onsemi

Final Product/Process Change Notification Document #:FPCN24045X Issue Date: 26 Jan 2022

Title of Change:	Assembly and Test Capacity Expansion to HANA Semiconductor for NCL2801 SOIC-8 Products.		
Proposed First Ship date:	03 May 2022 or earlier if approved by customer		
Contact Information:	Contact your local onsemi Sales Office or joseph.acapuyan@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 Chielo.Basa@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 <u>PCN.Support@onsemi.com</u>		
Marking of Parts/ Traceability of Change:	On the label of the box and reel, the ASSY LOC: DZ will indicate product assembled in HANA Semiconductor. Please see sample label on Page 2 at the following URL http://www.onsemi.com/pub/Collateral/LABELRM-D.PDF to see the location of the ASSY LOC.		
Change Category:	Assembly Change, Test	Assembly Change, Test Change	
Change Sub-Category(s):	Manufacturing Site Addition, Material Change		
Sites Affected:			
onsemi Sites		External Foundry/Subcon Sites	

None

Description and Purpose:

onsemi would like to inform its customers of the qualification of Hana Semiconductor (Thailand) for the assembly and test of NCL2801, SOIC8 products listed in this Final Product Change Notification (FPCN).

HANA Semiconductor, Thailand

This is a capacity expansion, and at the end of the FPCN approval cycle, these products may be dual sourced from either HANA Semiconductor, Thailand or from OSPI Carmona, Philippines.

For assembly, BOM changes associated with this IPCN are shown here:

	Before Change Description	After Change Description	
Site	onsemi Carmona, Philippines	onsemi Carmona, Philippines	HANA Semiconductor
LeadFrame	HDLF CuAg	HDLF CuAg	UHDLF CuAg BOT
Die Attach	CRM-1076WB	CRM-1076WB	EN4900LC-18
Bond Wire	PdCu 1 mils*	PdCu 1 mils*	CuPdAu 1 mils
Mold Compound	G600	G600	CV8214C

*Products being built in OSPI Carmona is already under conversion to PdCu wire under FPCN24061X. This qualification will ensure that both sites are shipping using Cu wire.

Product marking changes are shown here:

	From	То	
Site	onsemi Carmona, Philippines	onsemi Carmona, Philippines	HANA Semiconductor
Product marking change	Assy Location: P	Assy Location: P	Assy Location: H

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Reliability Data Summary:

QV DEVICE NAME: NCL2801CDADR2G

RMS: 077870; 080056

PACKAGE: SOIC 8

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta= 125°C	1008 hrs	0/231
TC	JESD22-A104	Ta= -65°C to + 150°C	1000 cyc	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL 1 @ 260°C		0/462
SD	JSTD002	Ta = 245C, 10 sec		0/45
PD	JESD22-B100 and JESD22-B108	Per Case Outline		0/30

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
NCL2801CDBDR2G	NCL2801CDADR2G
NCL2801CFADR2G	NCL2801CDADR2G
NCL2801CDADR2G	NCL2801CDADR2G