ON Semiconductor

INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION #16820

Generic Copy

Issue Date: 23-Feb-2012

TITLE: PCWB/PCWC/PCWD: Implementation of pre-mold plasma clean

PROPOSED FIRST SHIP DATE: 01-Jul-2012 or earlier if approved by customer

AFFECTED CHANGE CATEGORY(S): Assembly process

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or <filip.thierens@onsemi.com>

NOTIFICATION TYPE:

Initial Product/Process Change Notification (IPCN)

First change notification sent to customers. IPCNs are issued at least 120 days prior to implementation of the change. An IPCN is advance notification about an upcoming change and contains general information regarding the change details and devices affected. It also contains the preliminary reliability qualification plan.

The completed qualification and characterization data will be included in the Final Product/Process Change Notification (FPCN).

This IPCN notification will be followed by a Final Product/Process Change Notification (FPCN) at least 90 days prior to implementation of the change.

DESCRIPTION AND PURPOSE:

This is to announce the Implementation of plasma clean operation prior to mold during assembly processing. The purpose is to improve quality of the packaging.

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QUALIFICATION PLAN:

Estimated date for qualification Completion: Mar/31/2012

Package Change Qualification Plan

ON Semi Product Name :	0PCWD	Qual Plan Revision :	1-0
Customer Product Name :		Date :	13-Jan-2012
Maskset :	not applicable	Prepared by :	Daniel Vanderstraeten
Die Size :		Approved by :	
Process & Waferfab :	plasma clean qualification	Qual Start Date Forecast :	
Package & Assembly House :	NQFP 64, UNISEM	Total parts required :	231

ACCELERATED ENVIRONMENT STRESS TESTS

Test #	Test	Reference	Test Conditions	Electrical Test Requirements	Sample Size per lot	Accept Criteria	# of Lots	Total Parts Required	Comments
A1	Moisture Preconditioning (PC)	J-STD-020 & JESD22-A113	Moisture Soak (MSL = 3) Solder Reflow (3x @ 260°C) Acoustic Microscopy (SAT)	Test @ room	77	0	3	231	Preconditioning before tests A4.
A4	Temperature Cycling (TC)	JESD22-A104	-65°C to 175°C for 500 cycles	Test @ hot	77	0	3	231	Samples preconditioned per test A1. Wire Bond Pull (test C2) planned after TC.

PCWB and PCWC are structurally similar to PCWD and are qualified based on PCWD data.

List of affected Customer Specific Parts:

0PCWB-002-XTP
0PCWC-002-XTP
0PCWC-003-XTP
0PCWC-004-XTP
0PCWC-006-XTP
0PCWC-007-XTP
0PCWC-008-XTP
0PCWD-001-XTP