PRODUCT / PROCESS CHANGE NOTIFICATION

ST25DV-I2C series with Open Drain GPO design improvement

What is the change?
The ST25DV04K, ST25DV16K and ST25DV64K with Open Drain General Purpose Output Dynamic NFC Tags have undergone a design change at metal mask layer about:

- The quality of internal load modulation generation to improve the tag's answer at all RF field conditions (from Hmin to Hmax).
- The RF-I2C arbitration mechanism during extreme I2C bus activity.
- The stability of on-going write operations during premature RF field cuts, when Vcc is on.

This product change is improving the overall system robustness and has no impact on the application design. No hardware or software change is required at application level.

Why?
The strategy of STMicroelectronics Memory division is to support our customers on a long-term basis and to apply continuous improvement.
In line with this commitment, those design enhancements will lead to:

- Improve interoperability with readers
- Increase system robustness
- Facilitate access from RF interface when the device is under huge activity in I2C bus

When?
Qualification samples will be available from week 07 / 2020 or week 11 / 2020, depending on product version.

Current version will be delivered until Week 26 / 2020.
From Week 27 / 2020, new version only will be delivered.

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 QRMMY1922** will be available Week 04 / 2020.

What is the impact of the change?

- Form: Marking change on package top side

- Fit: No change

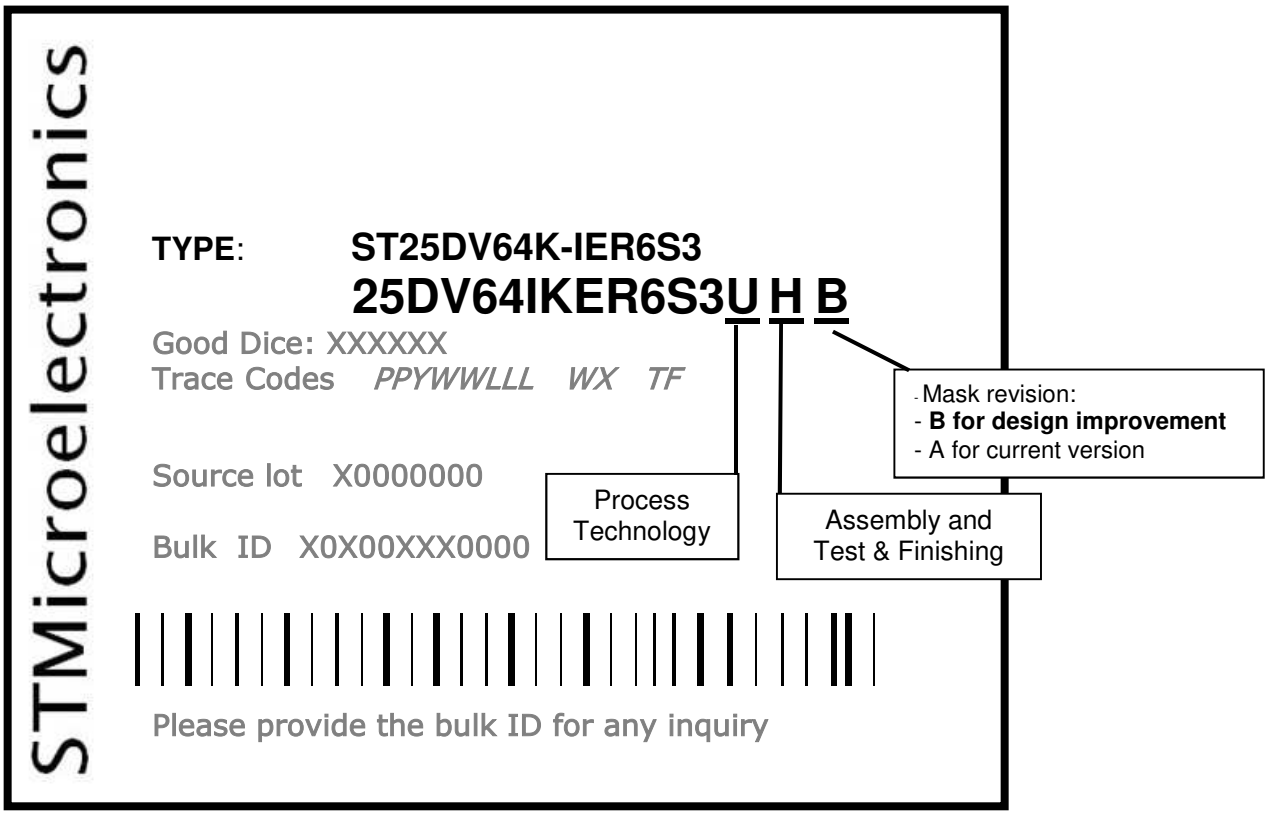
- Function: No change

How can the change be seen?

- ***BOX LABEL MARKING***

On the BOX LABEL MARKING, the difference is visible inside the **Finished Good Part Number**: The mask revision digit is "**B**" for the design improvement, this identifier being "A" for the current version.

➔ ***Example for ST25DV64K-IER6S3***



How can the change be seen?

- DEVICE MARKING

The change is visible inside the **Product name** where the last digit is "**B**" for the design change, this identifier being "A" for the current version.

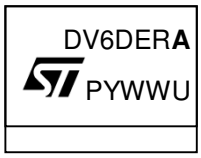
SO8N

Example for ST25DV64K:

Legend:
DV6DERB = Product name
P = Assembly plant
Y = Assembly year
WW = Assembly week
U = Process techno (CMOS F8H)

New design

Current design



TSSOP8

Example for ST25DV04K:

Legend:
V2EUB = Product name
P = Assembly plant
Y = Assembly year
WW = Assembly week

New design

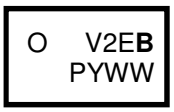
Current design

DFN8

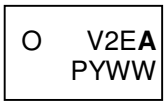
Example for ST25DV04K:

Legend:
V2EB = Product name
P = Assembly plant
Y = Assembly year
WW = Assembly week

New design



Current design



Appendix A: Product Change Information

Product family / Commercial products:	ST25DV-I2C series with Open-Drain GPO (See Appendix B)
Customer(s):	All
Type of change:	Design change
Reason for the change:	System robustness improvement
Description of the change:	Digital routing modification at metal mask layer
Forecast date of the change: **(Notification to customer)**	Week 01 / 2020
Forecast date of **Qualification samples availability for customer(s):**	Week 07 / 2020 or Week 11 / 2020 See Appendix B for details
Forecast date for the internal STMicroelectronics change, **Qualification Report availability:**	Qualification Report QRMMY1922 will be available Week 04 / 2020.
Marking to identify the changed product:	Die version digit "**B**" in top marking product name
Description of the qualification program:	Standard ST Microelectronics Corporate Procedures for Quality and Reliability
Product Line(s) and/or Part Number(s):	See information in Appendix B
Manufacturing location:	Rousset (France)
Estimated date of first shipment:	Week 27 / 2020

Appendix B: Concerned Commercial Part Numbers:

Current Commercial Part Numbers	Current Finished Good Part Numbers	New Finished Good Part Numbers	Qualification samples availability
ST25DV04K-IER6S3	25DV04KIER6S3UHA	25DV04KIER6S3UH**B**	Week 11 / 2020
ST25DV04K-IER6T3	25DV04KIER6T3UTA	25DV04KIER6T3UT**B**	Week 11 / 2020
ST25DV04K-IER6C3	25DV04KIER6C3UGA	25DV04KIER6C3UG**B**	Week 11 / 2020
ST25DV04K-IER8S3	25DV04KIER8S3UHA	25DV04KIER8S3UH**B**	Week 07 / 2020
ST25DV04K-IER8T3	25DV04KIER8T3UTA	25DV04KIER8T3UT**B**	Week 07 / 2020
ST25DV04K-IER8C3	25DV04KIER8C3UGA	25DV04KIER8C3UG**B**	Week 11 / 2020
ST25DV16K-IER6S3	25DV16KIER6S3UHA	25DV16KIER6S3UH**B**	Week 11 / 2020
ST25DV16K-IER6T3	25DV16KIER6T3UTA	25DV16KIER6T3UT**B**	Week 11 / 2020
ST25DV16K-IER8S3	25DV16KIER8S3UHA	25DV16KIER8S3UH**B**	Week 07 / 2020
ST25DV16K-IER8T3	25DV16KIER8T3UTA	25DV16KIER8T3UT**B**	Week 07 / 2020
ST25DV64K-IER6S3	25DV64KIER6S3UHA	25DV64KIER6S3UH**B**	Week 07 / 2020
ST25DV64K-IER6T3	25DV64KIER6T3UTA	25DV64KIER6T3UT**B**	Week 07 / 2020
ST25DV64K-IER8S3	25DV64KIER8S3UHA	25DV64KIER8S3UH**B**	Week 11 / 2020
ST25DV64K-IER8T3	25DV64KIER8T3UTA	25DV64KIER8T3UT**B**	Week 11 / 2020

Document Revision History		
Date	Rev.	Description of the Revision
Dec. 16, 2019	1.00	First draft creation – Christian POLI

Source Documents & Reference Documents		
Source document Title	**Rev.:**	**Date:**