# nexperia

# **Product Change Notification**

Issue date: 09 Jan 2023

Effective date: 23 Apr 2023

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.



CN-202212010F

# Change of back side metallization thickness and introduction of new EMCs in SOT23 - wave 3

#### Change Category

[X] Wafer Fab Process [] Wafer Fab Material s [] Wafer Fab Location	[] Assembl y Process [X] Assembl y Materials [] Assembl y Location	<ul> <li>[ ] Product Marking</li> <li>[ ] Mechanical</li> <li>Specification</li> <li>[ ]</li> <li>Packing/Shipping/Labelin</li> <li>g</li> </ul>	[ ] Test Location [ ] Test Process [ ] Test Equipmen t	[ ] Design [ ] Errata [ ] Electrical spec./Tes t coverage	
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# Details of this change

Schedule changes affect product types in SOT23 package only.

(1) The back side metallization thickness will be changed from 2.25  $\mu m$  to 1.75  $\mu m.$ 

(2) Introduction of additional EMCs (epoxy mold compounds) GR646CHN, CV4112B and E500HK.

(3) The bond wire material will changed from gold (Au) to copper (Cu) for some selected product types.

Current Products

(1) back side metallization thickness 2.25 µm

(2) epoxy mold compound: GR646 and 3400FPG (where affected)

(3) Au wire (where affected)

Changed Products

(1) back side metallization thickness 1.75 µm

(2) epoxy mold compound: GR646, 3400FPG (where affected), CV4112B,

E500HK and GR646CHN.

(3) Cu wire

Gold wire remains qualified for supply security reason.

SQR\_202212010F.pdf: <u>https://qcm.nexperia.com/Document/DOC-548489/SQR\_202212010F.pdf</u>

CN-202212010F\_PCN-FORM-Rev\_5\_0\_2.xlsm: https://qcm.nexperia.com/Document/DOC-548470/CN-202212010F\_PCN-FORM-Rev\_5\_0\_2.xlsm

CN-202212010F\_PCN-Delta-Qualification-Matrix-ZVEI-5\_0\_14.xlsm: https://qcm.nexperia.com/Document/DOC-548469/CN-202212010F\_PCN-Delta-Qualification-Matrix-ZVEI-5\_0\_14.xlsm

#### Why do we implement this change?

(1) To increase efficiency of volume production.

(2) Aligning with world technology standards, Nexperia continues to introduce copper wire for plastic SMD packages. Copper wire shows enhanced mechanical properties.

(3) To increase flexibility and volume ramp-up.

#### Identification of affected products

Changed products can be identified by date code after implementation.

# **Product availability**

#### Production

Planned first shipment: 01 May 2023 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 08 Feb 2023. 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: <u>pcn@nexperia.com</u>

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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