



INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION #16527Generic Copy

Issue Date: 14-Jan-2011**TITLE:** Amkor Korea Plant 1 (ATK1) Manufacturing move to Amkor Philippines**PROPOSED FIRST SHIP DATE:** 14-May-2011**AFFECTED CHANGE CATEGORY(S):** Assembly**FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:**Contact your local ON Semiconductor Sales Office or <Rhal.Alolod@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:

Transfer product to Amkor Philippines. See table below for material changes.

Table 1: BOM information for move to Philippines manufacturing

Package	BOM	From (ATK1)	To (ATP)
LQFP / TQFP	Plating Epoxy Mold compound	SnPb Ablebond 84-1 LMIS-4 Ablestik 3230 EME7320CR Sumitomo G700L	SnPb Ablestik 3230 Sumitomo G700L
NQFP	Plating Epoxy Mold compound	SnPb Ablebond 8290 G700	SnPb CRM1085A G700

PURPOSE / REASON:

To continuously support the SnPb Plating requirement from customer due to discontinuance in ATK.


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QUALIFICATION PLAN:

ACCELERATED ENVIRONMENT STRESS TESTS									
Test #	Test	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
A1	Moisture Preconditioning (PC)	Moisture Soak (MSL = 3) Solder Reflow (3x @ 225°C)	Test @ room	154	0	3	462	1	154
A0	Delamination check (SAT)	Acoustic Microscopy	N.A.	ALL	0	3	ALL	1	154
A3	HAST Unbiased (UHST)	130°C/ 85%RH for 96 hrs	Test @ room	77	0	3	231	1	77
A4	Preconditioning Temperature Cycling (TC)	-55°C to 125°C for 100 cycles	Test @ hot	77	0	3	231	1	77
A4	Temperature Cycling (TC)	-65°C to 150°C for 1000 cycles	Test @ hot	77	0	3	231	1	77
	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)	3	15	1	5
A6	High Temperature Storage (HTS)	150°C for 1000 hrs	Test @ room Test @ hot	77	0	1	77	1	77
PACKAGE ASSEMBLY INTEGRITY TESTS									
Test #	Test	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
	X-ray		N.A.	15		3	45	1	15
	Internal Visual		N.A.	10		3	30	1	10
	External Visual		N.A.	ALL		ALL	ALL	ALL	ALL
	Salt Atmosphere		N.A.	5		3	15	1	5
C1	Wire Bond Shear (WBS)		N.A.	30 bonds from 5 parts	Cpk > 1.33 Ppk > 1.66	1	5	1	5
C2	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)	1	5	1	5
C3	Solderability (SD)		N.A.	15	> 95% lead coverage	3	45	1	15
C4	Physical Dimensions (PD)		N.A.	10	Cpk > 1.33 Ppk > 1.66	3	30	1	10


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List of affected Customer Specific Parts:

PART	
06817-807-XTD	13986-501-XTP
06817-808-XTD	14974-501-XTD
0ARGA-004-XTD	15022-510-XTD
0BAVB-002-XTP	15022-514-XTD
0BAVB-004-XTP	15025-512-XTD
0BAVC-001-XTP	15088-501-XTD
0BAVC-002-XTP	15125-001-XTD
0ESWA-002-XTD	19112-001-XTD
0FLMA-001-XTD	19265-001-XTP
0GLIA-001-XTD	19349-001-XTD
0HDSA-003-XTD	19402-001-XTD
0IRIA-001-XTD	19699-001-XTD
0OASA-003-XTP	19835-001-XTD
0PROA-002-XTP	19916-001-XTD
0SHIA-002-XTP	19949-001-XTD
0SHIA-004-XTP	19950-001-XTD
0SIFB-001-XTP	20459-001-XTP
0TWFA-002-XTD	20459-012-XTD
0TWGA-002-XTP	20474-004-XTD
0TWH A-002-XTP	20483-001-XTD
11086-802-XTD	20583-001-XTD
13505-520-XTD	20687-900-EPT
13505-521-XTD	20785-001-XTD
13747-502-XTD	20785-900-EPT
13755-446-XTD	20914-901-EPT
13755-502-XTD	61792-001-XTD
13787-501-XTP	62151-002-XTD