


PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company	 STMicroelectronics International N.V
1.2 PCN No.	MDG/23/13947
1.3 Title of PCN	ST25R3914-AQWT wafer fab / EWS dual source and datasheet update
1.4 Product Category	ST25R3914-AQWT
1.5 Issue date	2023-03-27

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	Marie-France FLORENTIN
2.1.2 Marketing Manager	Sylvain FIDELIS
2.1.3 Quality Manager	Mickael DENAIS-ALLICHON

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: Wafer fabrication	See detailed description

4. Description of change

	Old	New
4.1 Description	The ST25R3914-AQWT is currently following the combination: ams OSRAM wafer fab 8 (Austria) / ams OSRAM EWS (Austria).	A second source will be implemented with the combination: TSMC wafer fab 10 (China) / ST Toa Payoh EWS (Singapore).
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	- Form: Marking change to reflect the different Fab location - Fit: No change - Function: No change, except register 0x3F readout. Readout changed from 0Bh to 0Dh.	

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. Therefore, a dual source will be introduced for the ST25R3914-AQWT to ensure best delivery times and availability to customers.
5.2 Customer Benefit	DOUBLE SOURCING

6. Marking of parts / traceability of change

6.1 Description	N/A
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7. Timing / schedule

7.1 Date of qualification results	2023-06-02
7.2 Intended start of delivery	2023-09-01
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)		
13947 Public product.pdf 13947 PCN ST25R3914 dual source.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
	ST25R3914-AQWT	

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ST25R3914-AQWT wafer fab / EWS dual source and datasheet update

What is the change?

The ST25R3914-AQWT is currently following the combination: ams OSRAM wafer fab 8 (Austria) / ams OSRAM EWS (Austria).

A **second source** will be implemented with the combination: **TSMC wafer fab 10 (China) / ST Toa Payoh EWS (Singapore)**.

Final test machine models and test program do not change, product name marking will remain the same. Both sources will be used for production based on the same silicon and chip housing.

Datasheet is updated (DS11837 Rev 8 to Rev 9) to add the internal LDO current of 200mA in the operating conditions (currently only mentioned in section "Power supply system") and the 500mA as maximum peak current bypassing the internal LDO.

In section "IC identity register" the new version number of the silicon is added to reflect the different mask sets of the fabs. (Version changed from **0Bh->0Dh**)

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. Therefore, a dual source will be introduced for the ST25R3914-AQWT to ensure best delivery times and availability to customers.

When?

First products from new production line can be shipped by Week 35 / 2023. Flow used and final good delivered is at the discretion of ST.

How will the change be qualified?

The products remain strictly the same from the electrical and mechanical points of view. The additional flow has been qualified using the standard STMicroelectronics Corporate and MMY (Memory) division Procedures for Quality and Reliability. Qualification Report available Week 22 / 2023.

What is the impact of the change?


- **Form:** Marking change to reflect the different Fab location
- **Fit:** No change
- **Function:** No change, except register 0x3F readout. Readout changed from 0Bh to 0Dh.

ST25R3914-AQWT wafer fab / EWS dual source and datasheet update

How can the change be seen?

- **BOX LABEL MARKING**

On the BOX LABEL, the difference is visible on the Finished Good part Number. Also, the change is visible inside the Trace code where the “wafer fab” digits are reflecting the new plant as **S9** for **TSMC wafer fab 10 (China)** instead of P2 for ams OSRAM (Austria):

STMicroelectronics	Manufactured under patents or patents pending	
	Country Of Origin: XXX	
	Pb-free	2 nd Level Interconnect
	MSL: 3	Bag seal date: XXXX
	PBT: 260 °C	Category: e3 ECO
	TYPE: ST25R3914-AQWT	
	25R3914-AQWTRTUC	
Total Qty:	4000	Finished Good Part Number: C: new product die revision A: current product die revision
Trace Codes PPYWWLLL S9 TF		Finished Good Part Number: T: New product manufactured at TSMC wafer fab 10 (China) A: Current product manufactured at ams OSRAM wafer fab (Austria)
Marking	25R3914	S9: new TSMC wafer fab 10 (China) P2: ams OSRAM wafer fab 8 (Austria)
Bulk ID	X0X00XXX0000	
		
Please provide the bulk ID for any inquiry		

ST25R3914-AQWT wafer fab / EWS dual source and datasheet update

How can the change be identified?

- **Form: DEVICE MARKING**

On the device marking, the change is visible inside the trace code where the **wafer fab country & plant** code “WX” is changing from P2 to **S9**.



Legend:

25R3914 = Product name

PP = Assembly Country & plant

LLL = Sequence

WX = wafer plant: **S9** for product manufactured in **TSMC fab 10** (China)
P2 for product manufactured in ams OSRAM wafer fab (Austria)

HHH = Country of origin

Y = Assembly year

WW = Assembly week

ST25R3914-AQWT wafer fab / EWS dual source and datasheet update

Product family / Commercial products:	ST25R3914-AQWT
Customer(s):	All
Type of change:	Double sourcing
Reason for the change:	Service improvement
Description of the change:	Implementation of a second source for the wafer factory and EWS
Forecast date of the change: (Notification to customer)	Week 13 / 2023
Forecast date of <u>Qualification samples</u> availability for customer(s):	Week 15 / 2023
Forecast date for the internal STMicroelectronics change, <u>Qualification Report</u> availability:	Week 22 / 2023
Marking to identify the changed product:	Wafer Plant code on Marking
Estimated date of first shipment:	Earliest by Week 35 / 2023

ST25R3914-AQWT wafer fab / EWS dual source and datasheet update

Document Revision History		
Date	Rev.	Description of the Revision
Mar. 23, 2023	1.00	

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



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 : ST25R3914-AQWT wafer fab / EWS dual source and datasheet update

PCN Reference : MDG/23/13947

Subject : Public Products List

Dear Customer,

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

ST25R3914-AQWT		
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