


**PRODUCT / PROCESS CHANGE NOTIFICATION**

**1. PCN basic data**

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.	ADG/20/12043	
1.3 Title of PCN	AEC-Q101 Automotive Grade qualification of TVS in SMA and SMB packages at Assembly/Test location in China	
1.4 Product Category	<ul style="list-style-type: none"> <li>• Package : SMA and SMB</li> <li>• Commercial Product : SM4TY (Vbr from 47V to 82V) SM6TY (Vbr from 42V to 82V) SM6T250CAY</li> </ul>	
1.5 Issue date	2020-03-06	

**2. PCN Team**

<b>2.1 Contact supplier</b>	
2.1.1 Name	ROBERTSON HEATHER
2.1.2 Phone	+1 8475853058
2.1.3 Email	heather.robertson@st.com
<b>2.2 Change responsibility</b>	
2.2.1 Product Manager	Richard RENARD
2.1.2 Marketing Manager	Eric PARIS
2.1.3 Quality Manager	Jean-Paul REBRASSE

**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)	Morocco ST site and assy site in China (subco Liteon)

**4. Description of change**

	Old	New
4.1 Description	assy site Morocco (ST)	assy site China (subco Liteon)
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	no	

**5. Reason / motivation for change**

5.1 Motivation	In the frame of the back-end locations management, ST has initiated a transfer of the SMA and SMB lines from its Bouskoura internal plant (Morocco) to back-end partners.This assembly and test plant in China is a subcontractor already qualified and delivering in high volume for ST on automotive SMA and SMB package lines.
5.2 Customer Benefit	MANUFACTURING FLEXIBILITY

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

6.1 Description	marking, internal codification and QA number
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**7. Timing / schedule**

7.1 Date of qualification results	2020-09-25
7.2 Intended start of delivery	2020-09-04
7.3 Qualification sample available?	Upon Request

**8. Qualification / Validation**

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

9. Attachments (additional documentations)	
12043 Public product.pdf 12043 PCN China subco_SMA & SMB Auto_ 12043.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
	SM4T47AY	
	SM4T47CAY	
	SM4T50AY	
	SM4T50CAY	
	SM4T56AY	
	SM4T56CAY	
	SM4T68AY	
	SM4T68CAY	
	SM4T82AY	
	SM4T82CAY	
	SM6T250CAY	
	SM6T42AY	
	SM6T42CAY	
	SM6T47AY	
	SM6T47CAY	
	SM6T56AY	
	SM6T56CAY	
	SM6T68AY	
	SM6T68CAY	
	SM6T75AY	
	SM6T75CAY	
	SM6T82AY	
	SM6T82CAY	

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<h2 style="margin: 0;"><i><b>PCN</b></i></h2> <h3 style="margin: 0;"><i><b>Product/Process Change Notification</b></i></h3>			
<h4 style="margin: 0;">AEC-Q101 Automotive Grade qualification of TVS in SMA and SMB packages at Assembly/Test location in China</h4>			
<b>Notification number:</b>	ADG-DIS/20/12043	<b>Issue Date</b>	05/03/2020
<b>Issued by</b>	Aline AUGIS		
<b>Product series affected by the change</b>		<ul style="list-style-type: none"> <li>• Package: SMA and SMB</li> <li>• Commercial Product:               <ul style="list-style-type: none"> <li>○ SM4TY (Vbr from 47V to 82V)</li> <li>○ SM6TY (Vbr from 42V to 82V)</li> <li>○ SM6T250CAY</li> </ul> </li> </ul>	
<b>Type of change</b>		Assembly and test line transfer	
<b>Description of the change</b>  STMicroelectronics is qualifying according to <b>automotive grade</b> its <b>SMA and SMB</b> package subcontractor in <b>China</b> .			
<b>Reason for change</b>  In the frame of the back-end locations management, ST has initiated a transfer of the SMA and SMB lines from its Bouskoura internal plant (Morocco) to back-end partners. This <b>assembly</b> and <b>test plant</b> in China is a subcontractor already qualified and delivering in high volume for ST on automotive SMA and SMB package lines.			
<b>Former versus changed product:</b>		The changed products will remain fully compliant with product datasheet in term of electrical, dimensional and thermal parameters.  The Moisture Sensitivity Level of the part (according to the IPC/JEDEC JSTD-020D standard) remains unchanged.  The footprint recommended by ST remains the same.  There is no change in packing modes and standard delivery quantities either.  The products remain in full compliance with the ST ECOPACK®2 grade ("halogen-free").	
<b>Disposition of former products</b>  As communicated in Corporate PCI 11964, ST Bouskoura SMA and SMB production line discontinuation will occur in W39-2020. Units manufactured at ST Bouskoura will be delivered till stock depletion.			

(1) ADG: Automotive and Discrete Group

## Marking and traceability

Parts produced in China are differentiated by their **marking** as indicated below

Assembly location	Assy plant code	Date code marking	
		Assy year	Assy week
Morocco (ST)	CZ (on label) Z (on unit)	Y (1 digit indicating the year)	WW (2 digits indicating the week number)
China (subco)	GP (on label) GP (on unit)		

**Traceability** for the implemented change will be ensured by an **internal codification** and by the **Q.A. number**.

### Forecasted qualification date

2020 week 39

### Forecasted sample availability

Product family	Sub-family	Commercial part Number	Availability date
Protection device	TVS	SM4T47CAY	W39-2020
		SM4T82CAY	W39-2020
		SM4T56AY	W39-2020
		SM4T68AY	W39-2020
		SM4T82AY	W39-2020
		SMA6T82AY	W39-2020
		SM6T42CAY	W39-2020
		SM6T75CAY	W39-2020
		SM6T47AY	W39-2020

Note: Commercial part numbers not included in above table can be delivered on request.

### Change implementation schedule

Sales types	Estimated production start	Estimated first shipments
All	2020 week 40	2020 week 42

### Comments:

Sample order must be inserted for sampling

### Customer's feedback

Please contact your local ST sales representative or quality contact for requests concerning this change notification.

Absence of acknowledgement of this PCN within 30 days of receipt will constitute acceptance of the change

Absence of additional response within 180 days of receipt of this PCN will constitute acceptance of the change

### Qualification program and results

QRP availability date: 2020 W39



## 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 :** AEC-Q101 Automotive Grade qualification of TVS in SMA and SMB packages at Assembly/Test location in China

**PCN Reference :** ADG/20/12043

**Subject :** Public Products List

Dear Customer,

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

SM6T68CAY	SM4T68AY	SM4T47AY
SM6T56AY	SM4T82AY	SM4T50AY
SM4T56AY	SM6T47AY	SM6T82CAY
SM6T250CAY	SM6T82AY	SM6T42CAY
SM4T82CAY	SM6T68AY	SM4T68CAY
SM6T42AY	SM6T47CAY	SM6T75CAY
SM6T75AY	SM6T56CAY	SM4T50CAY
SM4T56CAY	SM4T47CAY	



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