PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company	STMicroelectronics International N.V
1.2 PCN No.	ADG/21/12606
1.3 Title of PCN	Products in BCD4 Housed in PowerSSO-36 Package: Bill Of Material Upgrade
1.4 Product Category	see list
1.5 Issue date	2021-02-18

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	Vito GRAZIANO
2.1.2 Marketing Manager	Angelo MOTTESE
2.1.3 Quality Manager	Marcello Donato MENCHISE

3. Change

3.1 Category	3.2 Type of change	3.3 Manufacturing Location
Materials	New direct material part number (same supplier, different supplier or new supplier), Bond wire material, diameter	ST Muar (Malaysia)

4. Description of change

	Old	New
4.1 Description	Au wire 1.3 mils Mold Compound Hitachi CEL9240	Cu wire 1.2 mils Mold Compound Sumitomo G700LS Lead frame finishing rough Copper
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	No Impact	

5. Reason / motivation for change

5.1 Motivation	Company roadmap and quality improvement
5.2 Customer Benefit	QUALITY IMPROVEMENT

6. Marking of parts / traceability of change

6.1 Description	Dedicated Finished Good Codes

7. Timing / schedule

7.1 Date of qualification results	2021-02-08
7.2 Intended start of delivery	2021-05-31
7.3 Qualification sample available?	Upon Request

8. Qualification / Validation

8.1 Description	12606 Validation.zip		
8.2 Qualification report and qualification results	Available (see attachment)	**Issue Date**	2021-02-18

9. Attachments (additional documentations)

12606 Public product.pdf
12606 Validation.zip
12606 Details.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
	L9953LXPTR	
	L99DZ70XP	
	L99DZ70XPTR	
	L99MM70XPTR	
	L99MOD50XPTR	
	L99MOD53XPTR	
	L99MOD54XPTR	

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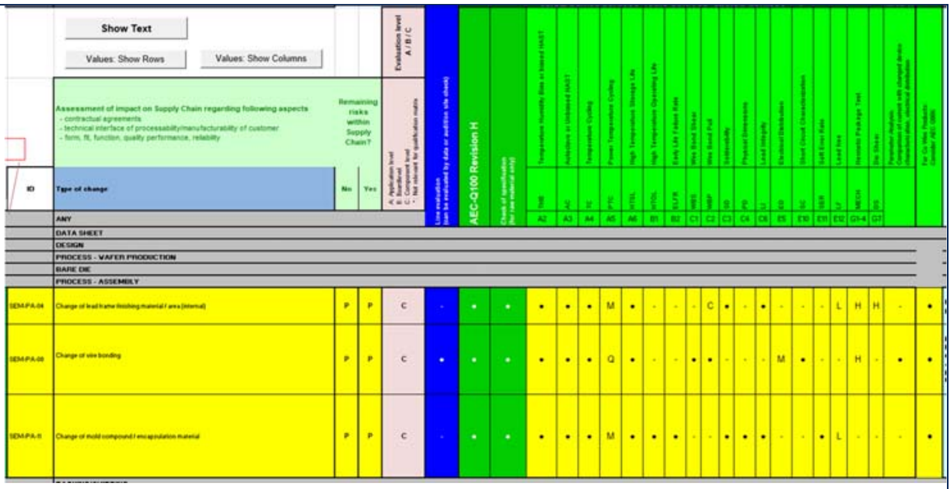
PRODUCT/PROCESS CHANGE NOTIFICATION

TITLE	**Products in BCD4 Housed in PowerSSO-36 Package: Bill Of Material Upgrade**
IMPACTED PRODUCTS	ST lines diffused in BCD4s technology and assembled in PowerSSO36 package, currently adopting gold 1.3mil wires: ✚ UH48 ✚ UH57 ✚ UH67 ✚ UH72 ✚ UH73 ✚ UH75
MANUFACTURING STEP	Assembly
INVOLVED PLANT	ST Muar Plant (Malaysia)
CHANGE REASON	Company roadmap and quality improvement
CHANGE DESCRIPTION	Package Bill Of Material upgrade based on following conversions: ✚ gold wires 1.3mil diameter converted to copper 1.2mil; ✚ mold compound Hitachi CEL 9240 converted to Sumitomo G700LS ✚ leadframe finishing converted to rough copper
TRACEABILITY	Internal Traceability and new Finished Good codes (internal part number)
VALIDATION	Validation has been performed according to ZVEI Guidelines for Automotive Changes, e.g. AEC Q100 and Q006:



Assessment of impact on Supply Chain regarding following aspects
- contractual agreements
- technical interface of processability/manufacturability of customer
- form, fit, function, quality performance, reliability

ID	Type of change	Remaining risks within Supply Chain? No	Remaining risks within Supply Chain? Yes	Evaluation level A / B / C A: Application level B: Boardlevel C: Component level *: Not relevant for qualification matrix	Line evaluation (can be evaluated by data or audition site check)	AEC-Q100 Revision H	Check of specification (for raw material only)	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	E11 SER Soft Error Rate	E12 LF Lead free	G1-4 MECH Hermetic Package Test	G7 DS Die Shear	Parameter Analysis	For Cu Wire Products Consider AEC Q006
	ANY																										
	DATA SHEET																										
	DESIGN																										
	PROCESS - WAFER PRODUCTION																										
	BARE DIE																										
	PROCESS - ASSEMBLY																										
SEM-PA-04	Change of lead frame finishing material / area (internal)	P	P	C	-	•	•	•	•	•	M	•	-	-	-	C	•	-	•	-	-	-	L	H	H	-	•
SEM-PA-09	Change of wire bonding	P	P	C	•	•	•	•	•	•	Q	•	-	-	•	•	-	-	-	M	•	-	-	H	-	•	•
SEM-PA-11	Change of mold compound / encapsulation material	P	P	C	-	•	•	•	•	•	M	•	•	•	-	-	•	•	•	-	-	•	L	-	-	-	•

CURRENT PRODUCTS

Current products will be replaced by the new version with the upgraded Bill Of Material (wires, mold compound, leadframe finishing)

REPORTS

12606 Validation.zip containing the below:

- Reliability Report
- Electrical Comparison Report

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

PCN Title : Products in BCD4 Housed in PowerSSO-36 Package: Bill Of Material Upgrade
PCN Reference : ADG/21/12606

Subject : Public Products List

Dear Customer,

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

L99DZ70XPTR	**L9953XP**	**L9954LXP**
L9954XP	**L99MOD54XPTR**	**L99DZ70XP**
L99MM70XPTR	**L9953XPTR**	**L9953LXPTR**
L99MM70XP	**L9954LXPTR**	**L9954XPTR**
L99MOD53XPTR	**L99MOD50XPTR**	

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