

PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.	MDG/20/12057	
1.3 Title of PCN	Bonding wire change to Gold on ST25R3912	
1.4 Product Category	ST25R3912-AQWT	
1.5 Issue date	2020-03-10	

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	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	New direct material part number (same supplier, different supplier or new supplier), Bond wire material, diameter	UTAC Thailand

4. Description of change

	Old	New
4.1 Description	The ST25R3912-AQWT, currently assembled with Copper bonding wire... In addition to this change, the device marking and the label will reflect the right Pb-free category symbol: the ST25R3912-AQWT is currently shipped with the top marking showing the Pb-free category symbol "e4", while this symbol should be "e3" (for matte tin plating). Please note that there is no change on package material (including lead frame & lead finishing).	...will be assembled with Gold bonding wire for improved long-term reliability.
4.2 Anticipated Impact on form, fit, function, quality, reliability or processability?	<ul style="list-style-type: none"> - Form: Pb-free category symbol marking updated from "e4" to "e3". - Fit: No change - Function: No change 	

5. Reason / motivation for change

5.1 Motivation	To improve long-term reliability
5.2 Customer Benefit	QUALITY IMPROVEMENT

6. Marking of parts / traceability of change

6.1 Description	N/A
-----------------	-----

7. Timing / schedule

7.1 Date of qualification results	2020-03-22
7.2 Intended start of delivery	2020-06-08
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)			
---	--	--	--

12057 Public product.pdf 12057 Draft PCN ST25R3912 gold wire.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
	ST25R3912-AQWT	

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



PRODUCT CHANGE NOTIFICATION

Bonding wire change to Gold on ST25R3912

What is the change?

The **ST25R3912-AQWT**, currently assembled with Copper bonding wire will be assembled with **Gold bonding wire** for improved long-term reliability.

*In addition to this change, the device marking and the label will reflect the right Pb-free category symbol: the **ST25R3912-AQWT** is currently shipped with the top marking showing the Pb-free category symbol "e4", while this symbol should be "e3" (for matte tin plating).*

Please note that there is no change on package material (including lead frame & lead finishing).

Why?

The strategy of STMicroelectronics Memory Division is to follow highest quality standards for long-term reliability and to always optimize quality level wherever possible.

Device marking and packing labels must reflect lead finishing.

When?

The shipments of the **ST25R3912-AQWT** with Gold bonding wire will start from Week 24 / 2020.

How will the change be qualified?

The change has been qualified following the standard ST Microelectronics Corporate Procedures for Quality and Reliability.

The **Qualification Report QRMMY1703** will be available in Week 13 / 2020.

What is the impact of the change?

- **Form:** *Pb-free category symbol marking updated from "e4" to "e3".*
- **Fit:** No change
- **Function:** No change

How can the change be identified?

- **BOX LABEL MARKING**

The change to **Gold bonding wire** will be visible inside the **Finished Good Part Number** where the last digit is "**G**" for **Gold wire** while this digit was "**C**" for Copper wire.

For the change of **Pb-free category symbol**, the difference is visible inside the **Category**: "**e3**" symbol is appearing instead of "**e4**".

STMicroelectronics

Manufactured under patents or patents pending
Country Of Origin: Thailand
Pb-free 2nd Level Interconnect
MSL: 3 1 WEEK at **"e3" for Pb-free category**
PBT: 260 °C Category: **e3** ECOPACK2/ROHS

**TYPE: ST25R3912-AQWT
25R3912-AQWTRTUG**

Total Qty: **4000** **"G" for new Gold bonding wire
"C" for current Copper bonding wire**

Trace Codes PPYWWLLL WX TF

Marking 25R3912

Bulk ID X0X00XXX0000



Please provide the bulk ID for any inquiry

How can the change be identified?

- **DEVICE MARKING**
- **New Gold bonding wire:**
No visible change on marking.
- **Corrected Pb-free category symbol:** “e3” symbol is appearing instead of “e4”.

ST25R3912
Current marking



Legend:
25R3912 = Product name
PP = Assembly plant
LLL = Sequence
WX = Wafer plant
HHH = Country of origin
Y = Assembly year
WW = Assembly week

ST25R3912
New marking



Legend:
25R3912 = Product name
PP = Assembly plant
LLL = Sequence
WX = Wafer plant
HHH = Country of origin
Y = Assembly year
WW = Assembly week

Appendix A- Product Change Information

Product family / Commercial products:	ST25R3912, NFC Initiator IC
Customer(s):	All
Type of changes:	<ul style="list-style-type: none"> - Bonding wire material change - <i>Marking & labeling change</i>
Reason for the changes:	Quality and long-term reliability improvement.
Description of the changes:	<ul style="list-style-type: none"> - The bonding wire material changes from Copper to Gold. - <i>The Pb-free category symbol on IC top marking changes from “e4” to “e3” (matte tin). Packing labels will be updated as well.</i>
Forecast date of the change: (Notification to customer)	Week 11 / 2020
Forecast date of <u>Qualification samples</u> availability for customer(s):	See details in APPENDIX B
Forecast date for <u>Qualification Report</u> availability:	The Qualification Report QRMMY1703 will be available in Week 13 / 2020.
Marking to identify the changed product:	<i>The Pb-free category symbol on IC top marking changes from “e4” to “e3” (matte tin).</i>
Description of the qualification program:	Standard ST Microelectronics Corporate Procedures for Quality and Reliability
Product Line(s) and/or Part Number(s):	ST25R3912-AQWT
Manufacturing location:	UTAC Thailand
Estimated date of first shipment:	Week 24 / 2020



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 : Bonding wire change to Gold on ST25R3912

PCN Reference : MDG/20/12057

Subject : Public Products List

Dear Customer,

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

ST25R3912-AQWT		
----------------	--	--



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.