Product Change Notification CN-202402034F

Issue date: 18 Dec 2024

Effective date: 19 Jun 2025

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.

Introduction of Cu-wire bonding process for TSOP5-6 (SOT753-457) packages at ATSN (Nexperia Semiconductors Assembly & Test Plant Seremban Malaysia)

Change Category

- [ ] Wafer Fab Process
- [ ] Wafer Fab Materials
- [ ] Wafer Fab Location
- [X] Assembly Process
- [X] Assembly Materials
- [ ] Assembly Location
- [ ] Product Marking
- [ ] Mechanical Specification
- [ ] Packing/Shipping/Labeling
- [ ] Test Location
- [ ] Test Process
- [ ] Test Equipment
- [ ] Design
- [ ] Errata
- [ ] Electrical spec./Test coverage

Details of this change

Introduction of Cu-wire bonding process for TSOP5-6 (SOT753-457) packages at ATSN (Nexperia Semiconductors Assembly & Test Plant Seremban Malaysia)

- Replace Au (gold) wire with Cu (copper) wire in bonding process
- No assembly location change
- No diffusion fab location change
- No wafer fab process change
- No change in form, fit, function, quality, workability and reliability anticipated
- No impact on the product's functionality anticipated
- No change in data sheet and test limits

Qualification in accordance to the Automotive Electronics Council:
- AEC-Q100 Stress Test Qualification for Integrated Circuits
- AEC-Q006 Qualification requirements for Cu wire interconnections

Qualification_Report_PCN_CN-202402034F.pdf:
https://qcm.nexperia.com/Document/DOC-586676/Qualification_Report_PCN_CN-202402034F.pdf

Why do we implement this change?

- Last phase PicoGate (SOT753-457) Cu wire implementation after maturation since 2012 (phase 1)
- Continued alignment with world technology trends on state of the art production tools
- Copper wire shows enhanced mechanical properties
- Supporting global efforts towards sustainability by reducing the use of so-called conflict minerals

Identification of affected products

Change can be identified by backward traceability of the product marking date code

Management summary

Replace Au (gold) wire with Cu (copper) wire in bonding process of TSOP5-6 (SOT753-457) packages at ATSN (Nexperia Semiconductors Assembly & Test Plant Seremban Malaysia)

Product availability

Production

Planned first shipment: 18 Jun 2025

Existing inventory will be shipped until depleted

Sample information

Samples are available upon request

Impact

No impact to the product's functionality anticipated

No change in form, fit, function, quality or reliability anticipated

Data sheet revision

No impact to existing datasheet

Feedback

Your acknowledgement of this change, conform JEDEC J-STD-046, is expected till 17 Jan 2025. Lack of acknowledgement of the PCN constitutes acceptance of the change.

Additional information

View Change Notification Online

Remarks

PCN qualification samples are available upon request via Helpdesk+ from BG IC Solutions sample store in Nijmegen, the Netherlands. Maximum sample order 300 pieces per type

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.

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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.