Initial Product/Process Change Notification

Document #:IPCN23483ZE
Issue Date:29 Jun 2022

Title of Change:	Transfer of Assembly and Test operations of SMA, SMB and SMC products to subcontractor Good-Ark China.
Proposed Changed Material First Ship Date:	01 Aug 2023 or earlier if approved by customer
Current Material Last Order Date:	01 May 2023 *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*.
Current Material Last Delivery Date:	31 Jul 2023 *The Current Material Last Delivery Date may be subject to change based on build and depletion of the current (unchanged) material inventory*
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.
Additional Reliability Data:	Contact your local onsemi Sales Office or MohdAzizi.Azman@onsemi.com
Type of Notification:	This is an Initial Product/Process Change Notification (IPCN) sent to customers. An IPCN is an advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN). This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 6 months prior to implementation of the change. In case of questions, 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

Description and Purpose:

This Initial Notification (IPCN) is to announce the plan to transfer Assembly and Test of SMA, SMB and SMC products from onsemi Vietnam to subcontractor GoodArk China. The suffix '-GA01' will be added to the end of the part number.

	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

Assembly Plant Code Marking	From (onsemi Vietnam)	To (Good-Ark China)
SMA	VN	g
SMB	V	g
SMC	VN	g

Estimated date for qualification completion: 1 November 2022 . After completion of qualification, the Final PCN will process for issuance to customer.

Reason / Motivation for Change:	Supply disruption
Anticipated impact on fit, form, function, reliability, product safety or manufacturability:	The device will be qualified and validated based on the same Product Specification. No anticipated impacts.

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

Marking of Parts/ Traceability of Change:	Products from Good-ark will be marked with site code “g” prior to date code.

Reliability Data Summary:

QV DEVICE NAME : NRVTSA4100ET3G
RMS: 84101
PACKAGE: SMA

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=90°C, 100% max rated V	1008 hrs
HTSL	JESD22-A103	Ta=150°C	1008 hrs
LTSL	JESD22-A119	Ta=-40°C	168 hrs
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc
TC	JESD22-A104	Ta= -55°C to +150°C, mounted on board	1000 cyc
H3TRB	JESD22-A101	85°C, 85% RH, reverse bias	1008 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	
RSH	JESD22- B106	Ta = 265C, 10 sec	
SD	JSTD002	Ta = 245C, 5 sec	

QV DEVICE NAME : SURA8260T3G-VF01
RMS: 83561
PACKAGE: SMA

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs
HTSL	JESD22-A103	Ta=150°C	1008 hrs
LTSL	JESD22-A119	Ta=-40°C	168 hrs
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc
TC	JESD22-A104	Ta= -55°C to +150°C, mounted on board	1000 cyc
H3TRB	JESD22-A101	85°C, 85% RH, reverse bias	1008 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	
RSH	JESD22- B106	Ta = 265C, 10 sec	
SD	JSTD002	Ta = 245C, 5 sec	

QV DEVICE NAME : NRVUS360VBT3G
RMS: 83559
PACKAGE: SMB

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs
HTSL	JESD22-A103	Ta=150°C	1008 hrs
LTSL	JESD22-A119	Ta=-40°C	168 hrs
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc
TC	JESD22-A104	Ta= -55°C to +150°C, mounted on board	1000 cyc
H3TRB	JESD22-A101	85°C, 85% RH, reverse bias	1008 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	
RSH	JESD22- B106	Ta = 265C, 10 sec	
SD	JSTD002	Ta = 245C, 5 sec	

QV DEVICE NAME : SURS8360T3G-VF01
RMS: 83558
PACKAGE: SMC

Test	Specification	Condition	Interval
HTRB	JESD22-A108	Ta=150°C, 100% max rated V	1008 hrs
HTSL	JESD22-A103	Ta=150°C	1008 hrs
LTSL	JESD22-A119	Ta=-40°C	168 hrs
IOL	MIL-STD-750 (M1037) AEC-Q101	Ta=+25°C, delta Tj=100°C On/off = 2 min	30000 cyc
TC	JESD22-A104	Ta= -55°C to +150°C, mounted on board	1000 cyc
H3TRB	JESD22-A101	85°C, 85% RH, reverse bias	1008 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C	
RSH	JESD22- B106	Ta = 265C, 10 sec	
SD	JSTD002	Ta = 245C, 5 sec	

Electrical Characteristics Summary:

Electrical characteristic will be updated after the completion of qualification.

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
SURS8360T3G-VF01	SURS8360T3G-GA01	SURS8360T3G-VF01
SURS8340T3G	SURS8340T3G-GA01	SURS8360T3G-VF01
SURS8320T3G-VF01	SURS8320T3G-GA01	SURS8360T3G-VF01
SURHS8160T3G-IR02	SURHS8160T3G-GA01	NRVUS360VBT3G
NRVUS230VT3G-IR02	NRVUS230VT3G-GA01	NRVUS360VBT3G
NRVUS240VT3G	NRVUS240VT3G-GA01	NRVUS360VBT3G
NRVUS110VT3G	NRVUS110VT3G-GA01	NRVUS360VBT3G
SURS8260T3G-VF01	SURS8260T3G-GA01	NRVUS360VBT3G
NRVUS120VT3G	NRVUS120VT3G-GA01	NRVUS360VBT3G
SURS8120T3G-IR02	NRVUS120VT3G-GA01	NRVUS360VBT3G
NRVUHS160VT3G	NRVUHS160VT3G-GA01	NRVUS360VBT3G
NRVUS360VBT3G	NRVUS360VBT3G-GA01	NRVUS360VBT3G
SURS8220T3G-IR02	NRVUS220VT3G-GA01	NRVUS360VBT3G
NRVUS220VT3G	NRVUS220VT3G-GA01	NRVUS360VBT3G
NRVUS160VT3G	NRVUS160VT3G-GA01	NRVUS360VBT3G
SURA8215T3G-VF01	SURA8215T3G-GA01	SURA8260T3G-VF01
SURA8130T3G-VF01	SURA8130T3G-GA01	SURA8260T3G-VF01
SURA8240T3G-VF01	SURA8240T3G-GA01	SURA8260T3G-VF01
NRVUA110VT3G	NRVUA110VT3G-GA01	SURA8260T3G-VF01
NRVUA140VT3G	NRVUA140VT3G-GA01	SURA8260T3G-VF01
SURA8205T3G-VF01	SURA8205T3G-GA01	SURA8260T3G-VF01
NRVUA120VT3G	NRVUA120VT3G-GA01	SURA8260T3G-VF01
SURA8210T3G-IR02	NRVUA210VT3G-GA01	SURA8260T3G-VF01
SURA8260T3G-VF01	SURA8260T3G-GA01	SURA8260T3G-VF01
NRVUA220VT3G	NRVUA220VT3G-GA01	SURA8260T3G-VF01
NRVUA210VT3G	NRVUA210VT3G-GA01	SURA8260T3G-VF01
NRVUA160VT3G	NRVUA160VT3G-GA01	SURA8260T3G-VF01

NRVTSS3100ET3G	NRVTSS3100ET3G-GA01	NRVTSA4100ET3G
NRVTSA4100T3G	NRVTSA4100T3G-GA01	NRVTSA4100ET3G
NRVTSA3100ET3G	NRVTSA3100ET3G-GA01	NRVTSA4100ET3G
NRVTSA4100ET3G	NRVTSA4100ET3G-GA01	NRVTSA4100ET3G