ON Semiconductor

INITIAL PRODUCT/PROCESS CHANGE NOTIFICATION #16556

Generic Copy

Issue Date: 25-Jan-2011

TITLE: LFBGA Mold Compound and Epoxy Change in ATP3

PROPOSED FIRST SHIP DATE: 04-Oct- 2011

AFFECTED CHANGE CATEGORY(S): Mold Operation – New Mold Compound

FOR ANY QUESTIONS CONCERNING THIS NOTIFICATION:
Contact your local ON Semiconductor Sales Office or Sarah Sanico < ffxxxh@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:

The change is to convert from standard to green mold compound and die attach epoxy for all LFBGA in AMKOR due to discontinuance of Cookson (mold compound manufacturer) in producing of SMT B1LV because of low product demand. Majority of products are now going to green.

Propose Change	Package Affected	From	To
D/A Material	LFBGA	**QMI 596**	**ABLEBOND 2300**
Mold compound		**SMT B1LV**	**GE100L**

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QUALIFICATION PLAN:

Estimated Date for Qualification Completion: 05/30/2011
Samples should be available after completion of Qualification.

Test #	Test	Reference	Test Conditions
A1	**Moisture Preconditioning (PC)**	J-STD-020 & JESD22-A113	Moisture Soak (MSL = 3) Solder Reflow (3x @ 260°C)
A0	**Delamination check (SAT)**	J-STD-020	Acoustic Microscopy
A3	**Temperature Humidity Unbiased (THU)**	JESD22-A101	85°C/ 85%RH for 1000 hrs
A4	**Preconditioning Temperature Cycling (TC)**	JESD22-A104	-55°C to 125°C for 100 cycles
A4	**Temperature Cycling (TC)**	JESD22-A104	-55°C to 125°C for 1000 cycles
	Wire Bond Pull Strength (WBP)	MIL- STD883 Method 2011	Cond. C or D. Minimum pull strength after temperature cycle = 3 grams
A6	**High Temperature Storage (HTS)**	JESD22-A103	150°C for 1000 hrs

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List of affected Customer Specific Parts:

12095-802-XTP
13509-508-XTD
13517-508-XTD
13828-004-XUD
13925-442-XTD
13925-443-XTD
13925-444-XTD
14962-004-XUD
19063-004-XTD
19066-001-XTD
19490-001-XTD
19490-904-EPT
19598-003-XTD
19867-001-XTD
20405-001-XTD
06805-064-XTD
13925-001-XTD
13925-441-XTD
19490-004-XTD
19490-901-EPT