PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company	STMicroelectronics International N.V
1.2 PCN No.	ADG/19/11532
1.3 Title of PCN	Mold Compound Replacement For IPAK
1.4 Product Category	Industrial Rectifiers, Ignitors, SCR and Triacs in IPAK package. STPSxxx, ACSxxx, ACSTxxx, FERDxxx, TNxxx, TSxxx, FLCxxx, LICxxx, Txxx
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	subco in China (TFME)

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

7. Timing / schedule

7.1 Date of qualification results	2019-07-08
7.2 Intended start of delivery	2019-07-29
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)

11532 Public product.pdf
11532 PCN-IPAK.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**
	FERD20H100SH	
	FERD20S100SH	
	FERD30H100SH	
FLC01-200H	FLC01-200H	
	STPS5H100H	
T405-600H	T405-600H	
T405Q-600H	T405Q-600H	
T410-600H	T410-600H	
T410-800H	T410-800H	
T435-600H	T435-600H	
T435-800H	T435-800H	
	T835-600H	
TN1215-600H	TN1215-600H	
	TN1215-800H	
TN22-1500H	TN22-1500H	
TS1220-600H	TS1220-600H	
TS420-600H	TS420-600H	

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STMicroelectronics
ADG[1] – Discrete and Filter Division
BU Rectifiers, Thyristors and AC Switches

(1) ADG: Automotive and Discrete Group

PCN
Product/Process Change Notification

Mold Compound Replacement For IPAK

Notification number:	ADG-DIS/19/11532	**Issue Date**	30/04/2019
Issued by	Aline Augis		

Product series affected by the change	Industrial Rectifiers, Ignitors, SCR and Triacs in IPAK package. STPSxxx, ACSxxx, ACSTxxx, FERDxxx, TNxxx, TSxxx, FLCxxx, LICxxx, Txxx
Type of change	Back end realization

Description of the change

Following 11478, Early Notification sent in W15-2019, the change is the Mold Compound Replacement for Ipak package.

Reason for change

Product discontinuance from current supplier.

Former versus changed product:	The changed products do not present modified electrical, dimensional or thermal parameters, leaving unchanged the current information published in the product datasheet The footprint recommended by ST remains the same. There is no change in the packing modes and the standard delivery quantities either. The products remain in full compliance with the ST ECOPACK®2 grade (“halogen-free”).

Disposition of former products

Delivery of current product will be done until stock depletion.

Marking and traceability

No change of marking. Traceability through new finished good codes (printed on labels).

Qualification forecasted date	Week 28-2019

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 29-2019**	**Week 31-2019**

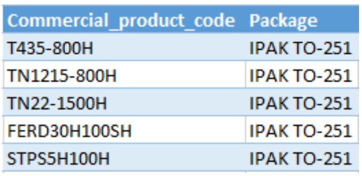
Comments:

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

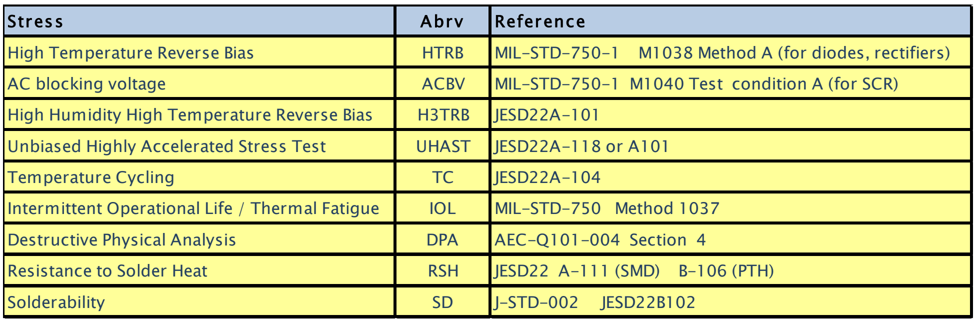
Qualification program:

Qualification will be performed through the following Product Test Vehicles.



Commercial_product_code	Package
T435-800H	IPAK TO-251
TN1215-800H	IPAK TO-251
TN22-1500H	IPAK TO-251
FERD30H100SH	IPAK TO-251
STPS5H100H	IPAK TO-251

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

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 : Mold Compound Replacement For IPAK
PCN Reference : ADG/19/11532

Subject : Public Products List

Dear Customer,

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

TS1220-600H	TN1215-800H	T835-600H
FERD30H100SH	T405Q-600H	T405-600H
T410-600H	T435-800H	TS820-600H
T435-600H	FERD20H100SH	FLC01-200H
TN1215-600H	T410-800H	TN22-1500H
LIC01-215H	TS420-600H	STPS5H100H
FERD20S100SH		

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