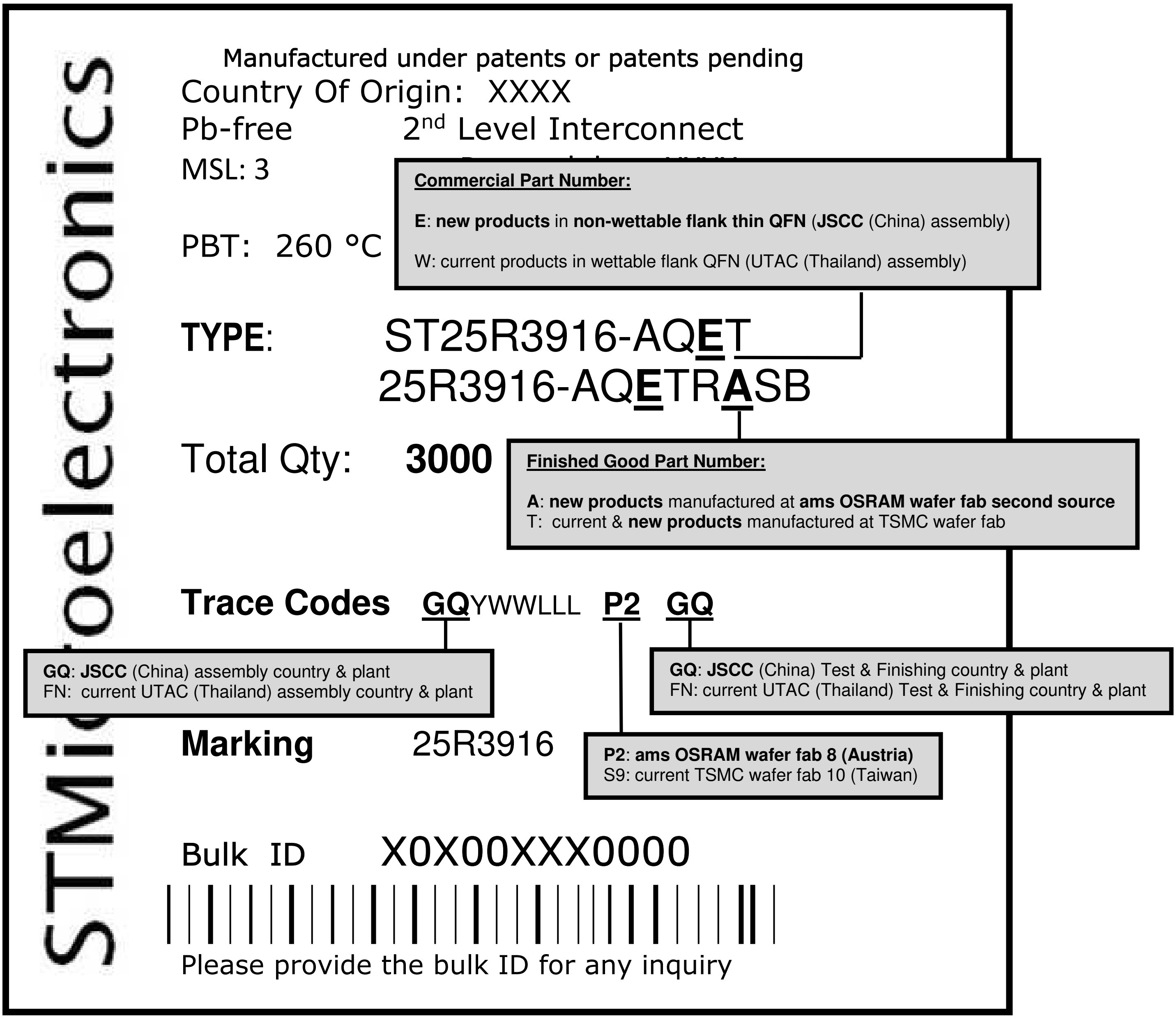
- **Function:** No change

## How can the change be seen?

- ***BOX LABEL MARKING***

On the BOX LABEL, the difference is visible on the Commercial Part Number and the Finished Good part Number. Also, the change is visible inside the Trace code where the “Assembly Country & Plant” digits are reflecting the new plant as **GQ** for **JSCC (China)** instead of FN for UTAC (Thailand):

➔ *Example for ST25R3916-AQET*



Manufactured under patents or patents pending

Country Of Origin: XXXX

Pb-free 2nd Level Interconnect

MSL: 3

PBT: 260 °C

**Commercial Part Number:**

**E**: **new products** in **non-wettable flank thin QFN** (**JSCC** (China) assembly)

W: current products in wettable flank QFN (UTAC (Thailand) assembly)

**TYPE**: ST25R3916-AQ**E**T

25R3916-AQ**E**TR**A**SB

Total Qty: **3000**

**Finished Good Part Number:**

**A**: **new products** manufactured at **ams OSRAM wafer fab second source**
T: current & **new products** manufactured at TSMC wafer fab

**Trace Codes** **GQ**YWWLLL **P2** **GQ**

**GQ**: **JSCC** (China) assembly country & plant
FN: current UTAC (Thailand) assembly country & plant

**GQ**: **JSCC** (China) Test & Finishing country & plant
FN: current UTAC (Thailand) Test & Finishing country & plant

**Marking** 25R3916

**P2**: **ams OSRAM wafer fab 8 (Austria)**
S9: current TSMC wafer fab 10 (Taiwan)

Bulk ID X0X00XXX0000

Please provide the bulk ID for any inquiry

## How can the change be identified?

### - *Form: DEVICE MARKING*

On the device marking, the change is visible inside the trace code where the Assembly Country & Plant “PP” is changing from FN to **GQ**. Also, the Country Of origin “HHH” is changing from THA to **CHN**.

Legend:
25R3916 = Product name
**PP** = **Assembly Country & plant: - GQ** for **new product assembled & tested at JSCC (China)**
- FN for current product at UTAC (Korea)
LLL = Sequence
**WX** = wafer plant : **P2** for product manufactured in ams OSRAM wafer fab (Austria)
S9 for product manufactured in TSMC fab 10 (Taiwan)
**HHH** = **Country of origin: - CHN** for **new product,** THA for current product.
Y = Assembly year
WW = Assembly week

## Appendix A- Product Change Information

| | |
|---|---|
| **Product family / Commercial products:** | NFC Reader IC |
| **Customer(s):** | All |
| **Type of change:** | New product introduction |
| **Reason for the change:** | Service improvement |
| **Description of the change:** | New product introduction |
| **Forecast date of the change:**<br>**(Notification to customer)** | Week 41 / 2022 |
| **Forecast date of Qualification samples availability for customer(s):** | See details in APPENDIX B |
| **Forecast date for the internal STMicroelectronics change, Qualification Report availability:** | Pending |
| **Marking to identify the changed product:** | ST25R391x-AQ**E**T on Box Label |
| **Description of the qualification program**: | Standard ST Microelectronics Corporate Procedures for Quality and Reliability |
| **Product Line(s) and/or Part Number(s):** | See Appendix B |
| **Manufacturing location:** | ams OSRAM AG, Austria<br>TSMC Shanghai, China<br>JSCC, China |
| **Estimated date of first shipment:** | Samples : Available<br>Production : wk44 |

## Appendix B: Concerned Commercial Part Numbers:

| Current Commercial Part Numbers | New Commercial Part Numbers | Samples availability |
|---|---|---|
| ST25R3916-AQ**W**T | **ST25R3916-AQET** | Available |
| ST25R3917-AQ**W**T | **ST25R3917-AQET** | Nov/2022 |
| ST25R3918-AQ**W**T | **ST25R3918-AQET** | Apr/2023 |
| ST25R3916B-AQ**W**T | **ST25R3916B-AQET** | Jan/2023 |
| ST25R3917B-AQ**W**T | **ST25R3917B-AQET** | Jan/2023 |

| **Document Revision History** | | |
|---|---|---|
| Date | Rev. | Description of the Revision |
| Sept. 12, 2022 | V01 | First draft. |
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| **Source Documents & Reference Documents** | | |
|---|---|---|
| **Source document Title** | **Rev.:** | **Date:** |
| | | |
| | | |
| | | |

# Public Products List

Publict 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

***PCI Title :*** ST25R3916/17/18/16B/17B, NFC Reader IC new product introduction
with non-wettable thin QFN package
***PCI Reference :*** MDG/22/13712

***Subject :*** Public Products List

Dear Customer,

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

| | | |
|---|---|---|
| ST25R3916-AQWT | ST25R3917B-AQWT | ST25R3916B-AQWT |
| ST25R3918-AQWT | ST25R3917-AQWT | |

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