

### Initial Product/Process Change Notification

Document #:IPCN23660XH Issue Date:18 May 2023

Title of Change:	Additional wafer fabric	Additional wafer fabrication facility for ONBCD25 technology in onsemi Aizu located in Aizu, Japan.	
Proposed First Ship date:	15 Jan 2024 or earlier i	15 Jan 2024 or earlier if approved by customer	
Contact Information:	Contact your local onse	emi Sales Office or <u>Jonathan.Bass2onsemi.com</u>	
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:	advance notification al change details and dev The completed qualific Change Notification (F Change Notification (F	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:	No change to marking	No change to marking / Changed material may be identified by date code	
Change Category:	Wafer Fab Change		
Change Sub-Category(s):	Manufacturing Site Add	dition	
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	
onsemi Aizu, Japan		None	

#### **Description and Purpose:**

onsemi would like to inform its customers that we will be qualifying an additional wafer fabrication facility for ONBCD25 technology in onsemi Aizu, Japan for the devices listed in this IPCN.

The wafer technology was previously qualified in 2021 and multiple products are already running production on this flow. These changes can be found under FPCN23660X-XF.

Upon completion of the qualification, all products listed here will be dual sourced from its current wafer fab facility in onsemi wafer fab in Gresham, US or onsemi, Aizu, Japan

	From	То
Fab Site	onsemi Gresham, US	onsemi Gresham, US or onsemi Aizu, Japan

There will be no change to the orderable part number.

There will be no product marking change as a result of this change

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Issue Date:18 May 2023

**Qualification Plans:** 

QV DEVICE NAME: SCY99261ABAZZZAMN1TBG

RMS: S90987

PACKAGE: DFN8 AU SNGL HPBF

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= -65°C to +150°C	500 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

#### QV DEVICE NAME SCY99218EAHBB0DR2G

RMS: 077064 PACKAGE: SOIC-8

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= -65°C to +150°C	500 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

QV DEVICE NAME: NCP4318ALKDR2G

RMS: 090520 PACKAGE: SOIC-8

Test	Specification	Condition	Interval
High Temperature Operating Life	JESD22-A108	Ta=105°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

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# Initial Product/Process Change Notification Document #:IPCN23660XH

Issue Date:18 May 2023

QV DEVICE NAME: NCV6324BMTAAWTBG

RMS: S90590

PACKAGE: WDFN8 AU SNGL HPBF WFS

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
Early Life Failure Rate	JESD22-A108	Ta=125°C, 100 % max rated Vcc	48 hrs
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	1000 сус
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

**QV DEVICE NAME: AX71551MNZ** 

RMS: 090959 PACKAGE: QFN 48 7x7

Test	Specification	Condition	Interval
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hours
Preconditioning	J-STD-020 JESD-A113	MSL 3 @ 260 °C	
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cycles
Highly Accelerated Stress Test	JESD22-A110	130°C, 85% RH, 18.8psig, bias	96 hours
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hours

**QV DEVICE NAME: NCP3237MNTXG** 

RMS: 071343 PACKAGE: QFN18

Test	Specification	Condition	Interval
High Temperature Operating Life	JESD22-A108	Ta=95°C, Tj=150°C, Vdd=15V	504 hours
Early Life Failure Rate	JESD22-A108	Ta=95°C, Tj=150°C, Vdd=15V	504 hours
High Temperature Storage Life	JESD22-A103	Ta= 150°C	1008 hours
Preconditioning	J-STD-020 JESD-A113	MSL 1 @ 260 °C	
Temperature Cycling	JESD22-A104	Ta= -65°C to +150°C	500 cycles
Highly Accelerated Stress Test	JESD22-A110	110°C, 85% RH, biased	264 hours
Unbiased Highly Accelerated Stress Test	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hours

Estimated date for qualification completion: 16 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 <u>PCN Customized Portal</u>.

Part Number	Qualification Vehicle
NCP4305AMTTWG	SCY99261ABAZZZAMN1TBG
NCP4305DMNTWG	SCY99261ABAZZZAMN1TBG
NCP4305DMTTWG	SCY99261ABAZZZAMN1TBG
NCP4306AAAZZZADR2G	SCY99218EAHBB0DR2G
NCP4306AAAZZZAMN1TBG	SCY99261ABAZZZAMN1TBG
NCP4306AAAZZZAMNTWG	SCY99261ABAZZZAMN1TBG
NCP4306AADZZZADR2G	SCY99218EAHBB0DR2G
NCP4318AHJDR2G	NCP4318ALKDR2G
NCP4318ALCDR2G	NCP4318ALKDR2G
NCP4318ALLDR2G	NCP4318ALKDR2G
NCP4318ALSDR2G	NCP4318ALKDR2G
NCP4318BLCDR2G	NCP4318ALKDR2G
NCP6323DMTAATBG	NCV6324BMTAAWTBG
NCP6324BMTAATBG	NCV6324BMTAAWTBG
NCP81233MNTXG	NCP3237MNTXG
NCP4318ALKDR2G	NCP4318ALKDR2G
NCP4318AHDDR2G	NCP4318ALKDR2G
NCP43080DMTTWG	SCY99261ABAZZZAMN1TBG
NCP43080AMTTWG	SCY99261ABAZZZAMN1TBG
NCP43080ADR2G	SCY99218EAHBB0DR2G
NCP4306AAHZZZADR2G	SCY99218EAHBB0DR2G
NCP4306AADZZZAMNTWG	SCY99261ABAZZZAMN1TBG
NCP4306AADZZZAMN1TBG	SCY99261ABAZZZAMN1TBG

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