



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION# 16860Generic Copy

Issue Date: 23-May-2012**TITLE:** Qualification of Vigilant Technology, Bangkok, Thailand for Assembly/Test of PDIP7 LD (less pin 6)**PROPOSED FIRST SHIP DATE:** 23-Aug-2012**AFFECTED CHANGE CATEGORY(S):** Subcontractor Assembly/Test Location**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**Contact your local ON Semiconductor Sales Office or <Scott.Brow@onsemi.com>**SAMPLES:** Contact your local ON Semiconductor Sales Office or John Flynn<j.flynn@onsemi.com>**ADDITIONAL RELIABILITY DATA:** AvailableContact 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:**

This is a Final Product Change Notice to alert customers of the qualification of Vigilant Technology, Bangkok, Thailand, (ISO9001:2000 / TS16949 / ISO14001 certified) to assemble and test products in PDIP7 lead packaged devices listed in this notification. Vigilant will provide additional capacity to supplement ON Semiconductors' current assembly & test facility located at Unisem, Batam, Indonesia. Vigilant is already a qualified site for assembly & test to run PDIP8 lead packages for ON Semiconductor.


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RELIABILITY DATA SUMMARY:
Reliability Test Results:

#	Test	Name	Test Conditions	End Point	Test Result	(rej/ ss)	(rej/ ss)	(rej/ ss)	(rej/ ss)
					Read Point	Lot A Vigilant	Lot B Vigilant	Lot C Vigilant	Lot D Unisem control
1	Prep	Sample prep and initial part testing	various	---	Initial Electrical	done	done	done	done
4	HTOL	High Temp Operating Life	TA = 125C, 50V bias	c=0, Room	504 hrs	0/80	0/80	0/80	0/80
					1008 hrs	0/80	0/80	0/80	0/80
5	HTBB	High Temp Blocking Bias	TA=125C, bias = 600V	c=0, Room	504 hrs	0/80	0/80	0/80	0/80
					1100 hrs	0/80	0/80	0/80	0/80
7	TC	Temp Cycle	-65/+150 C	c=0, Room	500 cyc	0/80	0/80	0/80	0/80
8	AC	Autoclave	TA=+121C, RH = 100%, PSIG= 15, no bias	c=0, Room	96 hrs	0/80	0/80	0/80	0/80
9	UHASt	UHASt	TA=+130C, RH = 85%, PSIG= 18.8, no bias	c=0, Room	96 hrs	0/80	0/80	0/80	0/80

ELECTRICAL CHARACTERISTIC SUMMARY:

There is no change in the electrical performance. Datasheet specifications remain unchanged.

CHANGED PART IDENTIFICATION:

Devices assembled by Vigilant will include the character 'V' as the identifier in the trace code. Upon expiration of the PCN devices may be sourced from either Vigilant, or previously qualified assembly locations. Manufacturing traceability will be maintained to allow identification of the assembly source.

As Vigilant will be using pre-plated NiPdAu lead frames as compared to the Sn Plating done at Unisem, as per JESD97, May 2004, section 5 the following information will be included to indicate the appropriate Pb-free 2nd level interconnect:

- Package labeling for material assembled in Vigilant will state 'e4', to indicate the use of precious metals, no Sn
- Package labeling for material assembled in previously qualified assembly locations will state 'e3' to indicate the use of Sn.



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List of affected General Parts:

NCP1010AP065G
NCP1010AP100G
NCP1010AP130G
NCP1011AP065G
NCP1011AP100G
NCP1011AP130G
NCP1012AP065G
NCP1012AP100G
NCP1012AP133G
NCP1013AP065G
NCP1013AP100G
NCP1013AP133G
NCP1014AP065G
NCP1014AP100G
NCP1015AP065G
NCP1015AP100G
NCP1027P065G
NCP1027P100G
NCP1028P065G
NCP1028P100G