

PCN# : P4B9AAB Issue Date : Feb. 12, 2015

#### **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.

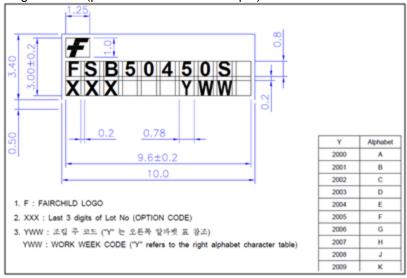
## **Implementation of change:**

Expected First Shipment Date for Changed Product : May. 13, 2015

Expected First Date Code of Changed Product :1519

Description of Change (From):

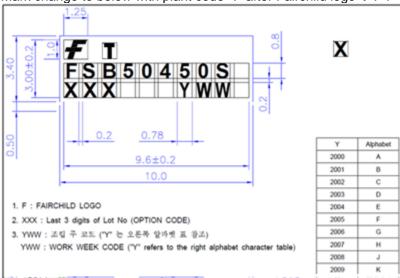
# Single manufacturing source location at Suzhou Original mark (put FSB50450S as example)



### Description of Change (To):

Additional manufacturing source location at Taiwan

Mark change to below with plant code 'T' after Fairchild logo 'F. 'T' size and font same as below device name.



## Reason for Change:

Manufacturing flexibility. Package outline drawings of the affected products remain unchanged. All of the affected products are fully compliant to all published data sheet and this change will have no impact on their electrical performance. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing. Please do not delay in requesting any samples required to approved within the timeframe noted. Please contact your local Fairchild Sales representative to place orders for a sufficient volume of unchanged product if your approval process will require more than 90 days.

Affected Product(s): Please refer to the list of affected products in the addendum attached in the PCN email you received. This list is based on an analysis of your company's procurement history.

<b>Qualification Plan</b>	Device	Package	Process	No. of Lots
Q20140359B	FSB50450S	SPM5D023	Assembly + Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL(3), PKG(Large),	85%RH, 85C, 85% BV	JESD22-A113	5 Cycles 24 hrs	0/70
PeakTemp(245c), Cycles(3)				
(Precondition)				
Autoclave	121C, 100%RH	JESD22-A102	121C, 100%RH	0 / 25
High Temperature Reverse	125C, Vpn=80% of Rated	JESD22-A108	168, 500, 1000	0 / 20
Bias	BV, Vcc=15VV		hrs	
High Temperature Storage	150C	JESD22-A103	168, 500, 1000	0 / 25
Life			hrs	
Power Cycle	Delta 100CC, 2 Min On/Off	MIL-STD-750	15000 Cycles	0/5
		M1037		
Resistance to Solder Heat	Solder Dip = 270C, 15sec	JESD22-B106	15sec	0 / 20
Temperature Cycle	-65C, 150C	JESD22-A104	500 Cycles	0 / 25
Temperature Humidity	85C, 85%RH, Vcc=15V,	JESD22-A101	168, 500, 1000	0/20
Biased Test	Vpn=40V		hrs	

Qualification Plan	Device	Package	Process	No. of Lots
Q20140359B	FSB52006S	SPM5D023	Assembly + Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL(3), PKG(Large),	85%RH, 85C, 85% BV	JESD22-A113	5 Cycles 24 hrs	0/70
PeakTemp(245c), Cycles(3)				
(Precondition)				
Autoclave	121C, 100%RH	JESD22-A102	121C, 100%RH	0 / 25
High Temperature Reverse	125C, Vpn=80% of Rated	JESD22-A108	168, 500, 1000	0/20
Bias	BV, Vcc=15VV		hrs	
High Temperature Storage	150C	JESD22-A103	168, 500, 1000	0 / 25
Life			hrs	
Power Cycle	Delta 100CC, 2 Min On/Off	MIL-STD-750	15000 Cycles	0/5
		M1037		
Resistance to Solder Heat	Solder Dip = 270C, 15sec	JESD22-B106	15sec	0/20
Temperature Cycle	-65C, 150C	JESD22-A104	500 Cycles	0 / 25
Temperature Humidity	85C, 85%RH, Vcc=15V,	JESD22-A101	168, 500, 1000	0 / 20
Biased Test	Vpn=40V		hrs	

<b>Qualification Plan</b>	Device	Package	Process	No. of Lots
Q20140359B	FSB50550US	SPM5H023	Assembly + Test	1

Test Description:	Condition:	Standard:	Duration:	Results:
MSL(3), PKG(Large),	85%RH, 85C, 85% BV	JESD22-A113	5 Cycles 24 hrs	0/70
PeakTemp(245c), Cycles(3)				
(Precondition)				
Autoclave	121C, 100%RH	JESD22-A102	121C, 100%RH	0 / 25
High Temperature Reverse	125C, Vpn=80% of Rated	JESD22-A108	168, 500, 1000	0/20
Bias	BV, Vcc=15VV		hrs	
High Temperature Storage	150C	JESD22-A103	168, 500, 1000	0 / 25
Life			hrs	
Power Cycle	Delta 100CC, 2 Min On/Off	MIL-STD-750	15000 Cycles	0/5
		M1037		
Resistance to Solder Heat	Solder Dip = 270C, 15sec	JESD22-B106	15sec	0/20
Temperature Cycle	-40CC, 125CC	JESD22-A104	200 Cycles	0 / 25
Temperature Humidity	85C, 85%RH, Vcc=15V,	JESD22-A101	168, 500, 1000	0/20
Biased Test	Vpn=40V		hrs	

Qualification Plan	Device	Package	Process	No. of Lots
Q20140359B	FSB50550AS	SPM5Q023	Assembly + Test	3

Test Description:	Condition:	Standard:	Duration:	Results:
MSL(3), PKG(Large),	85%RH, 85C, 85% BV	JESD22-A113	5 Cycles 24 hrs	0/45
PeakTemp(245c), Cycles(3)				
(Precondition)				
Autoclave	121C, 100%RH	JESD22-A102	121C, 100%RH	0 / 25
High Temperature Reverse	125C, Vpn=80% of Rated	JESD22-A108	168, 500, 1000	0/20
Bias	BV, Vcc=15VV		hrs	
High Temperature Storage	150C	JESD22-A103	168, 500, 1000	0 / 25
Life			hrs	
Power Cycle	Delta 100CC, 2 Min On/Off	MIL-STD-750	15000 Cycles	0/5
		M1037		
Resistance to Solder Heat	Solder Dip = 270C, 15sec	JESD22-B106	15sec	0/20
Temperature Cycle	-40CC, 125CC	JESD22-A104	200 Cycles	0 / 25
Temperature Humidity	85C, 85%RH, Vcc=15V,	JESD22-A101	168, 500, 1000	0 / 20
Biased Test	Vpn=40V		hrs	