

FW: Nexperia Product Change Notification: CN-202510018F

Tempest, Emma (Farnell Global)

Product Change Notices

Regards

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Sent: 25 November 2025 02:57

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Subject: Nexperia Product Change Notification: CN-202510018F

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Product Change Notification

CN-202510018F

Issue date: 24 Nov 2025

Effective date: 08 Mar 2026

Dear etempest@farnell.com,

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.



Dual sourcing for back-end manufacturing of automotive products in SOT1220 package

Change Category

| | | | | |
|--|---|--|---|---|
| <input type="checkbox"/> Wafer Fab Process | <input type="checkbox"/> Assembly Process | <input type="checkbox"/> Product Marking | <input checked="" type="checkbox"/> Test Location | <input type="checkbox"/> Design |
| <input type="checkbox"/> Wafer Fab Materials | <input type="checkbox"/> Assembly Materials | <input type="checkbox"/> Mechanical Specification | <input type="checkbox"/> Test Process | <input type="checkbox"/> Errata |
| <input type="checkbox"/> Wafer Fab Location | <input checked="" type="checkbox"/> Assembly Location | <input type="checkbox"/> Packing/Shipping/Labeling | <input type="checkbox"/> Test Equipment | <input type="checkbox"/> Electrical spec./Test coverage |

Details of this change

For the affected products, Nexperia is introducing dual sourcing regarding the assembly process. Currently, assembly for these products is performed only at ATGD. An additional Nexperia internal back-end site, ATSN, has now been qualified as

assembly location for the listed products. There will be no change in the product fit, form and function.

CN-202510018F_PCN-FORM-

Rev_5_1.xlsx: https://qcm.nexperia.com/Document/DOC-604917/CN-202510018F_PCN-FORM-Rev_5_1.xlsx

CN-2510018F_Delta-Qualification-Matrix-ZVEI-

5_1.xlsx: https://qcm.nexperia.com/Document/DOC-604916/CN-2510018F_Delta-Qualification-Matrix-ZVEI-5_1.xlsx

CN-

202510018FSelfQualificationReport.pdf: <https://qcm.nexperia.com/Document/DOC-604915/CN-202510018FSelfQualificationReport.pdf>

Why do we implement this change?

From implementation date on, Nexperia will have increased supply security provided by multiple assembly locations.

Identification of affected products

Top Side Marking

Product availability

Production

Planned first shipment: 08 Mar 2026

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

Disposition of old products

Dual Sourcing, adding ATSN to supply chain.

Feedback

Your acknowledgement of this change, conform JEDEC J-STD-046, is expected till 24 Dec 2025. 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 your distribution partner.

About Nexperia B.V.

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CN-202510018F

Dual sourcing for back-end manufacturing of automotive products in SOT1220 package

Revision: 21 November 2025

Self Qualification Report

Document Information

| Information | Content |
|-----------------|---------------------------|
| Author | Suanne Kuhrau |
| Supplier | Nexperia |
| Document Number | CN-202510018F |
| | Self Qualification Report |

Revision History

| Revision Date | Description |
|------------------|--------------|
| 21 November 2025 | New document |

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nexperia

Table of Contents

| | | |
|-----|---|----|
| 1. | Subject | 3 |
| 2. | Introduction..... | 3 |
| 3. | Changed assembly and final testing location | 3 |
| 4. | Affected product types | 4 |
| 5. | Reliability test program | 6 |
| 5.1 | Qualification strategy | 6 |
| 5.2 | Test vehicles..... | 6 |
| 6. | Qualification plan | 6 |
| 7. | Electrical and thermal performance..... | 14 |
| 7.1 | Electrical performance | 14 |
| 7.2 | Thermal performance..... | 14 |
| 8. | Comparison of visual appearance | 14 |
| 9. | Traceability..... | 14 |
| 10. | Conclusion..... | 14 |
| 11. | Legal Disclaimer..... | 14 |

1. Subject

CN-202510018F contains detail information on the qualification of a second assembly location to produce automotive graded SOT1220 devices.

2. Introduction

In order to increase supply security for products in the package type SOT1220, Nexperia has qualified a second assembly location. This PCN covers the qualification and release of the automotive graded SOT1220 devices specified in Table 2 for the newly added assembly location.

Currently, our back-end site ATGD (Nexperia, Guangdong, China) is the single source location for the assembly processes of the affected products. With this change, we qualified our back-end site ATSN (Nexperia, Seremban, Malaysia) as additional assembly location. The production steps, used materials, in-line tests and control plans remain unchanged. There is no effect on fit, form and function of the affected products.

3. Changed assembly and final testing location

The following changes according to the ZVEI DeQuMa apply to all products shown in Table 2 (affected products list):

SEM-PA-18: Move all or parts of production to a different assembly site.

SEM-TF-01: Move of all or part of electrical wafer test and/or final test to a different test site.

Table 1: Back-end location: Assembly and testing

| Current/ As is | New/ To be |
|---|--|
| Back-end (assembly and final testing) location: ATGD (Tianmei Industrial North, District A Section Huangjiang Town, Dongguan, 523750, China) | Back-end (assembly and final testing) location: ATSN (No. PT 12687, Tuanku Jaafar Industrial Park, 71450 Seremban, Negeri Sembilan, Malaysia) |
| | <u>Or</u> ATGD (Tianmei Industrial North, District A Section Huangjiang Town, Dongguan, 523750, China) |

The additional assembly site Nexperia ATSN uses the same processes and materials as the current assembly site Nexperia ATGD. The Nexperia ATSN assembly site was founded in 1992 and has been assembling discrete semiconductors ever since.

The additional final testing site Nexperia ATSN uses the same test equipment and testing specifications as the current assembly site Nexperia ATGD. The Nexperia ATSN final testing site was founded in 1992 and has been testing discrete semiconductors ever since.

4. Affected product types

The product types to be released with this PCN are shown in Table 2.

Table 2: Affected product types

| Product | 12NC | Package Name | Type of change: additional assembly and final test location |
|---------------|----------------|--------------|--|
| | | | ATSN |
| BUK6D120-40E | 9346 607 44115 | SOT1220 | • |
| BUK6D125-60E | 9346 607 46115 | SOT1220 | • |
| BUK6D16-30E | 9346 632 24115 | SOT1220 | • |
| BUK6D20-40E | 9346 668 25115 | SOT1220 | • |
| BUK6D210-60E | 9346 607 45115 | SOT1220 | • |
| BUK6D22-30E | 9346 609 47115 | SOT1220 | • |
| BUK6D230-80E | 9346 604 68115 | SOT1220 | • |
| BUK6D30-40E | 9346 614 73115 | SOT1220 | • |
| BUK6D38-30E | 9346 609 48115 | SOT1220 | • |
| BUK6D385-100E | 9346 609 46115 | SOT1220 | • |
| BUK6D56-60E | 9346 604 71115 | SOT1220 | • |
| BUK6D72-30E | 9346 609 49115 | SOT1220 | • |
| BUK6D77-60E | 9346 610 67115 | SOT1220 | • |
| BUK7D25-40E | 9345 602 15115 | SOT1220 | • |
| BUK7D36-60E | 9346 617 25115 | SOT1220 | • |
| BUK9D23-40E | 9346 602 13115 | SOT1220 | • |
| PMPB55ENEA | 9340 686 22115 | SOT1220 | • |
| PMPB85ENEA | 9340 674 78115 | SOT1220 | • |
| PMPB95ENEA | 9340 674 76115 | SOT1220 | • |
| BUK4D110-20P | 9346 617 24115 | SOT1220 | • |
| | 9346 617 24125 | SOT1220 | • |
| BUK4D16-20 | 9346 615 94115 | SOT1220 | • |
| | 9346 615 94125 | SOT1220 | • |
| BUK4D38-20P | 9346 614 84115 | SOT1220 | • |
| | 9346 614 84125 | SOT1220 | • |
| | 9346 614 84184 | SOT1220 | • |

| | | | |
|--------------|----------------|---------|---|
| BUK6D120-60P | 9346 603 43115 | SOT1220 | • |
| | 9346 603 43184 | SOT1220 | • |
| BUK9D120-60P | 9346 664 58115 | SOT1220 | • |
| PMPB10XNEA | 9340 709 22115 | SOT1220 | • |
| PMPB12UNEA | 9340 709 23115 | SOT1220 | • |
| PMPB13XNEA | 9340 709 24115 | SOT1220 | • |
| PMPB15XPA | 9340 709 26115 | SOT1220 | • |
| PMPB20XPEA | 9340 709 27115 | SOT1220 | • |
| PMPB23XNEA | 9346 602 18115 | SOT1220 | • |
| PMPB27EPA | 9340 70932115 | SOT1220 | • |
| PMPB29XNEA | 9340 709 25115 | SOT1220 | • |
| PMPB29XPEA | 9340 709 28115 | SOT1220 | • |
| PMPB43XPEA | 9340 709 29115 | SOT1220 | • |
| PMPB48EPA | 9340 709 33115 | SOT1220 | • |
| BUK6D23-40E | 9346 603 04125 | SOT1220 | • |
| | 9346 603 04115 | SOT1220 | • |
| | 9346 603 04184 | SOT1220 | • |
| BUK4D50-30P | 934665701115 | SOT1220 | • |
| BUK6D81-80E | 934661068115 | SOT1220 | • |

5. Reliability test program

In line with AEC-Q101, AEC-Q006 and Nexperia General Quality Specification, the product types have been qualified. To validate the assembly quality and reliability performance an extensive qualification program has been performed.

5.1 Qualification strategy

The qualification plan has been developed based on FMEA risk assessment. Potential failures have been identified and were addressed in qualification.

5.2 Test vehicles

Table 3: Qualification leader types used for qualification

| Product | Package | Assembly and Test Site |
|-------------|---------|------------------------|
| BUK6D43-40P | SOT1220 | ATSN |
| BUK4D50-30P | SOT1220 | ATSN |
| BUK4D60-30 | SOT1220 | ATSN |
| BUK6D23-40E | SOT1220 | ATSN |
| BUK6D81-80E | SOT1220 | ATSN |
| BUK4D50-30P | SOT1220 | ATSN |

6. Qualification plan

The qualification as reported in the summary below has been carried out to release the product type mentioned in this PCN.

Table 4: Qualification plan

Test Group A – Accelerated Environment Stress Tests

| # | Stress | Test method | Duration | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|----|-------------------------------|---|---------------|---|---------------|-------------------|------------|
| A1 | PC Pre-conditioning | JEDEC/IPC J-STD-020, JESD22-A-113, TEST before and after PC | acc. to MSL 1 | BUK6D43-40P BUK4D60-30 BUK6D23-40E BUK6D81-80E | - see notes - | | 0 |
| | Notes: | All qualification parts prior to tests #A2alt H ³ TRB, #A3 UHAST, #A4 TC/TCHT/TCDT, #A5 IOL/PTC and #C8 RSH. | | | | | |
| A2 | HAST | JEDEC JESD22-A-110 T _A = 130 °C, RH = 85 %, VDS = see notes | 96 hours | BUK6D43-40P BUK6D23-40E BUK6D81-80E | 1 1 1 | 77 | 0 |

| # | Stress | Test method | Duration | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|--|--|--|-------------|---|-------------|-------------------|------------|
| | Highly Accelerated Stress Test | | 192 hours | BUK6D43-40P BUK6D23-40E BUK6D81-80E | 1 1 1 | 64 | 0 |
| Notes: 13 samples per lot removed after 96h for analysis per AEC-Q006 (see Table 5) | | | | | | | |
| A2 alt | H³TRB High Humidity High Temperature Reverse Bias | JEDEC JESD22-A-101 T _A = 85 °C, RH = 85 %, V _{DS} = see notes | 1000 hours | NA | NA | NA | NA |
| | | | 2000 hours | NA | NA | NA | NA |
| Notes: Omitted in lieu of alternative test, see test #A2. | | | | | | | |
| A3 | UHAST Unbiased HAST | JEDEC JESD22-A-118 T _A = 130 °C, RH = 85 % | 96 hours | BUK6D43-40P BUK6D23-40E BUK6D81-80E | 1 1 1 | 77 | 0 |
| Notes: - | | | | | | | |
| A3 alt | AC Autoclave | JEDEC JESD22-A-102 T _A = 121 °C, RH = 100 %, p = 15 psig | 96 hours | NA | N/A | N/A | N/A |
| Notes: Omitted in lieu of alternative test, see test #A3. | | | | | | | |
| A4 | TC Temperature Cycling | JEDEC JESD22-A-104 Appendix 6 T = -65 °C to 150°C | 1000 cycles | BUK6D43-40P BUK4D60-30 BUK6D23-40E | 1 1 1 | 77 | 0 |
| | | | 2000 cycles | BUK6D43-40P BUK4D60-30 BUK6D23-40E | 1 1 1 | 64 | 0 |
| Notes: 13 samples per lot removed after 1000h for analysis per AEC-Q006 (see Table 5). | | | | | | | |
| A4a | TCHT Temperature Cycling Hot Test | JEDEC JESD22-A-104 Appendix 6 | 1000 cycles | N/A | N/A | N/A | N/A |
| Notes: See A4a alt. | | | | | | | |
| A4a alt | TCDT Delamination Test | JEDEC JESD22-A-104 Appendix 6, J-STD-035 | 1000 cycles | N/A | N/A | N/A | N/A |
| Notes: Tests A4A and A4Aalt are not executed on Cu wire bonded products. Instead, follow the requirements in AEC-Q006, see Table 5 | | | | | | | |
| A5 | IOL Intermittent Operational Life | MIL-STD-750 Method 1037 T = 25 °C, ΔT _j ≥ 100 °C, t _{on} = t _{off} = 2 min | 1000 hours | BUK6D43-40P BUK4D60-30 BUK6D23-40E | 1 1 1 | 77 | 0 |
| | | | 2000 hours | BUK6D43-40P BUK4D60-30 BUK6D23-40E | 1 1 1 | 77 | 0 |
| Notes: - | | | | | | | |

| # | Stress | Test method | Duration | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|--------|---|--------------|------------|----------------|-----------|-------------------|------------|
| A5 alt | PTC Power and Temperature Cycle | JESD22-A-105 | 1000 hours | N/A | N/A | N/A | N/A |

Notes: Omitted in lieu of alternative test, see test # A5 (IOL).

Test Group B – Accelerated Lifetime Simulation Tests

| # | Stress | Test method | Duration | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|---|--|--|------------|---|-------------|-------------------|------------|
| B1 | HTRB High Temperature Reverse Bias | MIL-STD-750-1 M1038 Condition A or M1039 Condition A $T_j = T_{jmax}$, $V_{DS} = \text{see notes}$ | 1000 hours | BUK6D43-40P BUK4D50-30P BUK6D81-80E | 1 1 1 | 77 | 0 |
| B1 | | | 2000 hours | BUK6D43-40P BUK4D50-30P BUK6D81-80E | 1 1 1 | 76 | 0 |
| Notes: VDS: BUK6D43-40P=40V, BUK4D50-30P=28V, BUK6D81-80E =80V One sample per lot removed after 1000h for analysis per AEC-Q006 (see Table 5). | | | | | | | |
| B1a | ACBV AC blocking voltage | MIL-STD-750-1 M1040 Test condition A | 1000 hours | N/A | N/A | N/A | N/A |
| Notes: ACBV is required for Thyristors only. Reported parts are not Thyristors. | | | | | | | |
| B1b | SSOP Steady State Operational | MIL-STD-750-1 M1038 Condition B (Zeners) | 1000 hours | N/A | N/A | N/A | N/A |
| Notes: SSOP is required for Zener diodes only. Reported parts are not Zener diodes. | | | | | | | |
| B2 | HTGB High Temperature Gate Bias | JEDEC JESD22-A-108 | 1000 hours | BUK6D43-40P BUK4D50-30P BUK6D81-80E | 1 1 1 | 77 | 0 |
| Notes: - | | | | | | | |

Test Group C – Package Assembly Integrity Tests

| # | Stress | Test method | Duration | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|-----|---|--|----------|---|-------------|-------------------|------------|
| C1 | DPA Destructive Physical Analysis | AEC-Q101-004 Section 4 2 devices each after HAST | - | BUK6D43-40P BUK6D23-40E BUK6D81-80E | 1 1 1 | 2 | 0 |
| | | AEC-Q101-004 Section 4 2 devices each after TC | | BUK6D43-40P BUK4D60-30 BUK6D23-40E | 1 1 1 | | |
| | | Notes: - | | | | | |
| | | JEDEC JESD22-B-100 | - | BUK4D50-30P | 1 | 30 | 0 |
| C2 | PD Physical Dimensions | Notes: - | | | | | |
| | | MIL-STD-750-2 Method 2037 / AEC-Q006 (Cu-wire) | - | BUK6D43-40P | 1 | 5 | 0 |
| C3 | WBP Wire Bond Pull Strength | Notes: - | | | | | |
| | | AEC-Q101-003, JEDEC JESD22-B116 | - | BUK6D43-40P | 1 | 5 | 0 |
| C4 | WBS Wire Bond Shear Strength | Notes: - | | | | | |
| | | MIL-STD-750-2 Method 2017 | - | BUK6D43-40P | 1 | 5 | 0 |
| C5 | DS Die Shear | Notes: - | | | | | |
| | | MIL-STD-750-2 Method 2036 evaluate lead integrity of through-hole leaded parts only | - | N/A | N/A | N/A | N/A |
| C6 | TS Terminal Strength | Notes: TS is required for through-hole leaded parts only. Reported parts are not through-hole leaded parts. | | | | | |
| | | JEDEC JESD22-B107 verify marking permanency | - | N/A | N/A | N/A | N/A |
| C7 | RTS Resistance to Solvents | Notes: RTS is not required for laser etched parts or parts with no marking. Reported parts are laser etched parts. | | | | | |
| | | JEDEC JESD22-A-111 260 °C ± 5 °C | 10 s | BUK4D50-30P | 1 | 30 | 0 |
| C8 | RSH Resistance to Solder Heat | Notes: - | | | | | |
| | | JEDEC JESD24-3, 24-4, 24-6 as appropriate | - | BUK6D43-40P | 1 | 10 | 0 |
| C9 | TR Thermal Resistance | Notes: - | | | | | |
| | | JEDEC J-STD-002 | - | BUK4D50-30P | 1 | 30 | 0 |
| C10 | SD Solderability | Notes: - | | | | | |

| # | Stress | Test method | Duration | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|-----|--|---|----------|----------------|-----------------------------------|-------------------|------------|
| C11 | WG Whisker Growth Evaluation | AEC-Q005 | | | ----- according to AEC-Q005 ----- | | |
| C12 | CA Constant Acceleration | MIL-STD-750-2 Method 2006 | - | N/A | N/A | N/A | N/A |
| | Notes: | No change of leadframe outside plating, leadframe material, leadframe dimensions or encapsulation process, therefore WG is not applicable | | | | | |
| C13 | VVF Vibration Variable Frequency | JEDEC JESD22-B-103 | - | N/A | N/A | N/A | N/A |
| | Notes: | VVF is required for hermetic packaged parts only. Reported package is not a hermetic package. | | | | | |
| C14 | MS Mechanical Shock | JEDEC JESD22-B-104 | - | N/A | N/A | N/A | N/A |
| | Notes: | MS is required for hermetic packaged parts only. Reported package is not a hermetic package. | | | | | |
| C15 | HER Hermeticity | JEDEC JESD22-A-109 | - | N/A | N/A | N/A | N/A |
| | Notes: | HER is required for hermetic packaged parts only. Reported package is not a hermetic package. | | | | | |

Test Group D – Die Fabrication Reliability Tests

| # | Stress | Test method | Duration | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|----|-----------------------------------|---|----------|----------------|-----------|-------------------|------------|
| D1 | DI Dielectric Integrity | AEC-Q101-004 Section 3 | - | N/A | N/A | N/A | N/A |
| | Notes: | No change in die fabrication: No change of wafer fab processes or materials, no change of die design. | | | | | |

Test Group E – Electrical Verification Tests

| # | Stress | Test method | Duration | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|----|------------------------------|--|----------|---|-----------|-------------------|------------|
| E0 | EV External Visual | JEDEC JESD22-B101 | - | All qualification parts submitting for testing. | | | 0 |
| | Notes: | Inspect part construction, marking and workmanship | | | | | |

| # | Stress | Test method | Duration | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|--|--|--|----------|--|-----------------------|-------------------|------------|
| E1 | TEST Pre- and Post- Stress Electrical Test | According to supplier's standard specification | - | All qualification parts tested per the requirements of the appropriate part specification. | | | 0 |
| Notes: Test is performed as specified in the applicable stress reference at room temperature. | | | | | | | |
| E2 | PV Parametric Verification | Over part temperature range specified in data sheet. | - | BUK6D43-40P BUK4D50-30P BUK4D60-30 BUK6D23-40E BUK6D81-80E | 1 1 1 1 1 | 25 | 0 |
| Notes: For parametric verification data, sometimes circumstances may necessitate the acceptance of only one lot by the user. | | | | | | | |
| E3 | ESDH ESD – HBM Characterization | AEC-Q101-001 | - | N/A | N/A | N/A | N/A |
| Notes: No change of wafer fab processes or materials, no change of die design. | | | | | | | |
| E4 | ESDC ESD – CDM Characterization | AEC-Q101-005 | - | N/A | N/A | N/A | N/A |
| Notes: Small packages are not able to hold enough charge and are therefore exempt of testing according to AEC-Q101-005. | | | | | | | |
| E5 | UIS Unclamped Inductive Switching | AEC-Q101-004 Section 2 | - | N/A | N/A | N/A | N/A |
| Notes: No change of wafer fab processes or materials, no change of die design. | | | | | | | |
| E6 | SC Short Circuit Characterization | AEC-Q101-006 | - | N/A | N/A | N/A | N/A |
| Notes: SC is required for smart power parts only. Reported parts are not smart power parts. | | | | | | | |

Table 5: Analyses after test (according to Table 3b of AEC-Q006 Rev. A)

| # | Analysis | Qualification Step | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|----------|-------------|---|---|-------------|-------------------|------------|
| 2 | CSAM | Before preconditioning (#A1) of parts submitted to HAST (#A2 alt) | BUK6D43-40P BUK6D23-40E BUK6D81-80E | 1 1 1 | 15 | 0 |
| | | Before preconditioning (#A1) of parts submitted to TC (#A4) and IOL (#A5) | BUK6D43-40P BUK4D60-30 BUK6D23-40E | 1 1 1 | | |

| # | Analysis | Qualification Step | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|----|--------------------------------|---|----------------|-----------|-------------------|------------|
| 4 | CSAM | Before preconditioning (#A1) of parts submitted to HAST (#A2 alt) | BUK6D43-40P | 1 | | |
| | | | BUK6D23-40E | 1 | | |
| | | | BUK6D81-80E | 1 | | |
| | CSAM | Before preconditioning (#A1) of parts submitted to TC (#A4) and IOL (#A5) | BUK6D43-40P | 1 | 15 | 0 |
| | | | BUK4D60-30 | 1 | | |
| | | | BUK6D23-40E | 1 | | |
| 8 | CSAM | After 96h HAST (#A2) | BUK6D43-40P | 1 | | |
| | | | BUK6D23-40E | 1 | | |
| | | | BUK6D81-80E | 1 | | |
| | CSAM | After 1000c TC (#A4) | BUK6D43-40P | 1 | 15 | 0 |
| | | | BUK4D60-30 | 1 | | |
| | | | BUK6D23-40E | 1 | | |
| 9a | Ball + Stitch/Wedge pull | After 96h HAST (#A2) | BUK6D43-40P | 1 | | |
| | | | BUK6D23-40E | 1 | | |
| | | | BUK6D81-80E | 1 | | |
| | Ball shear | After 1000c TC (#A4) | BUK6D43-40P | 1 | 3 | 0 |
| | | | BUK4D60-30 | 1 | | |
| | | | BUK6D23-40E | 1 | | |
| 9b | Ball shear | After 96h HAST (#A2) | BUK6D43-40P | 1 | | |
| | | | BUK6D23-40E | 1 | | |
| | | | BUK6D81-80E | 1 | | |
| | Cross Section | After 1000c TC (#A4) | BUK6D43-40P | 1 | | |
| | | | BUK4D60-30 | 1 | 1 | 0 |
| | | | BUK6D23-40E | 1 | | |
| 10 | Cross Section | After 1000h HTRB (#B1) | BUK6D43-40P | 1 | | |
| | | | BUK4D50-30P | 1 | | |
| | | | BUK6D81-80E | 1 | | |

| # | Analysis | Qualification Step | Tested part(s) | # of lots | Sample Size / lot | # of Fails |
|-----|--------------------------------|------------------------|---|-------------|-------------------|------------|
| 13 | CSAM | After 192h HAST (#A2) | BUK6D43-40P BUK6D23-40E BUK6D81-80E | 1 1 1 | 15 | 0 |
| | | After 2000c TC (#A4) | BUK6D43-40P BUK4D60-30 BUK6D23-40E | 1 1 1 | | |
| 14a | Ball + Stitch/Wedge pull | After 192h HAST (#A2) | BUK6D43-40P BUK6D23-40E BUK6D81-80E | 1 1 1 | 2 | 0 |
| | | After 2000c TC (#A4) | BUK6D43-40P BUK4D60-30 BUK6D23-40E | 1 1 1 | | |
| 14b | Ball shear | After 192h HAST (#A2) | BUK6D43-40P BUK6D23-40E BUK6D81-80E | 1 1 1 | 2 | 0 |
| | | After 2000c TC (#A4) | BUK6D43-40P BUK4D60-30 BUK6D23-40E | 1 1 1 | | |
| 15 | Cross Section | After 2000c TC (#A4) | BUK6D43-40P BUK4D60-30 BUK6D23-40E | 1 1 1 | 1 | 0 |
| | | After 2000h HTRB (#B1) | BUK6D43-40P BUK4D50-30P BUK6D81-80E | 1 1 1 | | |

7. Electrical and thermal performance

7.1 Electrical performance

Full electrical characterization over temperature range has been performed. Electrical parameters remain unchanged in specification and with the same distribution.

7.2 Thermal performance

Thermal parameters remain unchanged (in specification and with the same distribution).

8. Comparison of visual appearance

There is no change of visual appearance (within specification).

9. Traceability

Changed products can be identified by date code after implementation.

10. Conclusion

The products will not change functionally. Nexperia does not anticipate any negative impact on fit, form, function, and reliability.

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