


PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.	ADG/19/11528	
1.3 Title of PCN	Mold compound replacement for TO247	
1.4 Product Category	TM8050H-12W, STPSxxx, STPSCxxx, STBRxxx, STTHxxx series.	
1.5 Issue date	2019-05-06	

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	Philippe LEGER
2.1.3 Quality Manager	Jean-Paul REBRASSE

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), Mold compound	ST assy site in China (STS)

4. Description of change

	Old	New
4.1 Description	Samsung SDI product termination of the following references of molding compound for through hole packages	Replacement of current mold compounds with alternative material. ST is already proceeding with new resins evaluation and qualification, to guarantee adequate products continuity.
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	no	

5. Reason / motivation for change

5.1 Motivation	Product discontinuance from current supplier.
5.2 Customer Benefit	SERVICE CONTINUITY

6. Marking of parts / traceability of change

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

7.1 Date of qualification results	2019-08-29
7.2 Intended start of delivery	2019-09-13
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)
11528 Public product.pdf 11528 PCN-TO247 industrial draft.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
	STBR3012W	
	STBR6012W	
STPS30150CW	STPS30150CW	
STPS30170CW	STPS30170CW	
STPS3045CW	STPS3045CW	
STPS30H100CW	STPS30H100CW	
STPS30L45CW	STPS30L45CW	
STPS30L60CW	STPS30L60CW	
STPS40150CW	STPS40150CW	
	STPS40170CW	
STPS4045CW	STPS4045CW	
STPS40H100CW	STPS40H100CW	
STPS40L15CW	STPS40L15CW	
STPS6045CW	STPS6045CW	
STPS60L30CW	STPS60L30CW	
STPS60L45CW	STPS60L45CW	
	STPS60SM200CW	
STPS61150CW	STPS61150CW	
STPS61170CW	STPS61170CW	
STPS61H100CW	STPS61H100CW	
	STPS61L60CW	
STPS80150CW	STPS80150CW	
STPS80170CW	STPS80170CW	
	STPSC16H065AW	
	STPSC20065W	
	STPSC2006CW	
	STPSC20H065CW	
	STPSC40065CW	
	STTH100W04CW	
	STTH100W06CW	
	STTH1512W	
	STTH15RQ06W	
STTH3002CW	STTH3002CW	
STTH3003CW	STTH3003CW	
	STTH3006W	
	STTH3010W	
	STTH3012W	
	STTH30ACS06W	
STTH30L06CW	STTH30L06CW	
STTH30L06W	STTH30L06W	
STTH30R03CW	STTH30R03CW	
	STTH30R04W	
STTH30R06CW	STTH30R06CW	
	STTH30RQ06W	

	STTH30S12W	
	STTH30W02CW	
	STTH50W03CW	
STTH6002CW	STTH6002CW	
STTH6003CW	STTH6003CW	
	STTH6004W	
	STTH6006W	
	STTH6010W	
	STTH6012W	
	STTH60AC06CW	
STTH60L06CW	STTH60L06CW	
STTH60L06W	STTH60L06W	
STTH60P03SW	STTH60P03SW	
	STTH60R04W	
	STTH60RQ06W	
	STTH60W03CW	
	STTH61W04SW	
	STTH75S12W	
	TM8050H-8W	

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<p align="center">PCN</p> <p align="center">Product/Process Change Notification</p>			
<p align="center">Mold compound replacement for TO247</p>			
Notification number:	ADG-DIS/19/xxxx	Issue Date	29/04/2019
Issued by	Aline Augis		
Product series affected by the change		Industrial rectifiers in TO247 package. TM8050H-12W, STPSxxx, STPSCxxx, STBRxxx, STTHxxx series.	
Type of change		Back end realization	
<p>Description of the change</p> <p>Following 11478 Early Notification sent in W15-2019, the change is the mold compound replacement for TO247 package. Additional change is the extension of product perimeter at back-end subcontractor with Power Schottky products up to 100V included and bipolar rectifier products up to 300V included.</p>			
<p>Reason for change</p> <p>Product discontinuance from current supplier.</p>			
Former versus changed product:		<p>The changed products do not present modified electrical, dimensional or thermal parameters, leaving unchanged the current information published in the product datasheet</p> <p>The footprint recommended by ST remains the same.</p> <p>There is no change in the packing modes and the standard delivery quantities either.</p> <p>The products remain in full compliance with the ST ECOPACK®2 grade ("halogen-free").</p>	
<p>Disposition of former products</p> <p>Delivery of current product will be done until stock depletion.</p>			
<p>Marking and traceability</p> <p>No change of marking. Traceability through new finished good codes (printed on labels).</p>			
Qualification forecasted date		Week 35 - 2019	

(1) ADG: Automotive and Discrete Group

Forecasted sample availability

Samples will be available on demand with a typical lead time of 5 weeks after order entry.

Change implementation schedule

Sales types	Estimated production start	Estimated first shipments
All Commercial Products	Week 36-2019	Week 37-2019

Comments:

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:

Qualification will be performed through a global plan covering both TO220 and TO247 packages with the following Product Test Vehicles.

Product Test Vehicle	Package
TN5050H-12WY	TO247
STTH60RQ06WY	TO247
STTH30R4WY	TO247
STBR6012WY	TO247
STPS4045CWY	TO247
STTH50W03CW	TO247
STPS40H100CW	TO247
STPSC20H12DY	TO220
ACST1235-7T	TO220
TYN612MRG	TO220
STPS41H100CTY	TO220
STTH1210DY	TO220
STPS20200CT	TO220
STPS41H100CT	TO220
FERD40H100STS	TO220

Reliability tests will be conducted following below table.

Stress	Abrv	Reference
High Temperature Reverse Bias	HTRB	MIL-STD-750-1 M1038 Method A (for diodes, rectifiers)
AC blocking voltage	ACBV	MIL-STD-750-1 M1040 Test condition A (for SCR)
High Humidity High Temperature Reverse Bias	H3TRB	JESD22A-101
Unbiased Highly Accelerated Stress Test	UHASt	JESD22A-118 or A101
Temperature Cycling	TC	JESD22A-104
Intermittent Operational Life / Thermal Fatigue	IOL	MIL-STD-750 Method 1037
Destructive Physical Analysis	DPA	AEC-Q101-004 Section 4
Resistance to Solder Heat	RSH	JESD22 A-111 (SMD) B-106 (PTH)
Solderability	SD	J-STD-002 JESD22B102



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 : Mold compound replacement for TO247

PCN Reference : ADG/19/11528

Subject : Public Products List

Dear Customer,

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

STPS40L45CW	STTH6003CW	STPS61L45CW
STPS40H100CW	STTH50W03CW	STTH60P03SW
STTH30W02CW	STPS61H100CW	STPS61170CW
STTH60L06CW	STPS40150CW	STPS3045CW
STPSC16H065AW	STTH3002CW	STPS40170CW
STPS30170CW	STTH30ACS06W	STTH3006W
STTH60R04W	STTH6006W	STPS60SM200CW
STPS6045CW	STTH60W03CW	STPS61L60CW
STTH30R04W	STTH30R03CW	STTH60AC06CW
STTH6012W	STPSC40065CW	STPS4045CW
STTH30RQ06W	STTH15RQ06W	STPS30L60CW
STPS30L45CW	STTH30L06CW	STPS60L45CW
STPS80150CW	STTH6002CW	STPS30H100CW
STPS30150CW	STPSC2006CW	STBR3012W
STTH30R06CW	STPS80170CW	STTH100W06CW
STTH61W04SW	STTH30R06W	STPS40L15CW
STPS60L30CW	STPSC20065W	STTH3010W
STTH6010W	STPSC20H065CW	STTH3003CW
STTH100W04CW	STTH60L06W	STTH6004W
STPS61150CW	STTH30S12W	STBR6012W
STTH75S12W	TM8050H-8W	STTH1512W
STTH60RQ06W	STTH3012W	STPS3060CW



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