



Final Product/Process Change Notification

Document #:FPCN25451Z

Issue Date:03 Apr 2024

Title of Change:	Qualification of onsemi Aizu Japan as wafer Fab for ONC25 Technology for select products from NCV20061, NCV20081, NCV20091 and NCV20062, NCV20082, NCV20092.
Proposed Changed Material First Ship Date:	10 Oct 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 Adrian.Croitoru@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:	18 Mar 2024
PPAP Availability Date:	01 Apr 2024
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
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	Change of wire bonding
Description and Purpose: onsemi would like to inform its customers of qualification and transfer of a wafer fabrication facility for ONC25 technology at onsemi Aizu, Japan for the devices listed in this FPCN, and wire conversion from Au to Pd-Coated Copper(PCC). All products listed here will be sourced only from onsemi Aizu. There is no change to the orderable part number. There is no product marking change as a result of this notification.	



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NCV20061.NCV20081.NCV20091 Products – All packages		
	From	To
Wafer Fab	onsemi, Gresham, Oregon (US)	onsemi, Aizu (Japan)
Bond Wire	0.8mil Au	0.8mil Pd-Coated Copper (PCC)

NCV20062.NCV20082.NCV20092 Products - under SOIC-8 and TSSOP-8 packages		
	From	To
Wafer Fab	onsemi, Gresham, Oregon (US)	onsemi, Aizu (Japan)
Bond Wire	0.8mil Au	1mil Pd-Coated Copper (PCC)

NCV20062.NCV20082.NCV20092 Products under MICRO-8 package		
	From	To
Wafer Fab	onsemi, Gresham, Oregon (US)	onsemi, Aizu (Japan)
Bond Wire	1mil Au	1mil Pd-Coated Copper (PCC)

Reason / Motivation for Change:	Capacity improvement,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 Carmona, Philippines	
onsemi Seremban, Malaysia	

Marking of Parts/ Traceability of Change:	Custom source information will be updated on product label. Product traceability will be identified by encoded date code.
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Reliability Data Summary:				
QV DEVICE NAME: NCV20061SN2T1G				
RMS: S90295				
PACKAGE: TSOP-5				
Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/80
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/all
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/240

Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
Solderability	J-STD-002	Ta = 245°C, 5 sec	-	0/45
Electrical Distribution	onsemi DataSheet	Cpk ≥ 1.67, Test @ R & C & H	-	0/90

QV DEVICE NAME: NCV20061SQ3T2G

RMS: S90294

PACKAGE: SC-88A

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/80
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/all
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/240
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
Solderability	J-STD-002	Ta = 245°C, 5 sec	-	0/45
Electrical Distribution	onsemi DataSheet	Cpk ≥ 1.67, Test @ R & C & H	-	0/90

QV DEVICE NAME: NCV20062DR2G

RMS: O90248, O90249, O90250, O90252

PACKAGE: SOIC-8

Test	Specification	Condition	Interval	Results
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs	0/240
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/all
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/240
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
Solderability	J-STD-002	Ta = 245°C, 5 sec	-	0/45
Electrical Distribution	onsemi DataSheet	Cpk ≥ 1.67, Test @ R & C & H	-	0/90

QV DEVICE NAME: NCV20062DTBR2G

RMS: O90255

PACKAGE: TSSOP-8

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/all
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/240



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Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
Solderability	J-STD-002	Ta = 245°C, 5 sec	-	0/45
Electrical Distribution	onsemi DataSheet	Cpk ≥ 1.67, Test @ R & C & H	-	0/30

QV DEVICE NAME: NCV20062DMR2G

RMS: S90251

PACKAGE: MICRO-8

Test	Specification	Condition	Interval	Results
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs	0/240
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only		0/all
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc	0/240
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs	0/240
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/240
Solderability	J-STD-002	Ta = 245°C, 5 sec	-	0/45
Electrical Distribution	onsemi DataSheet	Cpk ≥ 1.67, Test @ R & C & H	-	0/30

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
NCV20061SN3T1G	#NONE	NCV20061SN2T1G
NCV20061SN2T1G	#NONE	NCV20061SN2T1G
NCV20061SQ3T2G	#NONE	NCV20061SQ3T2G
NCV20081SN3T1G	#NONE	NCV20061SN2T1G
NCV20081SN2T1G	#NONE	NCV20061SN2T1G
NCV20081SQ3T2G	#NONE	NCV20061SQ3T2G



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NCV20081SQ2T2G	#NONE	NCV20061SQ3T2G
NCV20091SN3T1G	#NONE	NCV20061SN2T1G
NCV20091SN2T1G	#NONE	NCV20061SN2T1G
NCV20091SQ3T2G	#NONE	NCV20061SQ3T2G
NCV20092DTBR2G	#NONE	NCV20062DTBR2G
NCV20092DR2G	#NONE	NCV20062DR2G
NCV20092DMR2G	#NONE	NCV20062DMR2G
NCV20082DTBR2G	#NONE	NCV20062DTBR2G
NCV20082DR2G	#NONE	NCV20062DR2G
NCV20082DMR2G	#NONE	NCV20062DMR2G
NCV20062DTBR2G	#NONE	NCV20062DTBR2G
NCV20062DR2G	#NONE	NCV20062DR2G
NCV20062DMR2G	#NONE	NCV20062DMR2G

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCV20061SN3T1G		NCV20061SN2T1G	#NONE	
NCV20061SQ3T2G		NCV20061SQ3T2G	#NONE	
NCV20081SN3T1G		NCV20061SN2T1G	#NONE	
NCV20081SN2T1G		NCV20061SN2T1G	#NONE	
NCV20081SQ3T2G		NCV20061SQ3T2G	#NONE	
NCV20081SQ2T2G		NCV20061SQ3T2G	#NONE	
NCV20091SN3T1G		NCV20061SN2T1G	#NONE	
NCV20091SN2T1G		NCV20061SN2T1G	#NONE	
NCV20091SQ3T2G		NCV20061SQ3T2G	#NONE	
NCV20092DTBR2G		NCV20062DTBR2G	#NONE	
NCV20092DR2G		NCV20062DR2G	#NONE	
NCV20092DMR2G		NCV20062DMR2G	#NONE	
NCV20082DTBR2G		NCV20062DTBR2G	#NONE	
NCV20082DR2G		NCV20062DR2G	#NONE	
NCV20082DMR2G		NCV20062DMR2G	#NONE	
NCV20062DTBR2G		NCV20062DTBR2G	#NONE	
NCV20062DR2G		NCV20062DR2G	#NONE	
NCV20062DMR2G		NCV20062DMR2G	#NONE	
NCV20061SN2T1G		NCV20061SN2T1G	#NONE	