ON Semiconductor

FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20074

Generic Copy

Issue Date: 26-Apr-2013

TITLE: Qualification of Vigilant Technology, Bangkok, Thailand for Assembly/Test of PDIP7 LD (less pin 7).

PROPOSED FIRST SHIP DATE: 26-Jul-2013

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: 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:

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 and other PDIP 7 lead packages for ON Semiconductor.

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RELIABILITY DATA SUMMARY:

#	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
2	HTBB	High Temp Blocking Bias	TA = 125C, 450 V bias	c = 0, Room	**504 Hrs**	0/80	0/80	0/80	0/80
3	HVTHB	High Voltage Temperature Humidity Bias	TA=85C, 60% RH, 450V bias	c = 0, Room	**168hrs**	0/80	0/80	0/80	0/80
4	HTOL	High Temp Operating Life	TA = 125C, 100 V 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	HTSL	High Temperature Storage life	TA=150C	c = 0, Room	504 hrs	0/80	0/80	0/80	0/80
					1008 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
					1000 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.

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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.

List of affected General Parts:

NCP1216AP65G
NCP1216AP100G
NCP1216AP133G
NCP1216P65G
NCP1216P100G
NCP1216P133G
NCP1217AP65G
NCP1217AP100G
NCP1217AP133G
NCP1217P65G
NCP1217P100G
NCP1217P133G