



Final Product/Process Change Notification

Document #:FPCN25110X

Issue Date:21 Dec 2023

Title of Change:	ONC25/ONC25BCD Product Qualification of onsemi Aizu FAB as additional FAB site.
Proposed First Ship date:	28 Mar 2024 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Eric.Rupnow@onsemi.com
PCN Samples Contact:	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.
Additional Reliability Data:	Contact your local onsemi Sales Office or Roy.Moreno@onsemi.com
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com
Marking of Parts/ Traceability of Change:	Products will be identifiable by trace codes and lot numbers associated with the product. onsemi cannot lot combine product from (2) different wafer FABs on the same reel of product.
Change Category:	Wafer Fab Change
Change Sub-Category(s):	Manufacturing Site Addition

Sites Affected:

onsemi Sites	External Foundry/Subcon Sites
onsemi Aizu, Japan	None
onsemi, Gresham United States	

Description and Purpose:

onsemi would like to notify its customers of the qualification of our ONC25 Technology at our onsemi Aizu, Japan FAB as additional FAB site for products listed in this PCN. Background operation will be performed at onsemi Seremban, Malaysia (ISMF).

The exact same process technology has been transferred as is currently running in the onsemi wafer fab located at Gresham, Oregon, USA. Tool sets are different but the exact same masking layers and steps are being used in the onsemi Aizu fab.

This is a capacity expansion to supplement the existing onsemi wafer fab. The parts being qualified are dual sourced and may be processed at either wafer fab in the future depending on capacity requirements.

	Before Change Description	After Change Description	
FAB	onsemi Gresham, USA	onsemi Aizu, Japan	onsemi Gresham, USA
BACKGROUND (only for NCP81071xDR2G and NCP81071xZR2G products)	onsemi Seremban, Malaysia (ISMF) (per PB25721X)	onsemi Seremban, Malaysia (ISMF)	onsemi Seremban, Malaysia (ISMF)

There is no change to the orderable part number.

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



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Reliability Data Summary:

QV DEVICE NAME: NCP81071ADR2G

RMS: 88015

PACKAGE: SOIC8

Test	Specification	Condition	Interval	Results
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre TC, uHAST, and HAST	Post-stress	0/693
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cycles	0/231
HAST	JESD22-A110	110°C, 85% RH, 18.8psig, bias	264 hours	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hours	0/231
Wire Bond Pull	MIL-STD-883 TM 2011	30 bonds per lot, 3 lots.		0/90

QV DEVICE NAME: NCP81071AMNTXG

RMS: 88016

PACKAGE: WDFN8

Test	Specification	Condition	Interval	Results
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre TC, uHAST, and HAST	Post-stress	0/231
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cycles	0/77
HAST	JESD22-A110	110°C, 85% RH, 18.8psig, bias	264 hours	0/77
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hours	0/77
Wire Bond Pull	MIL-STD-883 TM 2011	30 bonds per lot, 3 lots.		0/90

QV DEVICE NAME: NCP81071AZR2G

RMS: 88017

PACKAGE: MSOP8

Test	Specification	Condition	Interval	Results
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C, Pre TC, uHAST, and HAST	Post-stress	0/693
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cycles	0/231
HAST	JESD22-A110	110°C, 85% RH, 18.8psig, bias	264 hours	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hours	0/231
Wire Bond Pull	MIL-STD-883 TM 2011	30 bonds per lot, 3 lots.		0/90

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](#).

Part Number	Qualification Vehicle
NCP81071CZR2G	NCP81071AZR2G
NCP81071CMNTXG	NCP81071AMNTXG



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NCP81071CDR2G	NCP81071ADR2G
NCP81071BZR2G	NCP81071AZR2G
NCP81071BMNTXG	NCP81071AMNTXG
NCP81071BDR2G	NCP81071ADR2G
NCP81071AZR2G	NCP81071AZR2G
NCP81071AMNTXG	NCP81071AMNTXG
NCP81071ADR2G	NCP81071ADR2G

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCP81071AZR2G		NCP81071AZR2G	#NONE	
NCP81071ADR2G		NCP81071ADR2G	#NONE	
NCP81071CZR2G		NCP81071AZR2G	#NONE	
NCP81071CMNTXG		NCP81071AMNTXG	#NONE	
NCP81071CDR2G		NCP81071ADR2G	#NONE	
NCP81071BZR2G		NCP81071AZR2G	#NONE	
NCP81071BMNTXG		NCP81071AMNTXG	#NONE	
NCP81071BDR2G		NCP81071ADR2G	#NONE	
NCP81071AMNTXG		NCP81071AMNTXG	#NONE	