



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20283

Generic Copy

Issue Date: 30-Oct-2013

TITLE: NCP330 & NCP340 Cu Wire Qualification at ON Semiconductor, Seremban, Malaysia facility.

PROPOSED FIRST SHIP DATE: 30-Jan-2014

AFFECTED CHANGE CATEGORY(S): Assembly Process

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:

Contact your local ON Semiconductor Sales Office or Shilpa Rao <shilpa.rao@onsemi.com>

SAMPLES: Contact your local ON Semiconductor Sales Office

ADDITIONAL RELIABILITY DATA: Available

Contact your local ON Semiconductor Sales Office or Ken Fergus <ken.fergus@onsemi.com>

NOTIFICATION TYPE:

Final Product/Process Change Notification (FPCN)

Final change notification sent to customers. FPCNs are issued at least 90 days prior to implementation of the change.

ON Semiconductor will consider this change approved unless specific conditions of acceptance are provided in writing within 30 days of receipt of this notice. To do so, contact <quality@onsemi.com>.

DESCRIPTION AND PURPOSE:

ON Semiconductor is pleased to announce the completion of Cu Wire qualification for the NCP330MUTBG and NCP340MUTBG at ON Semiconductor's Seremban, Malaysia facility.

The NCP330 & NCP340 are currently assembled at the ON Semiconductor Seremban, Malaysia facility with Au Wire. At the expiration of this PCN, these devices will be built with Cu Wire at the same site.

There is no change in package outline or electrical performance of the parts – they continue to fully meet datasheet specifications.



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RELIABILITY DATA SUMMARY:

Reliability Test Results:

All qualification requirements were successfully met.

Qual Vehicles

- NCP330MUTBG

	Test	Name	Test Conditions	End Point Req's	Test Results	(rej/ ss)	(rej/ ss)	(rej/ ss)	(rej/ ss)
					Read Point	Lot A	Lot B	Lot C	Control
1	Prep	Sample preparation and initial part testing	various	---	Initial Electrical	done	done	done	done
2	PC	MSL 1 Preconditioning	IR @ 260 °C	c = 0, Room		done	done	done	done
3	AC-PC	Autoclave + PC	121°C/100% RH/15psig	c = 0, Room	Post PC Electrical	0/84	0/84	0/84	0/84
					96 Hrs	0/84	0/84	0/84	0/84
4	TC-PC	Temperature Cycling + PC	Ta = -65/150° C	c = 0, Room & Hot	Post PC Electrical	0/88	0/88	0/88	0/88
					500 Cyc	0/84	0/84	0/84	0/84
5	HAST - PC	Highly Accelerated Stress Test	Temp= +131°C, RH=85% , p = 18.8 psig, bias	c = 0, Room & Hot	Post PC Electrical	0/91	0/91	0/91	0/91
					96 Hrs	0/91	0/91	0/91	0/91
6	HTSL	High Temperature Storage Life	Ta = 150° C	c = 0, Room & Hot	Initial	0/111	0/111	0/111	0/111
					504 Hrs	0/106	0/106	0/106	0/106
					1008 Hrs	0/101	0/101	0/101	0/101
7	RSH	Resistance to Solder Heat	260 C Immersion	c = 0, Room	Electrical	0/30	0/30	0/30	0/30
8	DPA	Destructive Physical Analysis	Following TC 500cyc + PC	Compare to AEC Criteria	Done				
9	DPA	Destructive Physical Analysis	Following HAST 96hrs + PC	Compare to AEC Criteria	Done				
10	DPA	Destructive Physical Analysis	Following HTSL 1008hrs + PC	Compare to AEC Criteria	Done				

ELECTRICAL CHARACTERISTIC SUMMARY:

Electrical characteristics meet device specifications.

CHANGED PART IDENTIFICATION:

At the expiration of this FPCN devices will be assembled with Cu Wire at ON Semiconductor's existing Seremban facility. Devices with Cu Wire will have date code of WW05, 2014 or later.

List of affected General Parts:

NCP330MUTBG
NCP340MUTBG