



FINAL PRODUCT/PROCESS CHANGE NOTIFICATION #20236Generic Copy

Issue Date: 20-Sep-2013**TITLE:** Final Notification of Qualification of ON Semiconductor Philippines Inc. for Assembly of 8 Lead TSSOP 4.4x3.0mm Packages.**PROPOSED FIRST SHIP DATE:** 20-Dec-2013**AFFECTED CHANGE CATEGORY(S):** ON Semiconductor Assembly**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**Contact your local ON Semiconductor Sales Office or <Shao.Sia@onsemi.com>**SAMPLES:** Contact your local ON Semiconductor Sales Office**ADDITIONAL RELIABILITY DATA:**

Contact your local ON Semiconductor Sales Office.

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:**FPCN#20236 is available at www.onsemi.com. This is to notify customers of the assembly site transfer of 8 Lead TSSOP8 4.4x3.0mm package. Historically, the device listed was being assembled at Amkor located in Laguna, Philippines. At the expiration of Final PCN, the device listed will be assembled at ON Semiconductor located in Cavite, Philippines. No MSL classification change on this move. ON Semiconductor will retain MSL 3 rating from previous assembly site.


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RELIABILITY DATA SUMMARY:
Reliability Test Results:

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	Lot 2
Prep	Sample preparation and initial part testing	various	---	Initial Electrical	done	done	done	done
HTSL	High Temp Storage Life	Temp = +150°C for 1008 hours	c = 0, Room	508 Hrs	0/80	0/80	0/80	0/80
				1008 Hrs	0/80	0/80	0/80	0/80
PC	MSL3 Preconditioning	3x IR @ 260 deg C	c = 0, Room	Post Electrical	0/160	0/160	0/160	0/160
TC-PC	Temp Cycle + Preconditioning	Temp = -65°C to +150°C; for 500 cycles	c = 0, Room	Post PC Electrical	0/80	0/80	0/80	0/80
				500 cyc	0/80	0/80	0/80	0/80
AC-PC	Autoclave + Preconditioning	Temp = +121°C; RH = 100%, psig ~15 for 96hr	c = 0, Room	Post PC Electrical	0/80	0/80	0/80	0/80
				96 hrs	0/80	0/80	0/80	0/80
SAT	Scanning Acoustic Tomography	Compare for Delamination before and after PC	Compare to existing data	Results	0/22	n/a	n/a	n/a
CDPA	Custom Destructive Physical Analysis	Wire Bond Pull Test following 500 cyc TC + PC	Cpk > 1.33	30 bonds minimum	0/30	0/30	0/30	0/30
BPS	Bond Pull Strength	Cpk > 1.33	5 parts minimum	30 bonds minimum	0/30	0/30	0/30	0/30
BS	Bond Shear	Cpk > 1.33	5 parts minimum	30 bonds minimum	0/30	0/30	0/30	0/30
SD	Solderability	Solder Temp= 245°C	Visual Inspection	15 units minimum	0/15	0/15	0/15	0/15
PD	Physical Dimension Inspection	Cpk > 1.33	Inspection	10 units minimum	0/10	0/10	0/10	0/10

List of affected General Parts:

NB2305AI1DTG
 NB2305AI1DTR2G
 NB2305AI1HDTG
 NB2305AI1HDTR2G
 NB3N2304NZDTG
 NB3N2304NZDTR2G