

PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company		STMicroelectronics International N.V
1.2 PCN No.	POWER AND DISCRETE PRODUCTS/24/14778	
1.3 Title of PCN	New device backside TiNiAu on BA12	
1.4 Product Category	IGBT	
1.5 Issue date	2024-06-14	

2. PCN Team

2.1 Contact supplier	
2.1.1 Name	Robert Goodman
2.1.2 Phone	+1 6024856271
2.1.3 Email	robert.goodman@st.com
2.2 Change responsibility	
2.2.1 Product Manager	Angelo RAO
2.1.2 Marketing Manager	Giuseppe BAZZANO
2.1.3 Quality Manager	Vincenzo MILITANO

3. Change

3.1 Category	3.2 Type of change	3.3 Manufacturing Location
Wafer Fab (Process)	Any change in step sequence or removed step or new step introduction with potential impact on product reliability	Singapore Ang Mo Kio

4. Description of change

	Old	New
4.1 Description	BASE WET ETCH	BASE DRY ETCH
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	processability	

5. Reason / motivation for change

5.1 Motivation	Quality improvement process margin. FE/BE compatibility
5.2 Customer Benefit	QUALITY IMPROVEMENT

6. Marking of parts / traceability of change

6.1 Description	By QA number
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7. Timing / schedule

7.1 Date of qualification results	2024-05-27
7.2 Intended start of delivery	2024-11-27
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)

14778 Public product.pdf
14778 14778.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
	MJD31CT4-A	

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Public Products List

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PCN Title : New device backside TiNiAu on BA12

PCN Reference : POWER AND DISCRETE PRODUCTS/24/14778

Subject : Public Products List

Dear Customer,

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

MJD31CT4-A		
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New device backside TiNiAu on BA12

POWER AND DISCRETE PRODUCTS/24/14778

Product family	Technology	Package
BJT		DPAK

Description of the change

To fix in AMK backmetal peeling issue with improvement.

Reason

Quality improvement process margin. FE/BE compatibility

Date of implementation

WK 33'2024

Impact of the change

Form	
Fit	
Function	
Reliability	
Processibility	X

Product/process change notification:
 New device backside TiNiAu on BA12

POWER AND
 DISCRETE
 PRODUCTS/24/14778

Qualification of the change

Step	Item
X	wafer ID
Assy	Viod
	Bond line thickness
	Wedge shear
	Wire pull
Testing	T0 test
Step1	TSAM+CSAM @ T0 (On die)
Step2	MSL1+2reflow
	TSAM+CSAM @ T1 (On die)
	Electrical test T1
	Perfrom FIB at STS
Step3	3rd reflow
	TSAM+CSAM @ T2 (On die)
	Electrical test T2
	Perfrom FIB at STS
Step4	500TC
	TSAM+CSAM @ T3 (On die)
	Electrical test T3
	Perfrom FIB at STS
Step5	1000TC
	TSAM+CSAM @ T4 (On die)
	Electrical test T4
	Perfrom FIB at STS

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