

DESIGN/PROCESS CHANGE NOTIFICATION

This is to inform you that a change is being made to the products listed below.

Unless otherwise indicated in the details of this notification, the identified change will have no impact on product quality, reliability, electrical, visual or mechanical performance and affected products will remain fully compliant to all published specifications. Products incorporating this change may be shipped interchangeably with existing unchanged products.

This change is planned to take effect in 90 calendar days from the date of this notification. Please work with your local Fairchild Sales Representative to manage your inventory of unchanged product if your evaluation of this change will require more than 90 calendar days.

Please contact your local Customer Quality Engineer within 30 days of receipt of this notification if you require any additional data or samples. Alternatively, you may send an email request for data, samples or other information to PCNSupport@fairchildsemi.com.

Implementation of change:

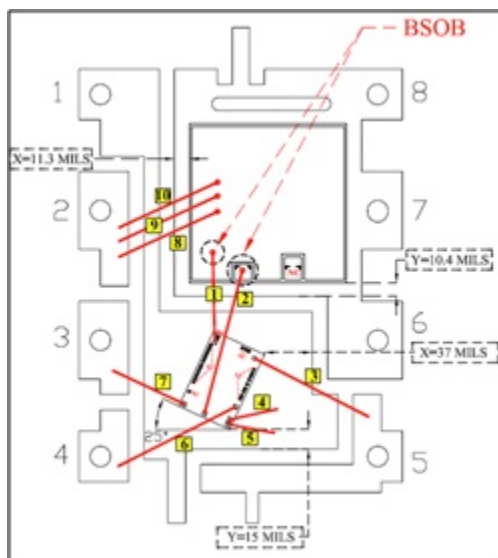
Expected First Shipment Date for Changed Product :May. 16, 2012

Expected First Date Code of Changed Product :1207

Last Date for Shipment of Unchanged Product :May. 16, 2012

Description of Change (From) :

FSPK146NY is currently assembled at AIC Semiconductor Sdn Bhd, Malaysia using below bonding layout and with gel coating on IC die. The Bill of Materials (BOM) is listed in the following table.



BOM\Assembly Site	AIC, Malaysia
Leadframe	LEFRAM, Cu LF with Ag plating DAP size: 144x143, 130x106 mils Downset: None
Die Attach	Henkel, 84-1, LMISR4
Wire	Tanaka, 1mil Au wire
Die Coating Gel	Dow Corning, HIPEC Q3-6646
Mold Compound	ELER, 8-640-C (Green)
Lead finish	Matte Sn

Description of Change (To) :

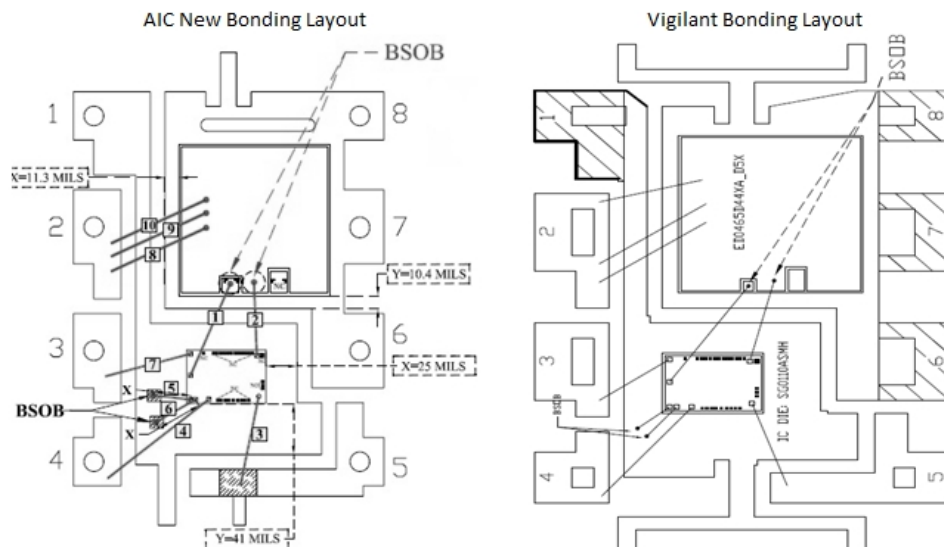
Improve the bonding layout by rotating the IC die to zero degree angle to shorten the wire length and remove the gel coating on IC die.

Addition of Vigilant Technology Company Limited, Thailand as qualified assembly and test site for FSPK146NY and adopts the same changes as AIC.

Differences in Bill of Materials (BOM) are shown in table below.

BOM\Assembly Site	AIC, Malaysia	Vigilant, Thailand
Leadframe	LEFRAM, Cu LF with Ag plating DAP size: 144x143, 130x106 mils Downset: None	Samsung, Cu LF with Ag plating, DAP size: 144x143, 130x106 mils Downset: 10mils
Die Attach	Henkel, 84-1, LMISR4	Henkel, Ablebond 2200D
Wire	Tanaka, 1mil Au wire	Tanaka, 1mil Au wire
Mold Compound	ELER, 8-640-C (Green)	Nitto, GE800 (Green)
Lead finish	Matte Sn	Matte Sn

New bonding layout for AIC and Vigilant are shown below.



Reason for Change:

Bonding layout is improved by rotating the IC die to zero degree angle to shorten the length of wire that is crossing-over the die surface. Shortening the wire length reduces risk of damage due to wire sweeping and mis-handling. Gel coating on IC die was removed to simplify assembly process, reduce delamination, and improve ground bond integrity. Removal of gel coating has been verified to have no significant impact on device's electrical characteristics, yield, as well as reliability performance.

Vigilant is being added as an alternate site for FSPK146NY for supply chain improvement. Vigilant has been qualified for FSC other products in Dual In-line package (DIP) and has been running mass production for more than a year. Over 70million parts were produced and shipped to-date without major quality incidents. Vigilant has demonstrated superior operational metric performance (quality, yield and process controls) over AIC and is established to be a long term partner for Fairchild Semiconductor.

Affected Product(s):

FSPK146NY		
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Qualification Plan	Device	Package	Process	No. of Lots
QP2011065A	FSPK146	DIP8	MXIC Process H	3

Test Description:	Condition:	Standard :	Duration:	Results:
High Temperature Operating Life Test	115C, VDD=25V;HV=400V;VD=520V	JESD22-A108	1000 hrs	0/231
Temperature Humidity Bias Test	85C,85%RH, VDD=11V;HV=100V;VD=100V	JESD22-A101	1000 hrs	0/231
Autoclave	121C, 100%RH	JESD22-A102	168 hrs	0/231
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/231