onsemi

Final Product/Process Change Notification Document #:FPCN24218XA Issue Date:13 Jun 2022

Title of Change:	NCP1399/NCP13992 - Assembly Qualification to UTAC, Thailand for capacity expansion - Phase 2.		
Proposed First Ship date:	20 Sep 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 <u>Rhica.Loredo@onsemi.com</u>		
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:	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 onsemi Carmona, Philippines or UTAC, Thailand.

Before Change		After Change		
Lead Frame	SOIC-16 Cu Frame (Less Pins 2 and 14)	SOIC-16 Cu Frame	SOIC-16 Cu Frame	
Lead I fame		(Less Pins 2 and 14)	(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	onsemi Carmona, Philippines	onsemi Carmona, Philippines	UTAC (UTL2)	

	Current (onsemi Carmona, Philippines)	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: 077266, 078735, 078737, 079145 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	192 hrs	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 <u>PCN Customized Portal</u>.

Part Number	Qualification Vehicle		
NCP13992AWDR2G	NCP1399ACDR2G		
NCP13992AUDR2G	NCP1399ACDR2G		
NCP13992ATDR2G	NCP1399ACDR2G		
NCP13992ASDR2G	NCP1399ACDR2G		
NCP13992ARDR2G	NCP1399ACDR2G		
NCP13992ANDR2G	NCP1399ACDR2G		
NCP13992AMDR2G	NCP1399ACDR2G		
NCP13992ALDR2G	NCP1399ACDR2G		
NCP13992AKDR2G	NCP1399ACDR2G		
NCP13992AJDR2G	NCP1399ACDR2G		
NCP13992AHDR2G	NCP1399ACDR2G		
NCP13992AGDR2G	NCP1399ACDR2G		
NCP13992AFDR2G	NCP1399ACDR2G		
NCP13992AEDR2G	NCP1399ACDR2G		



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NCP13992ADDR2G	NCP1399ACDR2G		
NCP13992ABDR2G	NCP1399ACDR2G		
NCP13992AADR2G	NCP1399ACDR2G		
NCP1399ATDR2G	NCP1399ACDR2G		
NCP1399ASDR2G	NCP1399ACDR2G		
NCP1399ARDR2G	NCP1399ACDR2G		
NCP1399ANDR2G	NCP1399ACDR2G		
NCP1399AMDR2G	NCP1399ACDR2G		
NCP1399AIDR2G	NCP1399ACDR2G		
NCP1399AHDR2G	NCP1399ACDR2G		
NCP1399AGDR2G	NCP1399ACDR2G		
NCP1399AFDR2G	NCP1399ACDR2G		
NCP1399AADR2G	NCP1399ACDR2G		



Appendix A: Changed Products

Product	Customer Part Number	Qualification Vehicle	New Part Number	Replacement Supplier
NCP13992AFDR2G		NCP1399ACDR2G		
NCP13992AADR2G		NCP1399ACDR2G		
NCP1399AIDR2G		NCP1399ACDR2G		
NCP1399AADR2G		NCP1399ACDR2G		
NCP13992ABDR2G		NCP1399ACDR2G		