

## PRODUCT / PROCESS CHANGE NOTIFICATION

### 1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.		AMS/20/12067
1.3 Title of PCN		LSM6DSO-products family: UTAC as additional Assy plant.
1.4 Product Category		LSM6DSO-products family (See Products list)
1.5 Issue date		2020-04-06

### 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	Andrea Mario ONETTI
2.1.2 Marketing Manager	Simone FERRI
2.1.3 Quality Manager	Michele CALDERONI

### 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)	CALAMBA and UTAC

### 4. Description of change

	Old	New
4.1 Description	CALAMBA (ST) as Assy Plant.	CALAMBA (ST) and UTAC (Subcon) as Assy Plants.
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	No Impact	

### 5. Reason / motivation for change

5.1 Motivation	The qualification of UTAC as additional Assy plant guarantees the manufacturing capacity in order to meet and to assure the customer demand.
5.2 Customer Benefit	CAPACITY INCREASE

### 6. Marking of parts / traceability of change

6.1 Description	Dedicated FG
-----------------	--------------

### 7. Timing / schedule

7.1 Date of qualification results	2020-07-06
7.2 Intended start of delivery	2020-08-03
7.3 Qualification sample available?	Upon Request

### 8. Qualification / Validation

8.1 Description	12067 PCN 12067 UTAC qualification for LSM6DSO family .pdf	
8.2 Qualification report and qualification results	Available (see attachment)	Issue Date 2020-04-06

### 9. Attachments (additional documentations)

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
	LSM6DSOTR	
	LSM6DSOXTR	

**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



## 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 :** LSM6DSO-products family: UTAC as additional Assy plant.

**PCN Reference :** AMS/20/12067

**Subject :** Public Products List

Dear Customer,

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

LSM6DSOTR	LSM6DSOPTR	LSM6DSOXTR
-----------	------------	------------



### **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

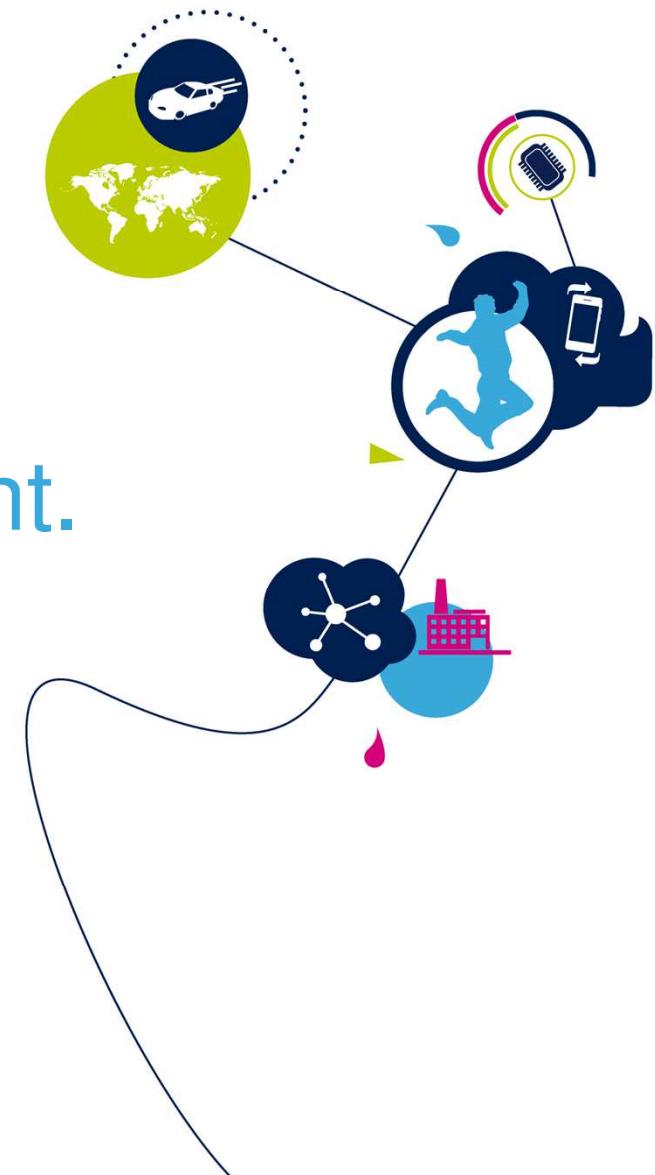
# PCN 12067

## LSM6DSO products family: UTAC as additional Assy plant.

### Reliability Plan

AMG MEMS Q&R

March 18<sup>th</sup> 2020



# Reliability plan

2

Following slide shows the reliability plan associated to the PCN 12067 about the addition of Utac, beside St Calamba, as assy plant about LSM6DSO family.

# Reliability Plan

3

Stress TEST	Qty	Method	Criteria	Note	Potential failure mode
Preconditioning (PC)	1000	MSL3 JEDEC JESD-020,	0 Failure	MANDATORY before TC,THS, U-HAST	Parametric stability
Temperature Cycle (TC)	100	-40°C/125°C JEDEC JESD22-A104 PC before	0 Failure	Readout 250cy, 500, 1000 cy	Parametric stability
High Temperature Storage Life (HTSL)	100	+150 °C JEDEC JESD22-A103	0 Failure	Readout 168h, 500, 1000 h	Parametric stability
Temperature Humidity Storage (THS)	500	85°C/85% JEDEC JESD22-A101 PC before	0 Failure	Readout 168h, 500, 1000 h	Parametric stability
U-HAST	100	131°C/ 85% JEDEC JESD22-A118 PC before	0 Failure	Readout 96h	Parametric stability
ESD – CDM	30	up to +/- 750 V	0 Failure	3 pcs / level	



Parametric stability have to be aligned present production (assy at Calamba)