Final Product/Process Change Notification

Document #:FPCN24218X
Issue Date:10 Mar 2022

Title of Change:	NCP1399/NCP13992 - Assembly Qualification to UTAC, Thailand for capacity expansion.
Proposed First Ship date:	18 Jun 2022 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Scott.Brow@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 Rhica.Loredo@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:	Product marked with "G" as assembly location is built in UTAC, Thailand Product marked with "P" as assembly location is built in Carmona, Philippines
Change Category:	Assembly Change
Change Sub-Category(s):	Manufacturing Site Addition

Sites Affected:

onsemi Sites	**External Foundry/Subcon Sites**
None	UTAC, Thailand

Description and Purpose:

onsemi would like to notify its customers of the qualification of UTAC, Thailand (UTL2) for the assembly of the part numbers listed in this Final Product Change notification (FPCN). At the expiry of this notification, the part numbers listed may be assembled in either OSPI (onsemi Philippines) or UTAC.

	Before Change	**After Change**	
LeadFrame	SOIC-16 Cu Frame (Less Pins 2 and 14)	SOIC-16 Cu Frame (Less Pins 2 and 14)	SOIC-16 Cu Frame (Less Pins 2 and 14)
Die Attach	CRM-1191A Non-conductive	CRM-1191A Non-conductive	Ablestik ABP8910T Non-Conductive
Bond Wire	1.0mil AuPdCu*	1.0mil AuPdCu	1.0 AuPdCu
Mold Compound	Sumitomo G600	Sumitomo G600	Sumitomo G633
Assembly Site	OSPI	OSPI	UTAC (UTL2)

*AuPdCu was qualified in OSPI per FPCN24061X

	Current (OSPI)	**New (UTAC)**
Product marking change	Trace code: P(WLYWW)G**	Trace code: G(WLYWW)G

**See the datasheet for more information regarding the trace code marking.

Reliability Data Summary:

QV DEVICE NAME : NCP1399ACDR2G
RMS : O77266, O78735, O78737, O79145
PACKAGE : SOIC 16lds

Test	Specification	Condition	Interval	Results
HTOL	JESD22-A108	Ta = 125°C, 100 % max rated Vcc	1008 hrs	0 / 231
HTBB	JESD22-A108	Ta = 125°C, 100 % max rated Vcc	1008 hrs	0 / 231
HTSL	JESD22-A103	Ta = 150°C	1008 hrs	0 / 231
TC	JESD22-A104	Ta = -65°C to +150°C	500 cyc	0 / 231
HAST	JESD22- A110	130°C, 85% RH, 18.8psig, bias	192hrs	0 / 231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0 / 231
PC	J-STD-020 I JESD-A113	MSL 1 @260°C		0/693
PD	JESD22-B100B	Package Outline		0/30
SD	JSTD002	Ta = 245C, 5 sec		0 /15

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
NCP13992ACDR2G	NCP1399ACDR2G
NCP1399APDR2G	NCP1399ACDR2G
NCP1399ACDR2G	NCP1399ACDR2G