



Final Product/Process Change Notification

Document # :FPCN23483ZE

Issue Date: 20 Dec 2022

Title of Change:	Transfer of Assembly and Test operations of SMA and SMB products to subcontractor Good-Ark China.
Proposed Changed Material First Ship Date:	02 Nov 2023 or earlier if approved by customer
Current Material Last Order Date:	N/A <i>Orders received after the Current Material Last Order Date expiration are to be considered as orders for new changed material as described in this PCN. Orders for current (unchanged) material after this date will be per mutual agreement and current material inventory availability.</i>
Current Material Last Delivery Date:	N/A <i>The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory</i>
Product Category:	Active components – Discrete components
Contact information:	Contact your local onsemi Sales Office or Hoang.Nguyen@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office to place sample order. Sample requests are to be submitted no later than 45 days after publication of this change notification. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Sample Availability Date:	01 Dec 2022
PPAP Availability Date:	01 Dec 2022
Additional Reliability Data:	Contact your local onsemi Sales Office or MohdAzizi.Azman@onsemi.com
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. The change will be implemented at 'Proposed Change Material First Ship Date' in compliance to J-STD-46 or ZVEI, or earlier upon customer approval, or per our signed agreements. onsemi will consider this proposed change and it's conditions acceptable, unless an inquiry is made in writing within 45 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com .
Change Category	
Category	Type of Change
Test Flow	Move of all or part of electrical wafer test and/or final test to a different location/site/subcontractor
Equipment	Production from a new equipment/tool which uses a different basic technology or which due to its unique form or function can be expected to influence the integrity of the final product, Change in final test equipment type that uses a different technology
Process - Assembly	Move of all or part of assembly to a different location/site/subcontractor., Change of mold compound, Die attach material, Change in leadframe dimensions



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Description and Purpose:

This Final Product Change Notification (FPCN) is to announce the planned qualification to transfer Assembly and Test of SMA and SMB products from onsemi Vietnam to subcontractor GoodArk China.

The suffix '-GA01' will be added to the end of the part number.

The products in SMA and SMB package are currently being assembled and tested at onsemi Vietnam.

Upon expiration of this FPCN, these products can be processed at Good-Ark location under new part numbers using its Bill of Materials

	From	To
Assembly Site	onsemi Vietnam	Good-Ark China
Leadframe	copper leadframe thickness: SMA: 10mils SMB: 10mils	copper leadframe thickness: SMA: 8mils SMB: 8mils
Clip	Cu Clip thickness: SMA: 12mils SMB: 12mils	Cu Clip thickness: SMA: 6mils SMB: 8mils
Solder Paste	SN5AG2.5PB92.5 Indium SMQ75	SN5AG2.5PB92.5 Indium 9.15
Mold compound	NITTO GE-200HH	HYSOL GR530

	From	To
Final Test Site	onsemi Vietnam	Good-Ark China

Reason / Motivation for Change:	Supply disruption
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device has been qualified and validated based on the same Product Specification. The device has successfully passed the qualification tests. Potential impacts can be identified, but due to testing performed by onsemi in relation to the PCN, associated risks are verified and excluded. No anticipated impacts.

Sites Affected:	
onsemi Sites	External Foundry/Subcon Sites
None	Good-Ark, China

Marking of Parts/ Traceability of Change:	Changed material can be identified by assembly plant code.
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Reliability Data Summary:

QV DEVICE NAME : NRV TSA4100ET3G

RMS: 84101

PACKAGE: SMA

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=90°C, 100% max rated V	1008 hrs	0/231
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/231
LTSL	JESD22-A119	Ta=-40°C	168 hrs	0/75
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C, mounted on board	1000 cyc	0/231
H3TRB	JESD22-A101	85°C, 85% RH, reverse bias	1008 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/924
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90
SD	JSTD002	Ta = 245C, 5 sec		0/45

QV DEVICE NAME : SUR A8260T3G-VF01

RMS: 83561

PACKAGE: SMA

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/231
LTSL	JESD22-A119	Ta=-40°C	168 hrs	0/75
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C, mounted on board	1000 cyc	0/231
H3TRB	JESD22-A101	85°C, 85% RH, reverse bias	1008 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/924
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90
SD	JSTD002	Ta = 245C, 5 sec		0/45

QV DEVICE NAME : NRVUS360VBT3G

RMS: 83559

PACKAGE: SMB

Test	Specification	Condition	Interval	Results
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs	0/231
HTSL	JESD22-A103	Ta=150°C	1008 hrs	0/231
LTSL	JESD22-A119	Ta=-40°C	168 hrs	0/75
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	15000 cyc	0/231
TC	JESD22-A104	Ta= -55°C to +150°C, mounted on board	1000 cyc	0/231
H3TRB	JESD22-A101	85°C, 85% RH, reverse bias	1008 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/924
RSH	JESD22- B106	Ta = 265C, 10 sec		0/90
SD	JSTD002	Ta = 245C, 5 sec		0/45

NOTE: AEC-1pager is attached.

To view attachments:

1. Download pdf copy of the PCN to your computer
2. Open the downloaded pdf copy of the PCN
3. Click on the paper clip icon available on the menu provided in the left/bottom portion of the screen to reveal the Attachment field
4. Then click on the attached file.

Electrical Characteristics Summary:

Electrical characteristics are not impacted.

List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the **PCN Customized Portal**.

Current Part Number	New Part Number	Qualification Vehicle
NRVSA3100ET3G	NRVSA3100ET3G-GA01	NRVSA4100ET3G
NRVSA4100ET3G	NRVSA4100ET3G-GA01	NRVSA4100ET3G



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NRV TSA4100T3G	NRV TSA4100T3G-GA01	NRV TSA4100ET3G
NRV TSS3100ET3G	NRV TSS3100ET3G-GA01	NRV TSA4100ET3G
NRV TSS5100ET3G	NRV TSS5100ET3G-GA01	NRV TSA4100ET3G
NRV UA110VT3G	NRV UA110VT3G-GA01	SUR A8260T3G-VF01
NRV UA210VT3G	NRV UA210VT3G-GA01	SUR A8260T3G-VF01
SUR A8205T3G-VF01	SUR A8205T3G-GA01	SUR A8260T3G-VF01
SUR A8210T3G-IR02	NRV UA210VT3G-GA01	SUR A8260T3G-VF01
NRV UA120VT3G	NRV UA120VT3G-GA01	SUR A8260T3G-VF01
NRV UA220VT3G	NRV UA220VT3G-GA01	SUR A8260T3G-VF01
SUR A8215T3G-VF01	SUR A8215T3G-GA01	SUR A8260T3G-VF01
NRV UA140VT3G	NRV UA140VT3G-GA01	SUR A8260T3G-VF01
SUR A8130T3G-VF01	SUR A8130T3G-GA01	SUR A8260T3G-VF01
SUR A8240T3G-VF01	SUR A8240T3G-GA01	SUR A8260T3G-VF01
NRV UA160VT3G	NRV UA160VT3G-GA01	SUR A8260T3G-VF01
SUR A8260T3G-VF01	SUR A8260T3G-GA01	SUR A8260T3G-VF01
NRV US110VT3G	NRV US110VT3G-GA01	NRV US360VBT3G
NRV US120VT3G	NRV US120VT3G-GA01	NRV US360VBT3G
NRV US220VT3G	NRV US220VT3G-GA01	NRV US360VBT3G
NRV US360VBT3G	NRV US360VBT3G-GA01	NRV US360VBT3G
SUR S8260T3G-VF01	SUR S8260T3G-GA01	NRV US360VBT3G
NRV US160VT3G	NRV US160VT3G-GA01	NRV US360VBT3G
SUR HS8160T3G-IR02	SUR HS8160T3G-GA01	NRV US360VBT3G
NRV UHS160VT3G	NRV UHS160VT3G-GA01	NRV US360VBT3G
NRV US240VT3G	NRV US240VT3G-GA01	NRV US360VBT3G
NRV US230VT3G-IR02	NRV US230VT3G-GA01	NRV US360VBT3G
SUR S8220T3G-IR02	NRV US220VT3G-GA01	NRV US360VBT3G
SUR S8120T3G-IR02	NRV US120VT3G-GA01	NRV US360VBT3G