

PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.		ADG/22/13222
1.3 Title of PCN		M series 1200V 40A IGBT TFS pad layout change
1.4 Product Category		IGBT
1.5 Issue date		2022-01-24

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	Angelo RAO
2.1.2 Marketing Manager	Natale Sandro D'ANGELO
2.1.3 Quality Manager	Vincenzo MILITANO

3. Change

3.1 Category	3.2 Type of change	3.3 Manufacturing Location
General Product & Design	Die redesign: Mask or mask set change with new die design – Pad modification (sizes, vertical structure, metal thickness)	Catania 8"

4. Description of change

	Old	New
4.1 Description	Gate pad of M series 1200V 40A IGBT TFS is currently positioned at the center of the die	Gate pad of M series 1200V 40A IGBT TFS will be moved to lateral position
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	no change on form, fit and performance	

5. Reason / motivation for change

5.1 Motivation	Wire bonding optimization
5.2 Customer Benefit	SERVICE IMPROVEMENT

6. Marking of parts / traceability of change

6.1 Description	By internal traceability and dedicated FG code
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7. Timing / schedule

7.1 Date of qualification results	2022-01-18
7.2 Intended start of delivery	2022-04-18
7.3 Qualification sample available?	Upon Request

8. Qualification / Validation

8.1 Description	13222 RERPTD22008_1.0_STGWA40M120DF3_STGW40M120DF3_KLJR01_New layout for wire optimization.pdf	
8.2 Qualification report and qualification results	Available (see attachment)	Issue Date 2022-01-24

9. Attachments (additional documentations)

13222 Public product.pdf

13222 M series 1200V 40A IGBT TFS pad layout change.docx

13222 RERPTD22008_1.0_STGWA40M120DF3_STGW40M120DF3_KLJR01_New layout for wire optimization.pdf

13222 Layout comparison.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
	STGW40M120DF3	
	STGWA40M120DF3	

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Public Products List

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PCN Title : M series 1200V 40A IGBT TFS pad layout change

PCN Reference : ADG/22/13222

Subject : Public Products List

Dear Customer,

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

STGW40M120DF3	STGWA40M120DF3	STG40M120F3D7
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Automotive Discrete Group (ADG)
Power Transistor MACRO-Division
IGBT & IPM Business Unit

Process Change Notification

M series 1200V 40A IGBT TFS pad layout change

Dear Customer,

Following the continuous improvement of our service and for wire bonding optimization reason, this document is announcing a pad layout change in our M series 1200V 40A IGBT TFS product family. This change involves gate pad that will be moved to lateral position as per attached document.

The devices affected by this process change guarantee the same quality and electrical characteristics as per current production.

The involved product series is listed in the table below:

Product Family	Series	Package	Test vehicles
IGBT Trench Field Stop (TFS)	M 1200V 40A	TO247 TO247-LL	STGWA40M120DF3 STGW40M120DF3

Any other Product related to the above series, even if not expressly included or partially mentioned in the attached table, is affected by this change.

Qualification program and results availability:

The reliability test report is provided in attachment to this document.

Samples availability:

Any sample request will be processed and scheduled by IGBT&IPM Business Unit, upon request.

Change implementation schedule:

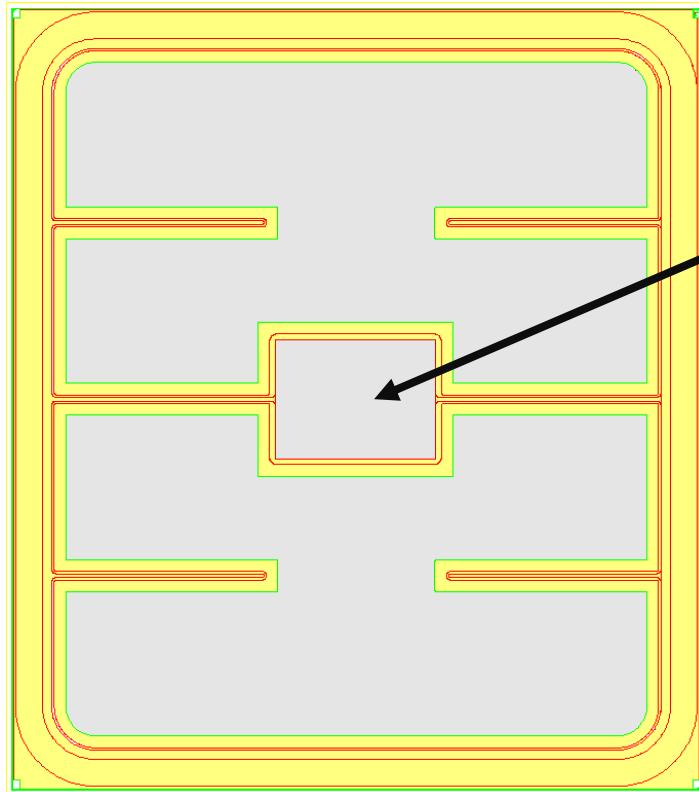
The production start and first shipments are expected to be implemented after week 16 of 2022 or even earlier, by agreement with the customer.

Marking and traceability:

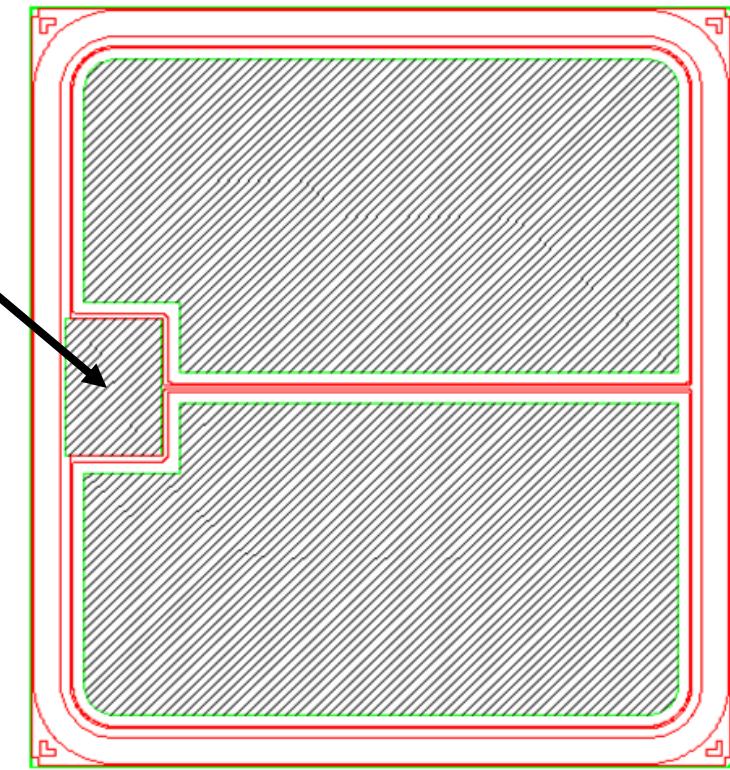
Unless otherwise stated by customer specific requirement, traceability of devices affected by this process change, will be ensured by internal code (Finished Good) and Q.A. number.

Yours faithfully,

IGBT TFS: M series 1200V 40A Pad layout change



Old version



New version