



Final Product/Process Change Notification

Document #:FPCN23749XB

Issue Date:01 Jun 2022

Title of Change:	Wafer fab transfer to onsemi Fab10, Pocatello, ID USA from Fab2, Oudenaarde, Belgium related to Fab2 sale
Proposed First Ship date:	08 Sep 2022 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Kevin.VanHyfte@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 Catherine.DeKeukeleire@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:	Traceability guaranteed by datecode
Change Category:	Wafer Fab Change
Change Sub-Category(s):	Design change (metal tune), Datasheet/Product Doc change, Manufacturing Site Transfer

Sites Affected:

onsemi Sites	External Foundry/Subcon Sites
onsemi Pocatello Idaho, United States	None

Description and Purpose:

Wafer fab transfer to onsemi Fab10 Pocatello Idaho, United States from Fab2 Oudenaarde, Belgium related to Fab2 sale. Subject to a commercial agreement, onsemi may extend the deliveries outside the First Ship Date which is the proposed date of implementation.

	From	To
Fab Site	Fab2, Oudenaarde, Belgium (Current Fab)	Fab10, Pocatello, Idaho, USA (New Fab)
Wafer size	Substrate: Si (150mm) 6"	Substrate: Si (200mm) 8"
Design layout	Mask set revision 'OAB'	Mask set revision 'OAD' by metal tune
Data sheet	Rev. 3 (NCP1083) Rev. 7 (NCP1081)	Rev. 4 (NCP1083) Rev. 8 (NCP1081) See changes at next page

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

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

Reliability Data Summary:

QV DEVICE NAME : 23045-902

PACKAGE : 20 TSSOP

Test	Specification	Condition	Interval	Results
HBM	JESD22-A114	0k5V, 1kV, 1k5V, 2kV, 2k5V	2kV	0/15
MM	JESD22-A115	50V, 100V, 150V, 200V, 250V	200V	0/15
CDM	JS-002	250V, 500V, 750V	500V	0/9
LU	JESD78	+/- 100 mA, O.V. 57V, Ta = 150°C	100mA	0/6

QV DEVICE NAME : 20241-011

RMS : O76881 + I76856

PACKAGE : 52 QFN

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta=125°C, biased	504 hrs	0/77

QV DEVICE NAME : 0CBCA-603, 22044-600, 19891-002

RMS : O78017 + B78022, O46315, O50270 + O46597

PACKAGE : 20 TSSOP, 36 SSOP, 20 SSOP

Test	Specification	Condition	Interval	Results
TC	JESD22-A104	Ta= -55°C to +150°C	500 cyc	0/231
HAST	JESD22-A110	130°C, 85% RH, 18.8psig, biased	96 hrs	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	48 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 3, IR reflow @ 260°C, TC, uHAST, HAST		0/693

Electrical Characteristics Summary:

Electrical characteristics are not impacted except the following Spec Parameters as a result of the design layout change. The design change is needed to guarantee the electrical characteristics above the minimum specified limits.

Data sheet	From	To
<i>I_Rinrush1</i>	min 95 - typ 125 - max 155 mA	min 95 - typ 130 - max 160 mA
<i>I_Rinrush2</i>	min 260 - typ 310 - max 360 mA	min 260 - typ 340 - max 390 mA
<i>I_Rlilim1</i>	min 450 - typ 510 - max 570 mA	min 450 - typ 525 - max 600 mA
<i>I_Rlilim2</i>	min 600 - typ 645 - max 690 mA	min 600 - typ 665 - max 730 mA
<i>I_Rlilim3</i>	min 720 - typ 770 - max 820 mA	min 720 - typ 790 - max 865 mA
<i>I_Rlilim4</i>	min 970 - typ 1100 - max 1230 mA	min 970 - typ 1130 - max 1290 mA

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
NCP1081DEG	23045-902; 20241-011; 0CBCA-603; 22044-600; 19891-002
NCP1081DER2G	23045-902; 20241-011; 0CBCA-603; 22044-600; 19891-002
NCP1083DEG	23045-902; 20241-011; 0CBCA-603; 22044-600; 19891-002
NCP1083DER2G	23045-902; 20241-011; 0CBCA-603; 22044-600; 19891-002

Appendix A: Changed Products

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Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCP1081DEG		23045-902; 20241-011; 0CBCA-603; 22044-600; 19891-002	NA	
NCP1083DEG	0HIPO-004-XTD	23045-902; 20241-011; 0CBCA-603; 22044-600; 19891-002	NA	
NCP1083DER2G	NCP1083DER2GOSTR-ND	23045-902; 20241-011; 0CBCA-603; 22044-600; 19891-002	NA	
NCP1081DER2G	0HIPO-002-XTP	23045-902; 20241-011; 0CBCA-603; 22044-600; 19891-002	NA	