

## INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION #16872

Generic Copy

Issue Date: 29-Jun-2012

TITLE: Product transfer from Unisem to Atp1 of LQFP 144L 20x20

PROPOSED FIRST SHIP DATE: 29-Oct-2012

AFFECTED CHANGE CATEGORY(S): Assembly location

#### **FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**

Contact your local ON Semiconductor Sales Office or <Joh. Villanueva@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:**

ON Semiconductor wish to inform its customers of the product transfer of LQFP 144L 20x20 from Unisem to Atp1 due to package discontinuance in Unisem. Unisem will be able support until December 2012 only.

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# **INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION #16872**

# **QUALIFICATION PLAN:**

Estimated Date for Qualification Completion: 08/30/2012 Samples should be available after completion of Qualification.

				ON Semiconduct	or <sup>a</sup>						
			Package Reliability Qualification Plan								
ON Product Name :						Qual Plan Revision :		n:			A (QP120602)
Customer Product Name Maskset :		e: 	BOLENO (Green of 504) 13505-523			Date : Prepared by :					2/3/2012 Gelo Ramos
Package code & Type			BRD & LQFP			Approved by:					Gelo Kallios
Package & Assembly H		ouse:	AMKOR TECHNOLOGY PHILIPP	INES		Fab/Process Total parts required :				200	
			ACCELERATED E	NVIRONME	NT ST	RESS TI	EST	S			
Test #	Test	Reference	Test Conditions	Electrical Test Requirements	Sample Size per lot	Accept Criteria	# of Qual Lots	Total Parts Required for Qual Lots	# of Cntrl Lots	Total Parts Required for Control Lots	Comments
A1	Moisture Preconditioning (PC)	J-STD-020 & JESD22-A113	Moisture Soak (MSL = 3) Solder Reflow (3x @ 260°C)	Test @ room	77	0	1	77	1	77	Surface Mount Dervices only. Preconditioning before tests A0 (SAT), A3 (AC/THU), A4 (TC). Test conditions are package dependent.
A0	Delamination check (SAT)	J-STD-020	Acoustic Microscopy	N.A.	ALL	0	1	ALL	1	77	Samples preconditioned per test A1 (PC)
A4	Temperature Cycling (TC)	JESD22-A104	-65°C to 150°C for 500 cycles	Test @ hot	77	0	1	77	1	77	Samples preconditioned per test A1 (PC). Test conditions are dependent on environment.
	Wire Bond Pull Strength (WBP)		Cond. C or D. Minimum pull strength after temperature cycle = 3 grams	N.A.	30 bonds from 5 parts	Cpk > 1.33 Ppk > 1.66 or 0 Fails after test A4 (TC)		5	1	5	DPA after TC.
			PACKAGE ASSEMBLY INTEGRITY TESTS								
Test #	Test	Reference	Test Conditions	Electrical Test Requirements	Sample Size per lot	Accept Criteria	# of Qual Lots		# of Cntrl Lots	Total Parts Required for Control Lots	Comments
	External Visual	Mil-Std-883D method 2009.		N.A.	ALL		ALL	ALL	ALL	ALL	Performed on all Parts

# **List of affected Customer Specific Parts:**

13505-523-XTD 62022-001-XTD 62268-001-XTD

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