

PCN# : P195A Issue Date : Oct. 06, 2011

## **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 : Jan. 04, 2012

Expected First Date Code of Changed Product :1204

Last Date for Shipment of Unchanged Product : Jan. 04, 2012

Description of Change (From) :

Products assembled in the MLP 2X2 6&8-lead and MLP 3.5x3.0 12-lead packages at current manufacturing site of Fairchild Semiconductor, Penang Malaysia.

BOM	Fairchild Penang		
Wire	0.8/ 1.5 mil Au		
Die Attach	LE5003/ QMI519		
Leadframe	ASM C194 Cu with full NiPdAu plating		
Mold Compound	Hitachi CEL9220HF13-F1		

Description of Change (To) :

Addition of Hana Semiconductor AYT, Thailand as a qualified manufacturing site for products assembled in the MLP 2X2 6&8-lead and MLP 3.5x3.0 12-lead package. No changes to current Package specifications and dimension

drawings.

BOM Fairchild Penang		HANA Semiconductor Ayutthaya		
Wire	0.8/ 1.5 mil Au	0.8/ 1.5 mil Au		
Die Attach	LE5003/ QMI519	Ablebond 8006NS/ 8600		
Leadframe	ASM C194 Cu with full NiPdAu plating	Samsung CDA194 with full NiPdAuAg plating		
Mold Compour	d Hitachi CEL9220HF13-F1	Hitachi CEL9220HF13H		

Reason for Change:

Hana Semiconductor, Thailand is being added as an additional assembly and test site for the affected products listed in this PCN. Hana has successfully manufactured Fairchild products for many years, including the 3.3x3.3 8-lead MLP and the 2x2 6-lead MLP . The products affected by this PCN will use the same mold compound and die attach materials as are used for the the other MLP products which are already manufactured by Hana. These products will remain fully compliant to all published specifications and may be shipped interchangeably with existing products.



## Affected Product(s):

FAN5353MPX	FAN5354MPX	FAN5902MPX
FPF1005	FPF1006	FPF1007
FPF1008	FPF1009	FPF1009R
FPF2163	FPF2164	FPF2165
FPF2165R	FPF2165_SBAA013	FPF2225
FT8010MPX		

Qualification Plan	Device	Package	Process	No. of Lots
Q20110330	FAN5353MPX	MLP3.5X3.0_12L	FS50BPOA	3

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113		0/828
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/231
Highly Accelerated Stress Test	130C, 85%RH,3.0V	JESD22-A110	96 hrs	0/135
Unbiased Highly Accelerated	130C, 85%RH	JESD22-A118	96 hrs	0/231
Stress Test				
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/231
Solderability	Steam Aging (8 hr) 245C,	JESD22-B102		0/33
-	5sec			

Qualification Plan	Device	Package	Process	No. of Lots
Q20110330	FPF1009	MLP2X2_6L	FS35C52BD	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113		0/276
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Highly Accelerated Stress Test	130C, 85%RH,5.0V	JESD22-A110	96 hrs	0/45
Unbiased Highly Accelerated	130C, 85%RH	JESD22-A118	96 hrs	0/77
Stress Test				
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Solderability	Steam Aging (8 hr) 245C,	JESD22-B102		0/11
-	5sec			

Qualification Plan	Device	Package	Process	No. of Lots
Q20110138B	FT8010MPX	MLP2X2_8L	FS35BC3B	1

Test Description:	Condition:	Standard :	Duration:	Results:
MSL1 Precondition	260C, 3 cycles	JESD22-A113		0/276
High Temperature Storage Life	150C	JESD22-A103	1000 hrs	0/77
Highly Accelerated Stress Test	110C, 85%RH,5.0V	JESD22-A110	264 hrs	0/45
Static Op Life	150C, 5.0V	JESD22-A108	1000 hrs	0/77
Temperature Cycle	-65C, 150C	JESD22-A104	500 cycles	0/77
Gate Leakage Negative	155C, -400V	AEC-Q100-006		0/3
Gate Leakage Positive	155C, 400V	AEC-Q100-006		0/3
Solderability	Steam Aging (8 hr) 215C,	JESD22-B102		0/11
	5sec			
Solderability	Steam Aging (8 hr) 245C,	JESD22-B102		0/11
	5sec			