



Product Change Notification

CN-202206004F

Issue date: 29 Aug 2022

Effective date: 11 Dec 2022

Here's your personalized quality information concerning products our customers and partners purchased from Nexperia.

For more details please contact your respective Nexperia CSR/AM.



SOT89 Introduction of copper wire, new leadframe design and new assembly materials

Change Category

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wafer	Assembl		Test	Design
Fab	y		Location	Errata
Process	Process	<input type="checkbox"/>	Process	Electrical
<input type="checkbox"/>	[X]	<input type="checkbox"/>	Equipment	spec./Test
Wafer	Assembl	<input type="checkbox"/>		coverage
Fab	y			
Material	Materials	<input type="checkbox"/>		
s	[]	Packing/Shipping/Labelin		
<input type="checkbox"/>	Assembl	g		
Wafer	y			
Fab	Location			
Location				

Details of this change

Scheduled changes affect product types in SOT89 package only.

- (1) The leadframe will be changed to a new design, using whole area adhesion enhanced silver plating.
- (2) New mold compound materials will be introduced.
- (3) A new die attach glue material will be introduced
- (4) The bond wire material will be changed from gold (Au) to copper (Cu). Gold wire remains qualified for supply security reasons only.

Old product: wire material is Au (with currently used mold compound, leadframe design and glue material)

Changed product: wire material is Cu (with new mold compound material, changed leadframe design and new glue material)

Reliability qualification and full electrical characterization over temperature have been performed. No change on thermal behavior or mechanical dimensions. Electrical parameters remain unchanged (in specification and with the same distribution).

PCN-DeQuMaNexperiaCN-202206004F.xlsm:

<https://qcm.nexperia.com/Document/DOC-542686/PCN-DeQuMaNexperiaCN-202206004F.xlsm>

PCN-FORMNexperiaCN-202206004F.xlsm:

<https://qcm.nexperia.com/Document/DOC-542685/PCN-FORMNexperiaCN-202206004F.xlsm>

SelfQualificationReportCN-202206004F.pdf:

<https://qcm.nexperia.com/Document/DOC-542684/SelfQualificationReportCN-202206004F.pdf>

Why do we implement this change?

- (1) + (2) Enhancing the mechanical stability of the package, especially regarding delamination
- (3) End of supply of old glue material. The current material is discontinued by the supplier.
- (4) Aligning with world technology standards, Nexperia continues to introduce copper wire for plastic SMD packages. Copper wire shows enhanced mechanical properties.

Identification of affected products

Top Side Marking

Changed products can be identified by date code after implementation.

Product availability

Production

Planned first shipment: 01 Dec 2022

Existing inventory will be shipped until depleted

Sample information

Samples are available upon request

Impact

No impact to the product's functionality anticipated

Data sheet revision

No impact to existing datasheet

Feedback

Your acknowledgement of this change, conform JEDEC J-STD-046, is expected till 28 Sep 2022. Lack of acknowledgement of the PCN constitutes acceptance of the change.

Additional information

[View Change Notification Online](#)

Contact and support

For all Quality Notification content inquiries, please contact your local Nexperia Sales Support Team.

For specific questions on this notice or the products affected please contact our specialist directly: pcn@nexperia.com

In case of distribution, please contact you distribution partner.

About Nexperia B.V.

We at Nexperia are the efficiency semiconductor company. We deliver over 90 billion products a year and as such service thousands of global customers, both directly and through our extensive network of channel partners. We are at the heart of billions of electronic devices in the Automotive, Mobile, Industrial, Consumer, Computing, and Communication Infrastructure segments.

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