

## PRODUCT / PROCESS CHANGE NOTIFICATION

### 1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.		ADG/22/13804
1.3 Title of PCN		L5050S (UK38): Assembly Transfer to Bouskoura
1.4 Product Category		L5050STR, L5050S
1.5 Issue date		2022-11-25

### 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	Francesco MACINA
2.1.2 Marketing Manager	Salvatore ABBISSO
2.1.3 Quality Manager	Marcello Donato MENCHISE

### 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)	ST Bouskoura - Morocco receiving Plant

### 4. Description of change

	Old	New
4.1 Description	Assy Plant Shenzhen	Assy Plant Bouskoura
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	No Impact	

### 5. Reason / motivation for change

5.1 Motivation	ST Shenzhen SO8 package line closure June 30,2023
5.2 Customer Benefit	SERVICE CONTINUITY

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

6.1 Description	Dedicated Finished Good code
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### 7. Timing / schedule

7.1 Date of qualification results	2023-02-24
7.2 Intended start of delivery	2023-03-31
7.3 Qualification sample available?	Upon Request

### 8. Qualification / Validation

8.1 Description	
8.2 Qualification report and qualification results	In progress

### 9. Attachments (additional documentations)

13804 Public product.pdf 13804 Details.pdf
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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
	L5050STR	

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## PRODUCT/PROCESS CHANGE NOTIFICATION

<b>TITLE</b>	L5050S (UK38): Assembly Transfer to Bouskoura																										
<b>IMPACTED PRODUCTS</b>	<p>ST silicon lines UK38 diffused in BCD5 technology and assembled in SO8 package:</p> <ul style="list-style-type: none"> <li>- L5050S</li> <li>- L5050STR</li> </ul>																										
<b>MANUFACT. STEP</b>	Assembly																										
<b>INVOLVED PLANT</b>	<p>Recipient: ST Shenzhen Plant (China)  Destination: ST Bouskoura Plant (Morocco)</p>																										
<b>CHANGE REASON</b>	ST Shenzhen SO8 package line closure 30 June 2023: Service and Capacity improvement for business continuity. Manufacturing process optimization																										
<b>CHANGE DESCRIPTION</b>	<p>Transfer of package assembly from current Shenzhen (China) to Bouskoura (Morocco) Plant. Package Bill of Material is subject to upgrade as per following table:</p> <table border="1" data-bbox="546 1214 1313 1573"> <thead> <tr> <th></th> <th>SHENZHEN</th> <th>BOUSKOURA</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td>GLUE</td> <td>ABLESTIK 8601S-25</td> <td>ABLESTIK 8601S-25</td> <td>same</td> </tr> <tr> <td>FRAME</td> <td>94x125 Mt HD NiThPdAgAu</td> <td>94x125 SSHD IDF SpAg</td> <td>different</td> </tr> <tr> <td>LEAD FINISHING</td> <td>e4</td> <td>e3</td> <td>different</td> </tr> <tr> <td>RESIN</td> <td>SUMITOMO EME-G700KC</td> <td>SUMITOMO EME-G700KC</td> <td>same</td> </tr> <tr> <td>WIRE</td> <td>Au D1.0</td> <td>Au D1.0</td> <td>same</td> </tr> </tbody> </table>				SHENZHEN	BOUSKOURA	Notes	GLUE	ABLESTIK 8601S-25	ABLESTIK 8601S-25	same	FRAME	94x125 Mt HD NiThPdAgAu	94x125 SSHD IDF SpAg	different	LEAD FINISHING	e4	e3	different	RESIN	SUMITOMO EME-G700KC	SUMITOMO EME-G700KC	same	WIRE	Au D1.0	Au D1.0	same
	SHENZHEN	BOUSKOURA	Notes																								
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WIRE	Au D1.0	Au D1.0	same																								
<b>TRACEABILITY</b>	Dedicated Finished Good code (internal part number)																										
<b>VALIDATION</b>	<p>According to ZVEI Delta Qualification Matrix corresponding to following selected items:</p> <ul style="list-style-type: none"> <li>SEM-PA-04 Change of lead frame finishing material / area (internal)</li> <li>SEM-PA-18 Move all or parts of production to a different assembly site</li> <li>SEM-TF-01 Move of all or part of electrical wafer test and/or final test to a different test site</li> </ul> <p>leading to the following reliability qualification plan performed on Test Vehicle:</p>																										

●	A2	THB	Temperature Humidity Bias or biased HAST
●	A3	AC	Autoclave or Unbiased HAST
●	A4	TC	Temperature Cycling
-	A5	PTC	Power Temperature Cycling
●	A6	HTSL	High Temperature Storage Life
●	B1	HTOL	High Temperature Operating Life
●	B2	ELFR	Early Life Failure Rate
●	C1	WBS	Wire Bond Shear
●	C2	WBP	Wire Bond Pull
●	C3	SD	Solderability
●	C4	PD	Physical Dimensions
●	C6	LI	Lead Integrity
●	E5	ED	Electrical Distribution
-	E10	SC	Short Circuit Characterization
●	E12	LF	Lead free
●			Whisker test
●			Parameter Analysis: Comparison of current with changed device characterization, electrical distribution
●			For Cu Wire Products: Consider AEQ-Q006

Above plan is implemented with following exceptions:

- A5 Power Temperature Cycling: not performed (not done during original qualification)
- B2 Early Life Failure Rate: limited to one qualification lot (not relevant for package related aspects)
- E10 Short Circuit Characterization: not performed (not done during original qualification) – current limit test  $I_{LIM}$  done at final test (100% production)

<b>CURRENT PRODUCTS</b>	Replaced by new version featuring new Plant and upgraded package
<b>REPORTS</b>	Qualification activity ongoing on Test Vehicle, Complete Availability by wk8/2023



## 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 :** L5050S (UK38): Assembly Transfer to Bouskoura

**PCN Reference :** ADG/22/13804

**Subject :** Public Products List

Dear Customer,

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

L5050STR		
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