ON Semiconductor

Final Product/Process Change Notification

Document # : FPCN21252X
Issue Date: 14 March 2016

Title of Change:	Conversion to XDLF Lead frame for 14L & 16L SOIC products assembled at Amkor Technology Philippines P1. Mold compound will also be changed.
Proposed first ship date:	21 June 2016 *or earlier upon customer approval*
Contact information:	Contact your local ON Semiconductor Sales Office or < Sunitha.Kundurti@onsemi.com>
Samples:	Contact your local ON Semiconductor Sales Office or < Sunitha.Kundurti@onsemi.com>
Additional Reliability Data:	Contact your local ON Semiconductor Sales Office or < Phine.Guevarra@onsemi.com>
Type of notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. ON Semiconductor will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact <PCN.Support@onsemi.com>.
Change category:	☐ Wafer Fab Change ☒ Assembly Change ☐ Test Change ☐ Other _____

Change Sub-Category(s):

☒ Manufacturing Site Change/Addition
☐ Manufacturing Process Change
☒ Material Change
☐ Product specific change
☐ Datasheet/Product Doc change
☐ Shipping/Packaging/Marking
☐ Other: _____

Sites Affected:

☐ All site(s) ☐ not applicable ☐ ON Semiconductor site(s) :
☒ External Foundry/Subcon site(s)
Amkor Technology Philippines P1

Description and Purpose:

Lead frame format change from HDLF (High density Lead frame) to XDLF (Extreme Density Lead Frame) for 14L & 16L SOIC products assembled in Amkor Technology Philippines P1. This change in lead frame format also requires a change in mold material pellet size.

Summarize on the table below are the packages for transfer and its equivalent bill of materials:

Item of change	Before	After	Remarks
Supplier	PSMP	ASM	Changed
Lead frame format(Length x width)	HDLF(250X70MM)	XDLF (300X100MM)	Changed
Mold compound	G600(14*5.2)	G600(18*20)	Changed

Reliability Data Summary:

The qualification is performed per type of package.
The principle of similarity will be applied: 1 qualification on 1 representative product will serve for all products qualified.

QV DEVICE NAME: FS7140-01G-XTD
PACKAGE : SOIC

Test	Specification	Condition	Interval	Results
HTSL	JESD22-A103	Ta= 150°C	1000hrs	0/77
TC	JESD22-A104	Ta= -65°C to +150°C	500cyc	0/231
uHAST	JESD22-A118	130°C, 85% RH, 18.8psig, unbiased	96 hrs	0/231
PC	J-STD-020 JESD-A113	MSL2 and 3 X IR at 260°C		0/462
SD	JSTD002	Ta = 245C, 10 sec		0/15

Electrical Characteristic Summary:
Electrical characteristics are not impacted.

List of Affected Standard Parts:

Part Number	Qualification Vehicle
FS6370-01G-XTD	FS7140-01G-XTD
FS7140-01G-XTD	FS7140-01G-XTD
FS7140-01G-XTP	FS7140-01G-XTD
FS6377-01G-XTP	FS7140-01G-XTD
FS6377-01G-XTD	FS7140-01G-XTD