



Initial Product/Process Change Notification

Document #: IPCN25110X

Issue Date: 15 Feb 2023

Title of Change:	ONC25/ONC25BCD Product Qualification of onsemi Aizu FAB as additional FAB/Backgrind site
Proposed First Ship date:	28 Sep 2023 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.
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 90 days prior to implementation of the change. In case of questions, contact <PCN.Support@onsemi.com>
Marking of Parts/ Traceability of Change:	Product 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

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/Backgrind site.

This qualification enables expanded capacity for this technology.

All products listed in this IPCN may be dual sourced from either the current onsemi wafer FAB in Gresham, OR US or onsemi Aizu, Japan.

This technology was previously qualified into Aizu and has been running at these FAB for > 2 years for other products in this technology.

	Before Change Description	After Change Description	
FAB	onsemi Gresham, USA	onsemi Aizu, Japan	onsemi Gresham, USA
BACKGRIND	onsemi Gresham, USA	onsemi Aizu, Japan	onsemi Gresham, USA

There are no product material changes as a result of this change.

There are no product marking changes as a result of this change.



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Qualification Plan:

QV DEVICE NAME: NCP3284MNTXG

RMS: 88014

PACKAGE: PQFN37

Test	Specification	Condition	Interval
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	192 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs

QV DEVICE NAME: NCP81071ADR2G, NCP81071AMNTX, NCP81071AZR2G and NCP81599MNTXG

RMS: 88015, 88016, 88017 and 88018

PACKAGE: LQFN32, SOIC8, WDFN8, MSOP8 and QFN32

Test	Specification	Condition	Interval
PC	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
PC-TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc
HAST	JESD22-A110	110°C, 85% RH, 2.7psig, bias	528 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96hrs

QV DEVICE NAME: NCP380HSNAJAAT1G and NCP380HMUAJAATBG

RMS: 88011 and 888041

PACKAGE: 6 lead TSSOP and 6 lead UDFN

Test	Specification	Condition	Interval
HTOL	JESD22-A108	Ta=125°C, 100 % max rated Vcc	1008 hrs
HTSL	JESD22-A103	Ta= 150°C	1008 hrs
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C, Pre TC, uHAST, HAST for surface mount pkgs only	
TC	JESD22-A104	Ta= -65°C to +150°C	500 cyc
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hrs
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs

QV DEVICE NAME: NCP451AFCT2G

RMS: 88010

PACKAGE: 6 lead WLCSP

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

Estimated date for qualification completion: 30 June 2023

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
NCP451AFCT2G	NCP451AFCT2G
NCP380HMU05AATBG	NCP380HMUAJAATBG
NCP380HMU10AATBG	NCP380HMUAJAATBG



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NCP380HMU15AATBG	NCP380HMUAJAATBG
NCP380HMU20AATBG	NCP380HMUAJAATBG
NCP380HMU21AATBG	NCP380HMUAJAATBG
NCP380HMUAJAATBG	NCP380HMUAJAATBG
NCP380HSN05AAT1G	NCP380HSNAJAAT1G
NCP380HSN10AAT1G	NCP380HSNAJAAT1G
NCP380HSNAJAAT1G	NCP380HSNAJAAT1G
NCP380LMU05AATBG	NCP380HMUAJAATBG
NCP380LMUAJAATBG	NCP380HMUAJAATBG
NCP81599MNTXG	NCP81599MNTXG
NCP81295MNTXG	NCP3284MNTXG
NCP81071CZR2G	NCP81071AZR2G
NCP81071CMNTXG	NCP81071AMNTXG
NCP81071CDR2G	NCP81071ADR2G
NCP81071BZR2G	NCP81071AZR2G
NCP81071BMNTXG	NCP81071AMNTXG
NCP81071BDR2G	NCP81071ADR2G
NCP81071AZR2G	NCP81071AZR2G
NCP81071AMNTXG	NCP81071AMNTXG
NCP81071ADR2G	NCP81071ADR2G
NCP3293MNTXG	NCP3284MNTXG
NCP3285MNTXG	NCP3284MNTXG
NCP3285AMNTXG	NCP3284MNTXG
NCP3284MNTXG	NCP3284MNTXG
NCP3284AMNTXG	NCP3284MNTXG
NCP380LSNAJAAT1G	NCP380HSNAJAAT1G
NCP380LSN10AAT1G	NCP380HSNAJAAT1G
NCP380LSN05AAT1G	NCP380HSNAJAAT1G

Appendix A: Changed Products

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DIKG: DIGI-KEY

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCP451AFCT2G		NCP451AFCT2G	NA	
NCP380HMU10AATBG		NCP380HMUJAATBG	NA	
NCP380HMU15AATBG		NCP380HMUJAATBG	NA	
NCP380HMU20AATBG		NCP380HMUJAATBG	NA	
NCP380HMU21AATBG		NCP380HMUJAATBG	NA	
NCP380HMUJAATBG		NCP380HMUJAATBG	NA	
NCP380HSN05AAT1G		NCP380HSNAJAAT1G	NA	
NCP380HSN10AAT1G		NCP380HSNAJAAT1G	NA	
NCP380HSNAJAAT1G		NCP380HSNAJAAT1G	NA	
NCP380LMU05AATBG		NCP380HMUJAATBG	NA	
NCP380LMUJAATBG		NCP380HMUJAATBG	NA	
NCP81599MNTXG		NCP81599MNTXG	NA	
NCP81295MNTXG		NCP3284MNTXG	NA	
NCP380HMU05AATBG		NCP380HMUJAATBG	NA	
NCP81071CDR2G		NCP81071ADR2G	NA	
NCP81071CZR2G		NCP81071AZR2G	NA	
NCP81071CMNTXG		NCP81071AMNTXG	NA	
NCP81071BMNTXG		NCP81071AMNTXG	NA	
NCP81071BDR2G		NCP81071ADR2G	NA	
NCP81071BZR2G		NCP81071AZR2G	NA	
NCP81071ADR2G		NCP81071ADR2G	NA	
NCP81071AZR2G		NCP81071AZR2G	NA	
NCP81071AMNTXG		NCP81071AMNTXG	NA	
NCP3284AMNTXG		NCP3284MNTXG	NA	
NCP3284MNTXG		NCP3284MNTXG	NA	
NCP380LSNAJAAT1G		NCP380HSNAJAAT1G	NA	
NCP380LSN05AAT1G		NCP380HSNAJAAT1G	NA	
NCP380LSN10AAT1G		NCP380HSNAJAAT1G	NA	