PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data	
1.1 Company	STMicroelectronics International N.V
1.2 PCN No.	ADG/20/12172
1.3 Title of PCN	SPC560xxx (FB50): Activation of TSMC as Additional Diffusion Plant (Following PCI ADG/19/11411)
1.4 Product Category	see list
1.5 Issue date	2020-05-25

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	Luca RODESCHINI
2.1.2 Marketing Manager	Selica RUSSI
2.1.3 Quality Manager	Alberto MERVIC

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	TSMC Subcontractor recipient (Taiwan)

4. Description of change		
	Old	New
4.1 Description	ST Crolles (France) Diffusion plant	ST Crolles (France) Diffusion plant TSMC (Taiwan) Additional Diffusion Plant
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	No Impact	

5. Reason / motivation for change	
5.1 Motivation	Dual sourcing strategy. Following PCI ADG/19/11411 dated March 2019
5.2 Customer Benefit	CAPACITY INCREASE

6. Marking of parts / traceability of change	
6.1 Description	Dedicated Finished Good Codes

7. Timing / schedule	
7.1 Date of qualification results	2020-05-19
7.2 Intended start of delivery	2020-10-01
7.3 Qualification sample available?	Upon Request

8. Qualification / Validation			
8.1 Description	12172 Validation.zip		
8.2 Qualification report and qualification results	Available (see attachment)	Issue Date	2020-05-25

9. Attachments (additional documentations)
12172 Public product.pdf 12172 Validation.zip 12172 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
	SPC560B40L3C6E0X	
	SPC560B40L5C6E0X	
	SPC560B50L3B4E0X	
	SPC560B50L3C6E0X	
	SPC560B50L3C6E0Y	
	SPC560B50L5C6E0X	
	SPC560B50L5C6E0Y	
	SPC560C50L3B4E0X	
	SPC560C50L3C6E0X	

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PRODUCT/PROCESS CHANGE NOTIFICATION

SUBJECT

SPC560xxx (FB50): Activation of TSMC as Additional Diffusion Plant (Following PCI ADG/19/11411)

IMPACTED PRODUCTS

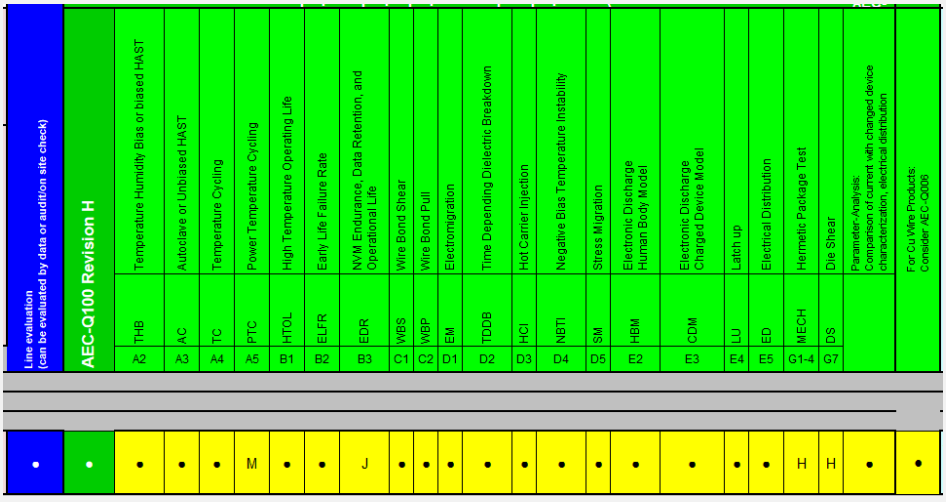
ST silicon line FB50 assembled in different packages:

PACKAGE DESCRIPTION	COMMERCIAL PRODUCT
LQFP 100 14x14x1.4	SPC560B40L3B3E0X
	SPC560B40L3B3EDX
	SPC560B40L3B4E0X
	SPC560B40L3B4EDX
	SPC560B40L3B6E0X
	SPC560B40L3B6E0Y
	SPC560B40L3C4E0X
	SPC560B40L3C6E0X
	SPC560B44L3B4EVX
	SPC560B50L3B4E0X
	SPC560B50L3B4E0Y
	SPC560B50L3B6E0X
	SPC560B50L3C4E0X
	SPC560B50L3C6E0X
	SPC560B50L3C6E0Y
	SPC560C40L3C6E0X
	SPC560C50L3B4E0X
	SPC560C50L3C6E0X
	SPC560C50L3C6E0Y
LQFP 144 20X20X1.4	SPC560B40L5B4ET
	SPC560B40L5B6E0Y
	SPC560B40L5C6E0X
	SPC560B44L5B4EVX
	SPC560B50L5B6E0X
	SPC560B50L5C6E0X
	SPC560B50L5C6E0Y

MANUFACT. STEP

Silicon Diffusion (Front End).

INVOLVED PLANT	TSMC (recipient Plant – ST Subcontractor) Fab14A 300mm located in Tainan (Taiwan) - Automotive qualified and certified IATF16949.
CHANGE REASON	Expansion of current silicon diffusion capacity (volumes increase) and flexible/secure production asset – dual sourcing strategy.
CHANGE DESCRIPTION	Activation of TSMC Fab14A as additional or alternative source for CMOS-M10 technology microcontrollers, following related product qualification according to automotive standards (AEC-Q100 – Q006).
TRACEABIL.	New dedicated Finished Good code (Internal Part Number).
VALIDATION	According to AEC-Q100 qualification plan for Integrated Circuits and ZVEI Guideline (change description: SEM-PW-13 Move of all or part of wafer fab to a different location/site/subcontractor):



CURRENT PRODUCTS

Current product (silicon line FB50) will be transferred to TSMC Fab14A Taiwan. ST Crolles 300mm diffusion line will remain active as alternate solution.

Together with the above activity, opportunity is taken to rationalize products portfolio, by terminating some impacted devices (PTN – Product termination Notice in progress), as per below table:

PACKAGE DESCRIPTION	COMMERCIAL PRODUCT	PTN	REPLACEMENT
LQFP 100 14x14x1.4	SPC560B40L3B3E0X	PTN 11559/19	SPC560B40L3B4E0X
	SPC560B40L3B3EDX	new PTN	SPC560B40L3B4E0X
	SPC560B40L3B4E0X	NO	
	SPC560B40L3B4EDX	PTN 11559/19	SPC560B40L3C6E0X
	SPC560B40L3B6E0X	PTN 11559/19	SPC560B40L3C6E0X
	SPC560B40L3B6E0Y	PTN 11559/19	SPC560B40L3C6E0X
	SPC560B40L3C4E0X	PTN 11559/19	SPC560B40L3C6E0X
	SPC560B40L3C6E0X	NO	
	SPC560B44L3B4EVX	PTN 11430/19	SPC560B50L3B4E0X
	SPC560B50L3B4E0X	NO	
	SPC560B50L3B4E0Y	PTN 11559/19	SPC560B50L3C6E0Y
	SPC560B50L3B6E0X	NO	
	SPC560B50L3C4E0X	new PTN	SPC560B50L3C6E0X
	SPC560B50L3C6E0X	NO	
	SPC560B50L3C6E0Y	NO	
	SPC560C40L3C6E0X	new PTN	SPC560C50L3C6E0X
	SPC560C50L3B4E0X	NO	
	SPC560C50L3C6E0X	NO	
	SPC560C50L3C6E0Y	PTN 11434/19	SPC560C50L3C6E0X
LQFP 144 20X20X1.4	SPC560B40L5B4ET	NO	
	SPC560B40L5B6E0Y	NO	
	SPC560B40L5C6E0X	NO	
	SPC560B44L5B4EVX	PTN 11430/19	SPC560B50L5C6E0X
	SPC560B50L5B6E0X	PTN 11241/18	SPC560B50L5C6E0X
	SPC560B50L5C6E0X	NO	
	SPC560B50L5C6E0Y	NO	

REPORTS	Validation procedure and results are reported in the attached Reliability Report (AEC-Q100/Q006) and Electrical Validation Report. 12172 Validation.zip

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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 : SPC560xxx (FB50): Activation of TSMC as Additional Diffusion Plant (Following PCI ADG/19/11411)

PCN Reference : ADG/20/12172

Subject : Public Products List

Dear Customer,

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

SPC560B50L3B4E0X	SPC560B50L5C6E0X	SPC560B50L3B6E0X
SPC560C50L3C6E0X	SPC560B40L3B4E0X	SPC560B50L3C6E0X
SPC560B50L3C4E0X	SPC560C40L3C6E0X	SPC560B40L5C6E0X
SPC560B50L5C6E0Y	SPC560C50L3B4E0X	SPC560B40L3C6E0X
SPC560B50L3C6E0Y		

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