



Final Product/Process Change Notification

Document #:FPCN21520ZG

Issue Date: 23 Jun 2023

Title of Change:	Transfer of ONC25 technology to onsemi Aizu, Japan from current site onsemi Gresham, United States and Assembly, Test site transfer of TSOP5 package from onsemi Seremban, Malaysia to onsemi Leshan, China.
Proposed Changed Material First Ship Date:	31 Jan 2024 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 – Integrated circuits
Contact information:	Contact your local onsemi Sales Office or Jan.Gryzbon@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:	30 Jun 2023
PPAP Availability Date:	30 Jun 2023
Additional Reliability Data:	Contact your local onsemi Sales Office or Vladislav.Hrachovec@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
Process - Wafer Production	Move of all or part of wafer fab to a different location/site/subcontractor
Equipment	Production from a new equipment/tool which uses the same basic technology (replacement equipment or extension of existing equipment pool) without change of process.
Process - Assembly	Move of all or part of assembly to a different location/site/subcontractor., Change of mold compound, Die attach material, Change of wire bonding
Description and Purpose:	
<p>This final notification announces the Transfer of ONC25 technology to onsemi Aizu, Japan from current site onsemi Gresham, United States and Assembly, Test site transfer of TSOP5 package from onsemi Seremban, Malaysia to onsemi Leshan, China.</p> <p>The onsemi Aizu, Wafer Fab located at Aizuwakamatsu, Japan has been qualified to process the ONC25 CMOS process.</p> <p>Tool sets are different but the exact same masking layers and steps are being used in the Aizu Fab.</p>	

This change is implemented to mitigate potential supply disruption; customers are encouraged to urgently review this change in order to minimize any potential impact to their supply chain.

	From	To
Wafer Fab site	onsemi Gresham, United States	onsemi Aizu, Japan
Assembly site	onsemi Seremban, Malaysia	onsemi Leshan, China
Final test site	onsemi Seremban, Malaysia	onsemi Leshan, China

	From	To
Die Attach	Conductive Wafer Backside Coat	Eutectic
Bond Wire	0.8mil Au wire	0.8mil bare Cu wire
Mold Compound	SUMITOMO G600FB	SUMITOMO G600FBL

There is no product marking change as a result of this change

Reason / Motivation for Change:	Source/Supply/Capacity Changes,Source/Supply/Capacity Changes Process/Materials Change
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
onsemi Aizu, Japan	None
onsemi Leshan, China	

Marking of Parts/ Traceability of Change:	Customs source information will be updated on product label, and product will be identified by encoded date code.
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Reliability Data Summary:

QV DEVICE NAME: NCV8114ASN330T1G
RMS: S87275
PACKAGE: TSOP5

Test	Specification	Condition	Interval	Results
HTOL	JA108	Ta= 125°C, Test @ R & H	2016 hrs	0/240
HTSL	JESD22-A103	Ta= 150°C	1008 hrs	0/240
HAST		Ta = 130°C, Test @ R	192 hrs	0/240
uHAST		Ta = 130°C	96hr	0/252
TC		Ta= -65°C to +150°C	500cycles	0/252
PC	J-STD-020 JESD22-A113	MSL1 @ 260 °C	-	0/720
ESD HBM	AEC-Q100-002	c = 0, Test @ R & H	2kV	0/3
ESD CDM	AEC-Q100-011	c = 0, Test @ R	1kV	0/3
ED	ON Data Sheet	Cpk > 1.67 Test @ R, H, C	Cpk>1.67	pass
LU	AEC-Q100-004	Test @ EP; Test & Stress @ R & H	LU->100mA LU->100mA	0/6

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
NCV8114ASN330T1G	N/A	NCV8114ASN330T1G
NCV8114ASN120T1G	N/A	NCV8114ASN330T1G
NCV8114ASN165T1G	N/A	NCV8114ASN330T1G
NCV8114ASN180T1G	N/A	NCV8114ASN330T1G
NCV8114ASN250T1G	N/A	NCV8114ASN330T1G
NCV8114BSN330T1G	N/A	NCV8114ASN330T1G
NCV8114BSN300T1G	N/A	NCV8114ASN330T1G
NCV8114BSN180T1G	N/A	NCV8114ASN330T1G
NCV8114BSN150T1G	N/A	NCV8114ASN330T1G
NCV8114BSN120T1G	N/A	NCV8114ASN330T1G
NCV8114ASN300T1G	N/A	NCV8114ASN330T1G
NCV8114ASN280T1G	N/A	NCV8114ASN330T1G