


# PRODUCT / PROCESS CHANGE NOTIFICATION

## 1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.	ADG/20/12045	
1.3 Title of PCN	Industrial 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>• Product series: <ul style="list-style-type: none"> <li>SMAJ (Vrm from 85V to 188V)</li> <li>SMBJ (Vrm from 85V to 188V)</li> <li>SMA6J (Vrm &lt; 12V and &gt;33V)</li> <li>SM6T (Vrm from 85V to 188V)</li> </ul> </li> <li>• STRVS185X02B</li> </ul>	
1.5 Issue date	2020-03-06	

## 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	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)	assy site Morocco (ST) and assy site 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, QA number
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## 7. Timing / schedule

7.1 Date of qualification results	2020-09-04
7.2 Intended start of delivery	2020-10-16
7.3 Qualification sample available?	Upon Request

## 8. Qualification / Validation

8.1 Description	
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8.2 Qualification report and qualification results	In progress	Issue Date	
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9. Attachments (additional documentations)
12045 Public product.pdf 12045 PCN China subco_SMA & SMB Industrial _12045.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
SM6T100A	SM6T100A	
SM6T100CA	SM6T100CA	
SM6T150A	SM6T150A	
SM6T150CA	SM6T150CA	
SM6T200A	SM6T200A	
SM6T200CA	SM6T200CA	
SM6T220A	SM6T220A	
SM6T220CA	SM6T220CA	
	SMA6J100A-TR	
	SMA6J100CA-TR	
	SMA6J10A-TR	
	SMA6J10CA-TR	
	SMA6J12A-TR	
	SMA6J12CA-TR	
	SMA6J130A-TR	
	SMA6J130CA-TR	
	SMA6J13A-TR	
	SMA6J13CA-TR	
	SMA6J154A-TR	
	SMA6J154CA-TR	
	SMA6J15A-TR	
	SMA6J15CA-TR	
	SMA6J170A-TR	
	SMA6J188A-TR	
	SMA6J188CA-TR	
	SMA6J18A-TR	
	SMA6J18CA-TR	
	SMA6J20A-TR	
	SMA6J20CA-TR	
	SMA6J24A-TR	
	SMA6J24CA-TR	
	SMA6J26A-TR	
	SMA6J26CA-TR	
	SMA6J28A-TR	
	SMA6J28CA-TR	
	SMA6J33A-TR	
	SMA6J33CA-TR	
	SMA6J40A-TR	
	SMA6J40CA-TR	
	SMA6J48A-TR	
	SMA6J48CA-TR	
	SMA6J5.0A-TR	

	SMA6J5.0CA-TR	
	SMA6J58A-TR	
	SMA6J58CA-TR	
	SMA6J6.0A-TR	
	SMA6J6.0CA-TR	
	SMA6J6.5A-TR	
	SMA6J6.5CA-TR	
	SMA6J70A-TR	
	SMA6J70CA-TR	
	SMA6J8.5A-TR	
	SMA6J8.5CA-TR	
	SMA6J85A-TR	
	SMA6J85CA-TR	
SMAJ130CA-TR	SMAJ130CA-TR	
	SMAJ154A-TR	
SMAJ170A-TR	SMAJ170A-TR	
SMAJ170CA-TR	SMAJ170CA-TR	
SMAJ188A-TR	SMAJ188A-TR	
SMAJ188CA-TR	SMAJ188CA-TR	
SMAJ40A-TR	SMAJ40A-TR	
SMAJ40CA-TR	SMAJ40CA-TR	
SMAJ43A-TR	SMAJ43A-TR	
SMAJ43CA-TR	SMAJ43CA-TR	
SMAJ48A-TR	SMAJ48A-TR	
SMAJ48CA-TR	SMAJ48CA-TR	
SMAJ58A-TR	SMAJ58A-TR	
SMAJ58CA-TR	SMAJ58CA-TR	
	SMAJ70A-TR	
SMAJ70CA-TR	SMAJ70CA-TR	
SMAJ85CA-TR	SMAJ85CA-TR	
	SMBJ100CA-TR	
SMBJ130A-TR	SMBJ130A-TR	
	SMBJ154A-TR	
SMBJ170A-TR	SMBJ170A-TR	
SMBJ170CA-TR	SMBJ170CA-TR	
SMBJ85CA-TR	SMBJ85CA-TR	
	STRVS185X02B	

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<h2 style="text-align: center;">PCN</h2> <h3 style="text-align: center;">Product/Process Change Notification</h3>			
<h3 style="text-align: center;">Industrial grade qualification of TVS in SMA and SMB packages at Assembly/Test location in China</h3>			
Notification number:	ADG-DIS/20/12045	Issue Date	05/03/2020
Issued by	Aline AUGIS		
Product series affected by the change		<ul style="list-style-type: none"> <li>Package: SMA and SMB</li> <li>Product series: <ul style="list-style-type: none"> <li>SMAJ (V<sub>rm</sub> from 85V to 188V)</li> <li>SMBJ (V<sub>rm</sub> from 85V to 188V)</li> <li>SMA6J (V<sub>rm</sub> &lt; 12V and &gt;33V)</li> <li>SM6T (V<sub>rm</sub> from 85V to 188V)</li> </ul> </li> <li>STRVS185X02B</li> </ul>	
Type of change		Assembly and test line multi-sourcing	
<b>Description of the change</b>  STMicroelectronics is qualifying according to <b>industrial 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 and test plant</b> in China is a subcontractor already qualified and delivering in high volume for ST on automotive SMA and SMB package lines.			
Former versus changed product:		<p>The changed products will remain fully compliant with product datasheet in term of electrical, dimensional and thermal parameters.</p> <p>The Moisture Sensitivity Level of the part (according to the IPC/JEDEC JSTD-020D standard) remains unchanged.</p> <p>The footprint recommended by ST remains the same.</p> <p>There is no change in packing modes and standard delivery quantities either.</p> <p>The products remain in full compliance with the ST ECOPACK®2 grade ("halogen-free").</p>	
<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)
<b>China (subco)</b>	<b>GP (on label)</b> <b>GP (on unit)</b>		

**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	SMAJ70A-TR	W39-2020
		SMAJ188A-TR	W39-2020
		SMAJ170A-TR	W39-2020
		SMAJ188CA-TR	W39-2020
		SMA6J5.0CA-TR	W39-2020
		SMA6J12CA-TR	W39-2020
		SMA6J15CA-TR	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 90 days of receipt of this PCN will constitute acceptance of the change

### Qualification program and results

QRP availability date: 2020 Week 39



## 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 :** Industrial grade qualification of TVS in SMA and SMB packages at Assembly/Test location in China

**PCN Reference :** ADG/20/12045

**Subject :** Public Products List

Dear Customer,

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

SMA6J70CA-TR	SMA6J130CA-TR	SMAJ40CA-TR
SMAJ58CA-TR	SMAJ85CA-TR	SMAJ130CA-TR
SMA6J48A-TR	SMA6J13A-TR	SMA6J5.0CA-TR
SMA6J8.5A-TR	SMA6J100CA-TR	STRVS185X02B
SM6T220A	SMA6J33CA-TR	SMAJ43A-TR
SMAJ70CA-TR	SMAJ170CA-TR	SMA6J5.0A-TR
SMA6J6.5CA-TR	SMA6J33A-TR	SMAJ43CA-TR
SMA6J48CA-TR	SM6T100A	SM6T100CA
SMA6J12A-TR	SMA6J188CA-TR	SMA6J20CA-TR
SMBJ154A-TR	SMAJ48A-TR	SMAJ58A-TR
SMA6J40CA-TR	SM6T200CA	SMA6J85CA-TR
SMBJ170CA-TR	SMA6J100A-TR	SMA6J58A-TR
SMA6J85A-TR	SMA6J26CA-TR	SM6T150A
SMA6J24A-TR	SMA6J40A-TR	SMA6J18CA-TR
SMA6J13CA-TR	SMAJ48CA-TR	SMA6J15A-TR
SMA6J18A-TR	SMA6J6.0CA-TR	SMBJ85CA-TR
SMBJ170A-TR	SM6T200A	SMA6J154A-TR
SMAJ188A-TR	SMA6J10A-TR	SMA6J70A-TR
SMA6J28CA-TR	SMA6J12CA-TR	SMAJ40A-TR
SMAJ188CA-TR	SM6T150CA	SMA6J170CA-TR
SMBJ100CA-TR	SM6T220CA	SMAJ154A-TR
SMA6J26A-TR	SMBJ130A-TR	SMA6J20A-TR
SMA6J28A-TR	SMA6J130A-TR	SMA6J6.5A-TR
SMA6J154CA-TR	SMA6J58CA-TR	SMA6J6.0A-TR
SMA6J10CA-TR	SMAJ170A-TR	SMA6J188A-TR
SMAJ70A-TR	SMA6J170A-TR	SMA6J15CA-TR
SMA6J8.5CA-TR	SMA6J24CA-TR	



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