PRODUCT / PROCESS CHANGE INFORMATION

1. PCI basic data

1.1 Company	STMicroelectronics International N.V
1.2 PCI No.	AMS/19/11909
1.3 Title of PCI	AIS328DQTR fix (extension) of self test operating conditions.
1.4 Product Category	AIS328DQTR
1.5 Issue date	2019-12-20

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	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
General Product & Design	Modification of datasheet : Errata/error fix	N/A

4. Description of change

	Old	New
4.1 Description	Self test specified only at 3.3 V power supply and T equal to 25 deg.	Self test specified across the whole power supply voltage range and whole Operating T range.
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	No Impact	

5. Reason / motivation for change

5.1 Motivation	Reason of the change is to fix the self test operating conditions, specified in datasheet.
5.2 Customer Benefit	MANUFACTURING FLEXIBILITY

6. Marking of parts / traceability of change

6.1 Description	New Datasheet Revision

7. Timing / schedule

7.1 Date of qualification results	2019-12-09
7.2 Intended start of delivery	2019-12-09
7.3 Qualification sample available?	Not Applicable

8. Qualification / Validation

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

9. Attachments (additional documentations)

11909 Public product.pdf
11909 PCI AIS328DQ December 2019.pdf
11909 AIS328DQ rev4.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**
	AIS328DQTR	

IMPORTANT NOTICE – PLEASE READ CAREFULLY

AIS328DQ: datasheet update

MEMS Sensor Division

December 2019

New vs old revision 1/3

- The datasheet of ST Automotive accelerometer AIS328DQ has been updated to include wider operating conditions for the execution of the Self-Test routine.

It was (DS rev.3)	It is (DS rev.4)
• Self-test specified only at 3.3 V power supply and at a temperature of 25°C	• Self test specified across the whole power supply voltage range and the whole operating temperature range

- Variations are indicated in the following slide; all the remaining parts of the document remain unchanged

life.augmented

Table 3.　Mechanical characteristics

Symbol	Parameter	Test conditions	Min.	Typ.[1]	Max.	Unit
Vst	Self-test output change[8],[9],[10]	FS bit set to 00 X-axis	-500	-800	-1100	LSb
		FS bit set to 00 Y-axis	500	800	1100	LSb
		FS bit set to 00 Z-axis	400	600	800	LSb

It was

Table 3.　Mechanical characteristics

| Symbol	Parameter	Test conditions	Min.	Typ.[1]	Max.	Unit
Vst	Self-test output change[8],[9],[10],[11]	FS bit set to 00 X-axis	-183	-800	-1510	LSb
		FS bit set to 00 Y-axis	183	800	1510	LSb
		FS bit set to 00 Z-axis	102	600	1326	LSb

It is

New vs old revision 3/3

Notes of Table 3, page #10

8. The sign of "Self-test output change" is defined by a sign bit, for all axes. Values in *Table 3* are defined with the STsign bit in the CTRL_REG4 register equal to logic "0" (positive self-test), at T = 25 °C.

9. Self-test output changes with the power supply. "Self-test output change" is defined as OUTPUT[LSb]$_{(CTRL\_REG4\ ST\ bit=1)}$ - OUTPUT[LSb]$_{(CTRL\_REG4\ ST\ bit=0)}$. 1LSb=4$g$/4096 at 12-bit representation, ±2 g full-scale.

10. Output data reaches 99% of final value after 3/ODR when enabling self-test mode, due to device filtering.

It was

8. The sign of "Self-test output change" is defined by a sign bit, for all axes. Values in *Table 3* are defined with the STsign bit in the CTRL_REG4 register equal to logic "0" (positive self-test).

9. Self-test output changes with the power supply. "Self-test output change" is defined as OUTPUT[LSb]$_{(CTRL\_REG4\ ST\ bit=1)}$ - OUTPUT[LSb]$_{(CTRL\_REG4\ ST\ bit=0)}$. 1LSb=4$g$/4096 at 12-bit representation, ±2 g full-scale.

10. Output data reaches 99% of final value after 3/ODR when enabling self-test mode, due to device filtering.

11. Across the supply voltage range.

It is

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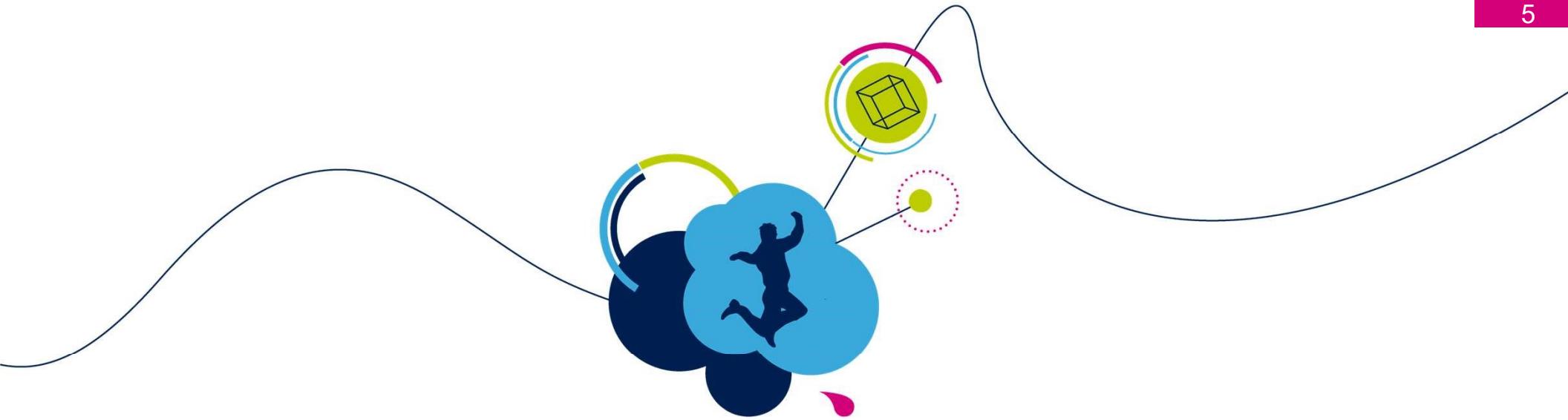
Thank You

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 : AIS328DQTR fix (extension) of self test operating conditions.

PCI Reference : AMS/19/11909

Subject : Public Products List

Dear Customer,

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

AIS328DQTR		

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