



# Initial Product/Process Change Notification

Document #: IPCN25451X

Issue Date: 17 May 2023

<b>Title of Change:</b>	Qualification of onsemi Aizu Japan as wafer Fab for ONC25 Technology for select products from NCS20061, NCS20081, NCS20091 and NCS20062, NCS20082, NCS20092.
<b>Proposed First Ship date:</b>	26 Jan 2024 or earlier if approved by customer
<b>Contact Information:</b>	Contact your local onsemi Sales Office or <a href="mailto:Adrian.Croitoru@onsemi.com">Adrian.Croitoru@onsemi.com</a>
<b>PCN Samples Contact:</b>	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
<b>Type of Notification:</b>	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 90 days prior to implementation of the change. In case of questions, contact < <a href="mailto:PCN.Support@onsemi.com">PCN.Support@onsemi.com</a> >
<b>Marking of Parts/ Traceability of Change:</b>	Custom source information will be updated on product label. Product traceability will be identified by encoded date code.
<b>Change Category:</b>	Back Grinding site change, Assembly Change, Wafer Fab Change
<b>Change Sub-Category(s):</b>	Material Change, Manufacturing Site Addition

**Sites Affected:**

onsemi Sites	External Foundry/Subcon Sites
onsemi Aizu, Japan	UTAC, Thailand
onsemi Carmona, Philippines	
onsemi Seremban, Malaysia	
onsemi, ISMF Malaysia	

**Description and Purpose:**

onsemi would like to inform its customers of qualification of an additional wafer fabrication facility for ONC25 technology at onsemi Aizu, Japan for the devices listed in this IPCN, and wire conversion from Au to Pd-Coated Copper (PCC). All products listed here will be dual sourced from onsemi Gresham and onsemi Aizu.

There is no change to the orderable part number.

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

No changes to part specification or datasheet are anticipated.

NCS20061.NCS20081.NCS20091 Products – All packages	From	To
<b>Wafer Fab</b>	onsemi, Gresham, Oregon (US)	onsemi, Gresham, Oregon (US); onsemi, Aizu (Japan)
<b>Bond Wire</b>	0.8mil Au	0.8mil Pd-Coated Copper (PCC)



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NCS20062.NCS20082.NCS20092 Products -under SOIC-8 and TSSOP-8 packages	From	To
Wafer Fab	onsemi, Gresham, Oregon (US)	onsemi, Gresham, Oregon (US); onsemi, Aizu (Japan)
Back Grinding	onsemi, Gresham, Oregon (US)	onsemi, ISMF Seremban
Bond Wire	0.8mil Au	1mil Pd-Coated Copper (PCC)

NCS20062.NCS20082.NCS20092 Products under MICRO-8 package	From	To
Wafer Fab	onsemi, Gresham, Oregon (US)	onsemi, Gresham, Oregon (US); onsemi, Aizu (Japan)
Back Grinding	onsemi, Gresham, Oregon (US)	onsemi, ISMF Seremban
Bond Wire	1mil Au	1mil Pd-Coated Copper (PCC)

## Qualification Plan:

**QV DEVICE NAME:** NCS20061MUTAG, NCS20061SQ3T2G, NCS20061SN2T1G

**RMS:** S90292, S90294, S90295

**PACKAGE:** UDFN-6, SC-88A, TSOP-5

Test	Specification	Condition	Interval
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C	
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
Solderability	JSTD002	Ta = 245°C, 5 sec	
Physical Dimensions	JESD22-B120		

**QV DEVICE NAME:** NCS20062DR2G, NCS20082DR2G, NCS20092DR2G

**RMS:** O90248, O90249, O90250

**PACKAGE:** SOIC-8

Test	Specification	Condition	Interval
High Temperature Operating Life	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs

**QV DEVICE NAME:** NCS20062DMR2G, NCS20062DR2G, NCS20062DTBR2G

**RMS:** O90251, 90252, 90255

**PACKAGE:** MICRO-8, SOIC-8, TSSOP-8

Test	Specification	Condition	Interval
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hrs
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260°C	
Temperature Cycling	JESD22-A104	Ta= -55°C to +150°C	1000 cyc
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs
Solderability	JSTD002	Ta = 245°C, 5 sec	
Physical Dimensions	JESD22-B120		

Estimated date for qualification completion: 11 October 2023



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## 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**.

Part Number	Qualification Vehicle
NCS20092DTBR2G	NCS20062DTBR2G
NCS20092DR2G	NCS20062DR2G
NCS20092DMR2G	NCS20062DMR2G
NCS20082DTBR2G	NCS20062DTBR2G
NCS20082DR2G	NCS20062DR2G
NCS20082DMR2G	NCS20062DMR2G
NCS20062DTBR2G	NCS20062DTBR2G
NCS20062DR2G	NCS20062DR2G
NCS20062DMR2G	NCS20062DMR2G
NCS20091SQ3T2G	NCS20061SQ3T2G
NCS20091SN2T1G	NCS20061SN2T1G
NCS20091SN3T1G	NCS20061SN2T1G
NCS20091MUTAG	NCS20061MUTAG
NCS20081SQ2T2G	NCS20061SQ3T2G
NCS20081SQ3T2G	NCS20061SQ3T2G
NCS20061SQ3T2G	NCS20061SQ3T2G
NCS20061MUTAG	NCS20061MUTAG
NCS20061SN3T1G	NCS20061SN2T1G
NCS20061SN2T1G	NCS20061SN2T1G
NCS20081MUTAG	NCS20061MUTAG
NCS20081SN3T1G	NCS20061SN2T1G
NCS20081SN2T1G	NCS20061SN2T1G