Product Change Notification | CN-202601025F

Issue date: 23 Jan 2026

Effective date: 06 Feb 2026

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.

Export Control Mitigation PCN: Release of additional assembly site ATSN

Change Category

[ ] Wafer Fab Process [ ] Assembly Process [ ] Product Marking [X] Test Location [ ] Design

[ ] Wafer Fab Materials [ ] Assembly Materials [ ] Mechanical Specification [ ] Test Process [ ] Errata

[ ] Wafer Fab Location [X] Assembly Location [ ] Packing/Shipping/Labeling [ ] Test Equipment [ ] Electrical spec./Test coverage

Details of this change

The Nexperia owned assembly site ATSN will be released additionally for production with immediate effect. The materials and specifications of the products remain unchanged.

SelfQualificationReportCN-202601025F.pdf: https://qcm.nexperia.com/Document/DOC-606923/SelfQualificationReportCN-202601025F.pdf

CN-202601025Fproductchangematrix.xlsx: https://qcm.nexperia.com/Document/DOC-606896/CN-202601025Fproductchangematrix.xlsx

CN-202601025FPCN-Delta-Qualification-Matrix.xlsm: https://qcm.nexperia.com/Document/DOC-606893/CN-202601025FPCN-Delta-Qualification-Matrix.xlsm

CN-202601025FPCN-FORM.xlsm: https://qcm.nexperia.com/Document/DOC-606894/CN-202601025FPCN-FORM.xlsm

Why do we implement this change?

An export control for the test and assembly site ATGD in Dongguan, China is impacting our supply chain. To ensure future supply and minimize disruption, we release the Nexperia owned assembly site ATSN in Seremban, Malaysia as an additional assembly site with immediate effect.

Impact and Required Action
- New orders for the affected 12NCs will automatically be considered as acceptance of this PCN.
- If you do not agree with the changes described in this PCN, please let us know immediately and ensure no new orders for the affected products are placed. If we do not receive a response from you within five (5) working days from the date of this PCN, we will assume that you accept the PCN.
- In case of a rejection of the PCN, Nexperia B.V. will reserve the right to cancel all open and confirmed orders related to the affected product(s) and as such a rejection may result in discontinuation of supply. Nexperia B.V. cannot be held liable for non-supply in such cases.

Identification of affected products

The assembly site can be identified on the packing labels (outer box as well as reel-label) and (where applicable) by the vendor code in the product marking.

Management summary

Export Control Mitigation PCN: Release of additional assembly site ATSN (Seremban, Malaysia)

Product availability

Production

Planned first shipment: 06 Feb 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

Feedback

Your acknowledgement of this change, conform JEDEC J-STD-046, is expected till 30 Jan 2026. Lack of acknowledgement of the PCN constitutes acceptance of the change.

Additional information

View Change Notification Online

Remarks

Please note that currently active PCNs are not affected by this notification. They remain valid and need to be released according to JEDEC requirements. This PCN only adds ATSN as a qualified assembly site. All running PCNs can be found in the Product Change Matrix. Please note that PCN sample requests for Export Control Mitigation PCNs cannot be supported. There is no dedicated PCN sample step in this expedited process. Samples will become available after mass production start via our eSample Store, please contact your local Nexperia Sales Support Team.

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:

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.

SalesItem_name	SalesItem_orderablePartNumber	SalesOrder_customerPartNumber	ProductType_name	BasicType_description	PackageOutlineVersion_description	PackageType_description	SalesItem_state	SalesItem_discontinuationType	SalesItem_availability	SalesItem_source	SalesItem_lastTimeBuyDate	SalesItem_lastTimeShipDate	SalesItem_customerSpecificIndicator	Replacement_SalesItem_orderablePartNumber	Replacement_SalesItem_name	Replacement_ProductType_name	Replacement_BasicType_description	BusinessLine_description
934060849215	BAS101S,215	BAS101S,215	BAS101S	High-voltage switching dioc	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933589500215	BC807,215	BC807,215	BC807	45 V, 500 mA PNP general-	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933589690215	BC850B,215	BC850B,215	BC850B	NPN general purpose trans	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933589690235	BC850B,235		BC850B	NPN general purpose trans	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933589750215	BC857A,215	BC857A,215	BC857A	PNP general purpose transi	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933478930215	BCX70H,215	BCX70H,215	BCX70H	NPN general purpose trans	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933478930235	BCX70H,235	BCX70H,235	BCX70H	NPN general purpose trans	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934063346215	BZB84-B16,215	BZB84-B16,215	BZB84-B16	Dual Zener diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934063346235	BZB84-B16VL		BZB84-B16	Dual Zener diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934061698215	BZB84-C13,215		BZB84-C13	Dual Zener diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933770370215	BZX84-B12,215	BZX84-B12,215	BZX84-B12	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934664111215	BZX84-B2V4-QR	BZX84-B2V4-QR	BZX84-B2V4-Q	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934664130215	BZX84-B2V7-QR	BZX84-B2V7-QR	BZX84-B2V7-Q	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934664104215	BZX84-B33-QR	BZX84-B33-QR	BZX84-B33-Q	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934664091215	BZX84-B4V7-QR	BZX84-B4V7-QR	BZX84-B4V7-Q	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933564710215	BZX84-B5V6,215	BZX84-B5V6,215	BZX84-B5V6	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933564710235	BZX84-B5V6,235	BZX84-B5V6,235	BZX84-B5V6	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934664120215	BZX84-B6V2-QR	BZX84-B6V2-QR	BZX84-B6V2-Q	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933671130215	BZX84-B6V8,215	BZX84-B6V8,215	BZX84-B6V8	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934664039215	BZX84-B7V5-QR	BZX84-B7V5-QR	BZX84-B7V5-Q	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934664039235	BZX84-B7V5-QVL	BZX84-B7V5-QVL	BZX84-B7V5-Q	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933137470215	BZX84-C11,215	BZX84-C11,215	BZX84-C11	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933137470235	BZX84-C11,235	BZX84-C11,235	BZX84-C11	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933388250215	BZX84-C13,215	BZX84-C13,215	BZX84-C13	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933388250235	BZX84-C13,235		BZX84-C13	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934663949215	BZX84-C24-QR	BZX84-C24-QR	BZX84-C24-Q	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934663949235	BZX84-C24-QVL		BZX84-C24-Q	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933516970215	BZX84-C3V9,215	BZX84-C3V9,215	BZX84-C3V9	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933516970235	BZX84-C3V9,235		BZX84-C3V9	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933137420215	BZX84-C6V8,215	BZX84-C6V8,215	BZX84-C6V8	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933137420235	BZX84-C6V8,235	BZX84-C6V8,235	BZX84-C6V8	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933137430215	BZX84-C7V5,215	BZX84-C7V5,215	BZX84-C7V5	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933137430235	BZX84-C7V5,235	BZX84-C7V5,235	BZX84-C7V5	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933137450215	BZX84-C9V1,215	BZX84-C9V1,215	BZX84-C9V1	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933137450235	BZX84-C9V1,235	BZX84-C9V1,235	BZX84-C9V1	Voltage regulator diodes	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934664225215	MMBZ15VAL-QR	MMBZ15VAL-QR	MMBZ15VAL-Q	Low capacitance unidirecti	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934664225235	MMBZ15VAL-QVL		MMBZ15VAL-Q	Low capacitance unidirecti	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934057672215	PBSS8110T,215	PBSS8110T,215	PBSS8110T	100 V, 1 A NPN low VCEsat	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934057672235	PBSS8110TVL	PBSS8110TVL	PBSS8110T	100 V, 1 A NPN low VCEsat	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934055236215	PDTA114YT,215	PDTA114YT,215	PDTA114YT	PNP resistor-equipped tran	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934031050215	PDTA143ET,215	PDTA143ET,215	PDTA143ET	PNP resistor-equipped tran	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934031030215	PDTC144ET,215	PDTC144ET,215	PDTC144ET	NPN resistor-equipped trar	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934031030235	PDTC144ETVL		PDTC144ET	NPN resistor-equipped trar	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934663716115	PDZ3.6B-QX	PDZ3.6B-QX	PDZ3.6B-Q	Voltage regulator diodes	SOD323	SOD2	RFS						No					Bipolar Discretes
934070276115	PESD1IVN27-UX	PESD1IVN27-UX	PESD1IVN27-U	ESD protection for In-vehicl	SOT323	SC-70	RFS						No					Bipolar Discretes
934661479215	PESD2CANFD24L-TR	PESD2CANFD24L-TR	PESD2CANFD24L-T	ESD protection for In-vehicl	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934665383215	PESD2CANFD24LT-QR	PESD2CANFD24LT-QR	PESD2CANFD24LT-Q	ESD protection for In-vehicl	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934058196215	PESD3V3S2UT,215	PESD3V3S2UT,215	PESD3V3S2UT	Double ESD protection dioc	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934059103215	PESD5V0U1UT,215	PESD5V0U1UT,215	PESD5V0U1UT	Ultra low capacitance ESD	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934060856215	PESD5V0U2BT,215	PESD5V0U2BT,215	PESD5V0U2BT	Ultra low capacitance bidir	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933859210215	PMBD7000,215	PMBD7000,215	PMBD7000	Double high-speed switchir	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933859210235	PMBD7000,235	PMBD7000,235	PMBD7000	Double high-speed switchir	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933816490215	PMBTA56,215	PMBTA56,215	PMBTA56	PNP general purpose transi	SOT23	TO-236AB	RFS						No					Bipolar Discretes
933816490235	PMBTA56,235	PMBTA56,235	PMBTA56	PNP general purpose transi	SOT23	TO-236AB	RFS						No					Bipolar Discretes
934068152115	PMEG6020EPASX	PMEG6020EPASX	PMEG6020EPAS	60 V, 2 A low VF MEGA Scho	SOT1061D	HUSON3	RFS						No					Bipolar Discretes

PCN no. CN-202601025F
Subject Export Control Mitigation PCN: Release of additional assembly site ATSN

12NC	product name	package name	**#1 SEM-PA-18 Move all or parts of production to a different assembly site. Old**	**#1 SEM-PA-18 Move all or parts of production to a different assembly site. New**	**#2 SEM-TF-01 Move of all or part of electrical wafer test and/or final test to a different test site. Old**	**#2 SEM-TF-01 Move of all or part of electrical wafer test and/or final test to a different test site. New**	**Comment - running PCN**
933137420215	BZX84-C6V8	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933137420235	BZX84-C6V8	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933137430215	BZX84-C7V5	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933137430235	BZX84-C7V5	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933137450215	BZX84-C9V1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933137450235	BZX84-C9V1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933137470215	BZX84-C11	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933137470235	BZX84-C11	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933388250215	BZX84-C13	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933388250235	BZX84-C13	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933478930215	BCX70H	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
933478930235	BCX70H	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
933516970215	BZX84-C3V9	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933516970235	BZX84-C3V9	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933564710215	BZX84-B5V6	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933564710235	BZX84-B5V6	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933589500215	BC807	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
933589690215	BC850B	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
933589690235	BC850B	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
933589750215	BC857A	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
933671130215	BZX84-B6V8	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
933770370215	BZX84-B12	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
933816490215	PMBTA56	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
933816490235	PMBTA56	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
933859210215	PMBD7000	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
933859210235	PMBD7000	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934031030215	PDTC144ET	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
934031030235	PDTC144ET	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
934031050215	PDTA143ET	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934055236215	PDTA114YT	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934057672215	PBSS8110T	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934057672235	PBSS8110T	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934058196215	PESD3V3S2UT	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934059103215	PESD5V0U1UT	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934060849215	BAS101S	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934060856215	PESD5V0U2BT	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934061698215	BZB84-C13	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934063346215	BZB84-B16	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934063346235	BZB84-B16	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934068152115	PMEG6020EPAS	SOT1061D	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934070276115	PESD1IVN27-U	SOT323	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934661131215	PDTA114YT/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202509013F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 5
934661131235	PDTA114YT/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202509013F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 5
934661137215	PDTA124ET/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202509013F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 5
934661137235	PDTA124ET/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202509013F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 5
934661141215	PDTA144ET/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202509013F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 5
934661141235	PDTA144ET/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202509013F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 5
934661479215	PESD2CANFD24L-T	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934661862215	BZX84-C11/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
934661862235	BZX84-C11/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
934661883215	BZX84-B24/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
934661886215	BZX84-B15/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
934661886235	BZX84-B15/1	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202309019F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 4
934663716115	PDZ3.6B-Q	SOD323	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202406007FU01 | Release of 8 inch wafer diameter for Zener diodes
934663739215	BC857C-Q/S400	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202509013F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 5
934663739235	BC857C-Q/S400	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202509013F | Introduction of new Epoxy Mold Compounds (EMC) in SOT23 package - wave 5
934663949215	BZX84-C24-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202503001FU01 | Additional Information to CN 202001003F01
934663949235	BZX84-C24-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202503001FU01 | Additional Information to CN 202001003F01
934664039215	BZX84-B7V5-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934664039235	BZX84-B7V5-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934664091215	BZX84-B4V7-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934664104215	BZX84-B33-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202503001FU01 | Additional Information to CN 202001003F01
934664111215	BZX84-B2V4-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934664120215	BZX84-B6V2-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934664130215	BZX84-B2V7-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934664225215	MMBZ15VAL-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934664225235	MMBZ15VAL-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934665383215	PESD2CANFD24LT-Q	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	
934665493215	BC807-25-Q/S320	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202504007F | New die-layout and -size plus change of back side metallization thickness plus introduction of new Epoxy Mold Compounds of pnp transistors
934665493235	BC807-25-Q/S320	SOT23	ATGD	ATGD or ATSN	ATGD	ATGD or ATSN	CN-202504007F | New die-layout and -size plus change of back side metallization thickness plus introduction of new Epoxy Mold Compounds of pnp transistors

CN-202601025F

Export Control Mitigation PCN: Release of additional assembly site ATSN

Revision: 22 January 2026 **Self Qualification Report**

Document Information

Information	Content
Author	
Supplier	Nexperia
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Revision History

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Contact Information

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Table of Contents

1. Introduction

Table 1: Changes announced in PCN CN-202601025F

Current	Change
Assembly and Final Testing at	Assembly and Final Testing at
Nexperia China Ltd. (Nexperia ATGD)	Nexperia China Ltd. (Nexperia ATGD) **or** Nexperia Malaysia Sdn. Bhd. (Nexperia ATSN)

2. Affected product types

The following changes according to the ZVEI DeQuMa apply to the affected products:

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.

For the affected product types, please refer to the file "CN-202601025F product change matrix.xlsx"

3. Change details

3.1 Assembly Site

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.

3.2 Final Testing Site

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. Reliability test vehicles

Table 2: Qualification leader types and materials used for qualification of SOT23, SOD882(D), SOT1061, SOD323

Product	Package	Assembly Site	Number of lots	See results in
BAV199-Q	SOT23	Nexperia ATSN	1	Table 4 and Table 5
MMBZ20VAL-Q	SOT23	Nexperia ATSN	1	
PESD5V0S2BT-Q	SOT23	Nexperia ATSN	1	
PBSS5240T-Q	SOT23	Nexperia ATSN	3	
BAV170-Q	SOT23	Nexperia ATSN	1	
PESD18VF1BL-Q	SOD882	Nexperia ATSN	2	
PESD5V0X1BCL-Q	SOD882	Nexperia ATSN	1	
PESD5V0X1UALD-Q	SOD882D	Nexperia ATSN	3	
PMEG2020CPA-Q	SOT1061	Nexperia ATSN	3	
BAS316-Q	SOD323	Nexperia ATSN	1	
SZMM3Z8V2T1G	SOD323	Nexperia ATSN	1	
PESD1IVN27A-Q	SOD323	Nexperia ATSN	1	

Table 3: Qualification leader types and materials used for qualification of SOT1061D

Product	Package	Assembly Site	Number of lots	See results in
BUK6D43-40P	SOT1220 1)	Nexperia ATSN	1	Table 6 and Table 7
BUK4D50-30P	SOT1220 1)	Nexperia ATSN	1	
BUK4D60-30	SOT1220 1)	Nexperia ATSN	1	
BUK6D23-40E	SOT1220 1)	Nexperia ATSN	1	
BUK6D81-80E	SOT1220 1)	Nexperia ATSN	1	
PMEG2020CPA-Q	SOT1061 1)	Nexperia ATSN	3	

1) Structurally similar to SOT1061D

5. Qualification reports

5.1 Qualification Results SOT23, SOD882(D), SOT1061, SOD323

Table 4: Qualification results according to AEC-Q101 Rev. E and AEC-Q006 Rev. A (SOT23, SOD882(D), SOT1061, SOD323)

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	All parts in Table 2	- see notes -		0
	Notes:	All qualification parts prior to tests #A2alt H^3TRB, #A3 UHAST, #A4 TC/TCHT/TCDT, #A5 IOL/PTC and #C8 RSH.					
A2	**HAST** Highly Accelerated Stress Test	JEDEC JESD22-A-110 T_A = 130 °C, RH = 85 %, V_R = 80 % of max. rated reverse voltage or limit of chamber	96 hours	N/A	N/A	N/A	N/A
	Notes:	Omitted in lieu of alternative test, see test #A2 alt (H^3TRB)					
A2 alt	**H^3TRB** High Humidity High Temperature Reverse Bias	JEDEC JESD22-A-101 T_A = 85 °C, RH = 85 %, V_R = 80 % of rated breakdown voltage or limit of chamber	1000 hours	all parts in Table 2	19	80	0
			2000 hours	PBSS5240T-Q	3	73	0
				PMEG2020CPA-Q	3	73	0
				BAS316-Q	1	73	0
				SZMM3Z8V2T1G	1	73	0
				PESD1IVN27A-Q	1	73	0
	Notes:	Seven samples per lot removed after 1000h for analysis per AEC-Q006 (see Table 5)					
A3	**UHAST** Unbiased HAST	JEDEC JESD22-A-118 T_A = 130 °C, RH = 85 %	96 hours	PBSS5240T-Q	3	80	0
				PESD18VF1BL-Q	2	80	0
				PESD5V0X1BCL-Q	1	80	0
				PESD5V0X1UALD-Q	3	80	0
				PMEG2020CPA-Q	3	80	0
				BAS316-Q	1	80	0
				SZMM3Z8V2T1G	1	80	0
				PESD1IVN27A-Q	1	80	0
	Notes:	-					
A3 alt	**AC** Autoclave	JEDEC JESD22-A-102 T_A = 121 °C, RH = 100 %, p = 15 psig	96 hours	N/A	N/A	N/A	N/A
	Notes:	Omitted in lieu of alternative test, see test #A3 (UHAST)					
A4	**TC** Temperature Cycling	JEDEC JESD22-A-104 Appendix 6 T = -65 °C to 150°C	1000 cycles	all parts in Table 2	19	80	0
			2000 cycles	PBSS5240T-Q	3	73	0
				PMEG2020CPA-Q	3	73	0
				BAS316-Q	1	73	0
				SZMM3Z8V2T1G	1	73	0
				PESD1IVN27A-Q	1	73	0

#	Stress	Test method	Duration	Tested part(s)	# of lots	Sample Size / lot	# of Fails
	Notes:	Seven 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:	TCHT is required for MOSFET parts with internal bond wire sizes 5 mil diameter and less. Reported parts are not MOSFET parts.					
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:	TCDT is required for MOSFET parts with internal bond wire sizes 5 mil diameter and less. Reported parts are not MOSFET parts.					
A5	**IOL** Intermittent Operational Life	MIL-STD-750 Method 1037 $T = 25\ °C$, $\Delta T_j \geq 100\ °C$, $t_{on} = t_{off} = 2$ min	1000 hours	PBSS5240T-Q	3	80	0
				PMEG2020CPA-Q	3	80	0
				BAS316-Q	1	80	0
				SZMM3Z8V2T1G	1	80	0
	Notes:	-					
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 $T_j = 150°C$, $V_R = 100\%$ of max. breakdown voltage	1000 hours	all parts in Table 2 except SZMM3Z8V2T1G	18	80	0
			2000 hours	PBSS5240T-Q	3	79	0
				PMEG2020CPA-Q	3	79	0
				BAS316-Q	1	79	0
				PESD1IVN27A-Q	1	79	0
	Notes:	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	SZMM3Z8V2T1G	1	80	0
			2000 hours	SZMM3Z8V2T1G	1	79	0
	Notes:	One sample per lot removed after 1000h for analysis per AEC-Q006 (see Table 5)					

#	Stress	Test method	Duration	Tested part(s)	# of lots	Sample Size / lot	# of Fails
B2	**HTGB** High Temperature Gate Bias	JEDEC JESD22-A-108	1000 hours	N/A	N/A	N/A	N/A
	HTnGB High Temperature Negative Gate Bias	JEDEC JESD22-A-108	1000 hours	N/A	N/A	N/A	N/A
	Notes:	HT(n)GB is required for MOS and IGBT parts only. Reported parts are not MOS or IGBT parts.					

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 H^{3}TRB and TC	-	all parts in Table 2	19	4	0
	Notes:	-					
C2	**PD** Physical Dimensions	JEDEC JESD22-B-100	-	SOT23, SOD323, SOD882, SOD882D SOT1061	5	30	0
	Notes:	-					
C3	**WBP** Wire Bond Pull Strength	MIL-STD-750-2 Method 2037 / AEC-Q006 (Cu-wire)	-	all parts in Table 2	19	5	0
	Notes:	-					
C4	**WBS** Wire Bond Shear Strength	AEC-Q101-003, JEDEC JESD22-B116	-	all parts in Table 2	19	5	0
	Notes:	-					
C5	**DS** Die Shear	MIL-STD-750-2 Method 2017	-	all parts in Table 2	19	5	0
	Notes:	-					
C6	**TS** Terminal Strength	MIL-STD-750-2 Method 2036 evaluate lead integrity of through-hole leaded parts only	-	N/A	N/A	N/A	N/A
	Notes:	TS is required for leaded parts only. Reported parts are not leaded parts.					
C7	**RTS** Resistance to Solvents	JEDEC JESD22-B107 verify marking permanency	-	N/A	N/A	N/A	N/A
	Notes:	RTS is not required for laser etched parts or parts with no marking. Reported parts are laser etched parts.					

#	Stress	Test method	Duration	Tested part(s)	# of lots	Sample Size / lot	# of Fails
C8	**RSH** Resistance to Solder Heat	JEDEC JESD22-A-111 260 °C ± 5 °C	10 s	PBSS5240T-Q BAS316-Q SZMM3Z8V2T1G PESD1IVN27A-Q	3 1 1 1	80 80 80 80	0 0 0 0
	Notes:	-					
C9	**TR** Thermal Resistance	JEDEC JESD24-3, 24-4, 24-6 as appropriate	-	N/A	N/A	N/A	N/A
	Notes:	-					
C10	**SD** Solderability	JEDEC J-STD-002	-	PBSS5240T-Q PESD18VF1BL-Q PESD5V0X1UALD-Q PMEG2020CPA-Q BAS316-Q SZMM3Z8V2T1G PESD1IVN27A-Q	3 3 3 3 1 1 1	5 5 5 5 5 5 5	0 0 0 0 0 0 0
	Notes:	-					
C11	**WG** Whisker Growth Evaluation	according to AEC-Q005		PBSS5240T-Q PESD18VF1BL-Q PESD5V0X1UALD-Q PMEG2020CPA-Q BAS316-Q		-	
	Notes:	-					
C12	**CA** Constant Acceleration	MIL-STD-750-2 Method 2006	-	N/A	N/A	N/A	N/A
	Notes:	CA is required for hermetic packaged parts only. Reported package is not a hermetic package.					
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:	DI is required for Power MOS and IGBT parts only. Reported parts are not Power MOS or IGBT parts.					

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					
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.	-	all parts in Table 2	12	25	0
	Notes:	-					
E3	**ESDH** ESD – HBM Characterization	AEC-Q101-001	-	BAV199-Q MMBZ20VAL-Q PBSS5240T-Q BAV170-Q PMEG2020CPA-Q	1 1 1 1 1	30 30 30 30 30	0 0 0 0 0
	Notes:	-					
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:	UIS is required for MOS and IGBT parts only. Reported parts are not MOS or IGBT parts.					
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) (SOT23, SOD882(D), SOT1061, SOD323)

#	Analysis	Qualification Step	Tested part(s)	# of lots	Sample Size / lot	# of Fails
2	CSAM	Before preconditioning (#A1) of parts submitted to H3TRB (#A2 alt), TC (#A4) and IOL (#A5)	PBSS5240T-Q	3	15	0
			PMEG2020CPA-Q	3	15	0
			BAS316-Q	1	15	0
			SZMM3Z8V2T1G	1	15	0
			PESD1IVN27A-Q	1	15	0
4	CSAM	Before preconditioning (#A1) of parts submitted to H3TRB (#A2 alt), TC (#A4) and IOL (#A5)	PBSS5240T-Q	3	15	0
			PMEG2020CPA-Q	3	15	0
			BAS316-Q	1	15	0
			SZMM3Z8V2T1G	1	15	0
			PESD1IVN27A-Q	1	15	0
	Notes:	Same samples as in CSAM before preconditioning (#2)				
8	CSAM	After 1000h H3TRB (#A2 alt) and HTRB (#B1), after 1000c TC (#A4)	PBSS5240T-Q	3	15	0
			PMEG2020CPA-Q	3	15	0
			BAS316-Q	1	15	0
			SZMM3Z8V2T1G	1	15	0
			PESD1IVN27A-Q	1	15	0
	Notes:	Same samples as in CSAM before preconditioning (#2)				
9a	Ball + Stitch/Wedge pull	After 1000h H3TRB (#A2 alt), after 1000c TC (#A4)	PBSS5240T-Q	3	3	0
			PMEG2020CPA-Q	3	3	0
			BAS316-Q	1	3	0
			SZMM3Z8V2T1G	1	3	0
			PESD1IVN27A-Q	1	3	0
9b	Ball shear	After 1000h H3TRB (#A2 alt), after 1000c TC (#A4)	PBSS5240T-Q	3	3	0
			PMEG2020CPA-Q	3	3	0
			BAS316-Q	1	3	0
			SZMM3Z8V2T1G	1	3	0
			PESD1IVN27A-Q	1	3	0
10	Cross Section	After 1000h H3TRB (#A2 alt) and HTRB (#B1), after 1000c TC (#A4)	PBSS5240T-Q	3	1	0
			PMEG2020CPA-Q	3	1	0
			BAS316-Q	1	1	0
			SZMM3Z8V2T1G	1	1	0
			PESD1IVN27A-Q	1	1	0
13	CSAM	After 2000h H3TRB (#A2 alt) and HTRB (#B1), after 2000c TC (#A4)	PBSS5240T-Q	3	15	0
			PMEG2020CPA-Q	3	15	0
			BAS316-Q	1	15	0
			SZMM3Z8V2T1G	1	15	0
			PESD1IVN27A-Q	1	15	0
	Notes:	Same samples as in CSAM before preconditioning (#2)				
14a	Ball + Stitch/Wedge pull	After 2000h H3TRB (#A2 alt), after 2000c TC (#A4)	PBSS5240T-Q	3	2	0
			PMEG2020CPA-Q	3	2	0
			BAS316-Q	1	2	0
			SZMM3Z8V2T1G	1	2	0
			PESD1IVN27A-Q	1	2	0

#	Analysis	Qualification Step	Tested part(s)	# of lots	Sample Size / lot	# of Fails
14b	Ball shear	After 2000h H3TRB (#A2 alt), after 2000c TC (#A4)	PBSS5240T-Q PMEG2020CPA-Q BAS316-Q SZMM3Z8V2T1G PESD1IVN27A-Q	3 3 1 1 1	2 2 2 2 2	0 0 0 0 0
15	Cross Section	After 2000h H3TRB (#A2 alt) and HTRB (#B1), after 2000c TC (#A4)	PBSS5240T-Q PMEG2020CPA-Q BAS316-Q SZMM3Z8V2T1G PESD1IVN27A-Q	3 3 1 1 1	1 1 1 1 1	0 0 0 0 0

5.2 Qualification Results SOT1061D

Table 6 Qualification results according to AEC-Q101 Rev. E and AEC-Q006 Rev. A (SOT1061D)

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	All parts in Table 3	- see notes -		0
	Notes:	All qualification parts prior to tests #A2 HAST/H^{3}TRB, #A3 UHAST, #A4 TC/TCHT/TCDT, #A5 IOL/PTC.					
A2	**HAST** Highly Accelerated Stress Test	JEDEC JESD22-A-110 T_A = 130 °C, RH = 85 %, V_R = 80 % of max. rated reverse voltage or limit of chamber	192 hours	BUK6D43-40P BUK6D23-40E BUK6D81-80E	1 1 1	80 80 80	0 0 0
	Notes:	-					
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	80 80 80	0 0 0
	Notes:	-					
A3 alt	**AC** Autoclave	JEDEC JESD22-A-102 T_A = 121 °C, RH = 100 %, p = 15 psig	96 hours	N/A	N/A	N/A	N/A
	Notes:	Omitted in lieu of alternative test, see test #A3 (UHAST)					
A4	**TC** Temperature Cycling	JEDEC JESD22-A-104 Appendix 6 T = -65 °C to 150°C	2000 cycles	BUK6D43-40P BUK4D60-30 BUK6D23-40E	1 1 1	80 80 80	0 0 0
	Notes:	-					

#	Stress	Test method	Duration	Tested part(s)	# of lots	Sample Size / lot	# of Fails
A4a	**TCHT** Temperature Cycling Hot Test	JEDEC JESD22-A-104 Appendix 6	1000 cycles	BUK6D43-40P BUK4D60-30 BUK6D23-40E	1 1 1	80 80 80	0 0 0
	Notes:	-					
A4a alt	**TCDT** Delamination Test	JEDEC JESD22-A-104 Appendix 6, J-STD-035	1000 cycles	BUK6D43-40P BUK4D60-30 BUK6D23-40E	1 1 1	5 5 5	0 0 0
	Notes:	-					
A5	**IOL** Intermittent Operational Life	MIL-STD-750 Method 1037 T = 25 °C, $\Delta T_j \geq 100$ °C, $t_{on} = t_{off} = 2$ min	2000 hours	BUK6D43-40P BUK4D60-30 BUK6D23-40E	1 1 1	5 5 5	0 0 0
	Notes:	-					
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 $T_j = 175$°C, $V_R = 100\%$ of max. voltage	2000 hours	BUK6D43-40P BUK4D50-30P BUK6D81-80E	1 1 1	80 80 80	0 0 0
	Notes:	-					
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 needed for voltage regulators (Zener diodes) only.					
B2	**HTGB** High Temperature Gate Bias	JEDEC JESD22-A-108	1000 hours	BUK6D43-40P BUK4D50-30P BUK6D81-80E	1 1 1	80 80 80	0 0 0
	HTnGB High Temperature Negative Gate Bias	JEDEC JESD22-A-108	1000 hours	N/A	N/A	N/A	N/A
	Notes:	HTnGB is needed for the initial qualification of a new technology only.					

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/H^{3}TRB and TC	-	BUK6D43-40P BUK6D81-80E BUK4D60-30 BUK6D23-40E	1 1 1 1	2+2 2 2 2 + 2	0 0 0 0
	Notes:	-					
C2	**PD** Physical Dimensions	JEDEC JESD22-B-100	-	SOT1220, SOT1061D	2	30	0
	Notes:	-					
C3	**WBP** Wire Bond Pull Strength	MIL-STD-750-2 Method 2037 / AEC-Q006 (Cu-wire)	-	BUK6D43-40P BUK4D50-30P BUK6D81-80E	1 1 1	5 5 5	0 0 0
	Notes:	-					
C4	**WBS** Wire Bond Shear Strength	AEC-Q101-003, JEDEC JESD22-B116	-	BUK6D43-40P BUK4D50-30P BUK6D81-80E	1 1 1	5 5 5	0 0 0
	Notes:	-					
C5	**DS** Die Shear	MIL-STD-750-2 Method 2017	-	BUK6D43-40P BUK4D50-30P BUK6D81-80E	1 1 1	5 5 5	0 0 0
	Notes:	-					
C6	**TS** Terminal Strength	MIL-STD-750-2 Method 2036 evaluate lead integrity of through-hole leaded parts only	-	N/A	N/A	N/A	N/A
	Notes:	TS is required for leaded parts only. Reported parts are not leaded parts.					
C7	**RTS** Resistance to Solvents	JEDEC JESD22-B107 verify marking permanency	-	N/A	N/A	N/A	N/A
	Notes:	RTS is not required for laser etched parts or parts with no marking. Reported parts are laser etched parts.					
C8	**RSH** Resistance to Solder Heat	JEDEC JESD22-A-111 260 °C ± 5 °C	10 s	N/A	N/A	N/A	N/A
	Notes:	RSH is not applicable for MCD packages, as these are not suitable for wave soldering.					
C9	**TR** Thermal Resistance	JEDEC JESD24-3, 24-4, 24-6 as appropriate	-	BUK6D43-40P	1	10	0
	Notes:	-					
C10	**SD** Solderability	JEDEC J-STD-002	-	PMEG2020CPA-Q	1	30	0
	Notes:	-					

#	Stress	Test method	Duration	Tested part(s)	# of lots	Sample Size / lot	# of Fails
C11	**WG** Whisker Growth Evaluation	according to AEC-Q005		PMEG2020CPA-Q		-	
	Notes:	-					
C12	**CA** Constant Acceleration	MIL-STD-750-2 Method 2006	-	N/A	N/A	N/A	N/A
	Notes:	CA is required for hermetic packaged parts only. Reported package is not a hermetic package.					
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:	DI is required for Power MOS and IGBT parts only. Reported parts are not Power MOS or IGBT parts.					

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 BUK6D81-80E	1 1 1	25 25 25	0 0 0
	Notes:	-					
E3	**ESDH** ESD – HBM Characterization	AEC-Q101-001	-	N/A	N/A	N/A	N/A
	Notes:	-					
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:	UIS is required for MOS and IGBT parts only. Reported parts are not MOS or IGBT parts.					
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 7 Analyses after test (according to Table 3b of AEC-Q006 Rev. A) (SOT1061D)

#	Analysis	Qualification Step	Tested part(s)	# of lots	Sample Size / lot	# of Fails
2	CSAM	Before preconditioning (#A1) of parts submitted to HAST (#A2), TC (#A4) and IOL (#A5)	BUK6D43-40P BUK6D81-80E BUK4D60-30 BUK6D23-40E	1 1 1 1	15 15 15 15	0 0 0 0
4	CSAM	After preconditioning (#A1) of parts submitted to HAST (#A2), TC (#A4) and IOL (#A5)	BUK6D43-40P BUK6D81-80E BUK4D60-30 BUK6D23-40E	1 1 1 1	15 15 15 15	0 0 0 0
	Notes:	Same samples as in CSAM before preconditioning (#2)				

#	Analysis	Qualification Step	Tested part(s)	# of lots	Sample Size / lot	# of Fails
8	CSAM	After 96h HAST (#A2) and after 1000c TC (#A4)	BUK6D43-40P	1	15	0
			BUK6D81-80E	1	15	0
			BUK4D60-30	1	15	0
			BUK6D23-40E	1	15	0
	Notes:	Same samples as in CSAM before preconditioning (#2)				
9a	Ball + Stitch/Wedge pull	After 96h HAST (#A2), after 1000c TC (#A4)	BUK6D43-40P	1	3	0
			BUK6D81-80E	1	3	0
			BUK4D60-30	1	3	0
			BUK6D23-40E	1	3	0
9b	Ball shear	After 96h HAST (#A2), after 1000c TC (#A4)	BUK6D43-40P	1	3	0
			BUK6D81-80E	1	3	0
			BUK4D60-30	1	3	0
			BUK6D23-40E	1	3	0
10	Cross Section	After 96h HAST (#A2) and 1000h HTRB (#B1), after 1000c TC (#A4)	BUK6D43-40P	1	1	0
			BUK4D50-30P	1	1	0
			BUK6D81-80E	1	1	0
			BUK4D60-30	1	1	0
			BUK6D23-40E	1	1	0
13	CSAM	After 192h HAST (#A2) after 2000c TC (#A4)	BUK6D43-40P	1	15	0
			BUK6D81-80E	1	15	0
			BUK4D60-30	1	15	0
			BUK6D23-40E	1	15	0
	Notes:	Same samples as in CSAM before preconditioning (#2)				
14a	Ball + Stitch/Wedge pull	After 192h HAST (#A2), after 2000c TC (#A4)	BUK6D43-40P	1	2	0
			BUK6D81-80E	1	2	0
			BUK4D60-30	1	2	0
			BUK6D23-40E	1	2	0
14b	Ball shear	After 192h HAST (#A2), after 2000c TC (#A4)	BUK6D43-40P	1	2	0
			BUK6D81-80E	1	2	0
			BUK4D60-30	1	2	0
			BUK6D23-40E	1	2	0
15	Cross Section	After 192h HAST (#A2) and 2000h HTRB (#B1), after 2000c TC (#A4)	BUK6D43-40P	1	1	0
			BUK4D50-30P	1	1	0
			BUK6D81-80E	1	1	0
			BUK4D60-30	1	1	0
			BUK6D23-40E	1	1	0

6. Electrical and thermal performance

6.1 Electrical performance

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

6.2 Thermal performance

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

7. Comparison of visual appearance

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

8. Traceability

The assembly site can be identified on the packing labels (outer box as well as reel-label) and (where applicable) by the vendor code in the product marking.

9. Conclusion

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

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