

Date Created : 2008/10/17
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PCN# : Q4084205

DESIGN/PROCESS CHANGE NOTIFICATION -- FINAL

This is to inform you that a design and/or process change will be made to the following product(s). This notification is for your information and concurrence.

If you require data or samples to qualify this change, please contact **Fairchild Semiconductor within 30 days of receipt of this notification.**

Updated process quality documentation, such as FMEAs and Control Plans, are available for viewing upon request.

If you have any questions concerning this change, please contact:

Technical Contact:

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PCN Originator:

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Implementation of change:

Expected 1st Device Shipment Date: 2009/02/06

Earliest Year/Work Week of Changed Product: 0906

Change Type Description: Wafer Diameter

Description of Change (From): Fairchild products currently manufactured using Fairchild's 6-inch class 1, Fab process in South Portland, ME.

Description of Change (To): Products will be manufactured using Fairchild's 8-inch class 1 Fab process in South Portland, ME. Die size, design, geometry, and layout of the affected products remains unchanged. Products manufactured on the 8-inch line will be fully compliant to all published datasheet specifications and will be completely interchangeable with current product. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing products.

Reason for Change : Fairchild Semiconductor is increasing wafer capacity by converting the 6-inch line to an 8-inch line Fab in South Portland,ME.

Qual/REL Plan Numbers : Q20080472

Qualification :

All reliability tests outlined in qualification plan Q20080472 successfully meet the requirements for release, qualifying South Portlands 8 inch FS35C5L process for the Logic product family in SC70, MicroPak BT, Micropak MLP, and SOT23.

Results/Discussion for Qual Plan Number - Q20080472

Test: (Autoclave) Conditions: 100%RH, 121C Standard: JESD22-A102
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Lot	Device	Setpoint	Result	Failure Code
Q20080472AAACLV	FXLP34P5X	96-HOURS	0/77	
Q20080472BAACLV	FSA2267AL10X	96-HOURS	0/77	
Q20080472CAACLV	FSA2567MPX	96-HOURS	0/77	
Q20080472EAACLV	FPF1005	96-HOURS	0/77	
Test: (Dynamic Op Life) Conditions: 125C, 5V Standard: JESD22-A108				
Lot	Device	Setpoint	Result	Failure Code
Q20080472DADOPL	FPF1003	168-HOURS	0/77	
		500-HOURS	0/77	
		1000-HOURS	0/77	
Test: (High Temperature Storage Life) Conditions: 150C Standard: JESD22-A103				
Lot	Device	Setpoint	Result	Failure Code
Q20080472AAHTSL	FXLP34P5X	168-HOURS	0/77	
		1000-HOURS	0/77	
Q20080472BAHTSL	FSA2267AL10X	168-HOURS	0/77	
		1000-HOURS	0/77	
Q20080472CAHTSL	FSA2567MPX	168-HOURS	0/77	
		1000-HOURS	0/77	
Test: (Highly Accelerated Stress Test) Conditions: 85%RH, 130C, 5.0V Standard: JESD22-A110				
Lot	Device	Setpoint	Result	Failure Code
Q20080472AAHAST1	FXLP34P5X	96-HOURS	0/45	
Q20080472BAHAST1	FSA2267AL10X	96-HOURS	0/45	
Q20080472CAHAST2	FSA2567MPX	264-HOURS	0/45	
Test: (Highly Accelerated Stress Test) Conditions: 85%RH, 130C, 5V Standard: JESD22-A110				
Lot	Device	Setpoint	Result	Failure Code
Q20080472EAHAST1	FPF1005	96-HOURS	0/45	
Test: (Precondition) Conditions: Standard: JESD22-A113				
Lot	Device	Setpoint	Result	Failure Code
Q20080472AAPCNL1A	FXLP34P5X		0/276	
Q20080472BAPCNL1A	FSA2267AL10X		0/276	
Q20080472CAPCNL1A	FSA2567MPX		0/199	
Q20080472EAPC1A	FPF1005		0/199	
Test: (Static Op Life) Conditions: 150C, 5.0V Standard: JESD22-A108				
Lot	Device	Setpoint	Result	Failure Code
Q20080472AASOPL1	FXLP34P5X	168-HOURS	0/77	
		500-HOURS	0/77	
		1000-HOURS	0/77	
Test: (Static Op Life) Conditions: 150C, 5V Standard: JESD22-A108				
Lot	Device	Setpoint	Result	Failure Code
Q20080472BASOPL1	FSA2267AL10X	168-HOURS	0/77	
		500-HOURS	0/77	
		1000-HOURS	0/77	
Test: (Temperature Cycle) Conditions: -40C, 125C Standard: JESD22-A104				
Lot	Device	Setpoint	Result	Failure Code
Q20080472DATMCL2	FPF1003	100-CYCLES	0/77	
		500-CYCLES	0/77	
		1000	0/77	
Test: (Temperature Cycle) Conditions: -65C, 150C Standard: JESD22-A104				
Lot	Device	Setpoint	Result	Failure Code
Q20080472AATMCL1	FXLP34P5X	500-CYCLES	0/77	
Q20080472BATMCL1	FSA2267AL10X	500-CYCLES	0/77	
Q20080472CATMCL1	FSA2567MPX	500-CYCLES	0/77	
Q20080472EATMCL1	FPF1005	100-CYCLES	0/77	
		500-CYCLES	0/77	

Product Id Description :

Affected FSIDs :

NC7S00CW	NC7S00L6X	NC7S00L6X_F113
NC7S00M5X	NC7S00M5	NC7S00P5X
NC7S00P5X_F40	NC7S00P5	NC7S02L6X

NC7S02L6X_F113	NC7S02M5X	NC7S02M5
NC7S02P5X	NC7S02P5	NC7S04CW
NC7S04L6X	NC7S04L6X_F113	NC7S04M5X
NC7S04M5X_F40	NC7S04M5X_G	NC7S04M5
NC7S04P5X	NC7S04P5X_F40	NC7S04P5
NC7S08CW	NC7S08L6X	NC7S08L6X_F113
NC7S08M5X	NC7S08M5X_F40	NC7S08M5X_SF500951
NC7S08M5	NC7S08P5X	NC7S08P5X_F40
NC7S08P5	NC7S14CW	NC7S14L6X
NC7S14L6X_F113	NC7S14M5X	NC7S14M5X_SF500948
NC7S14M5	NC7S14P5X	NC7S14P5X_F080
NC7S14P5X_F40	NC7S14P5	NC7S32L6X
NC7S32L6X_F113	NC7S32M5X	NC7S32M5X_F40
NC7S32M5	NC7S32P5X	NC7S32P5X_G
NC7S32P5	NC7S86CW	NC7S86L6X
NC7S86L6X_F113	NC7S86M5X	NC7S86M5
NC7S86P5X	NC7S86P5X_G	NC7S86P5
NC7ST00L6X	NC7ST00L6X_F113	NC7ST00M5X
NC7ST00M5	NC7ST00P5X	NC7ST00P5
NC7ST02L6X	NC7ST02L6X_F113	NC7ST02M5X
NC7ST02M5	NC7ST02P5X	NC7ST02P5
NC7ST04L6X	NC7ST04L6X_F113	NC7ST04M5X
NC7ST04M5	NC7ST04P5X	NC7ST04P5X_F080
NC7ST04P5	NC7ST08L6X	NC7ST08L6X_F113
NC7ST08M5X	NC7ST08M5X_F40	NC7ST08M5
NC7ST08P5X	NC7ST08P5X_F40	NC7ST08P5
NC7ST32L6X	NC7ST32L6X_F087	NC7ST32L6X_F113
NC7ST32M5X	NC7ST32M5	NC7ST32P5X
NC7ST32P5X_F080	NC7ST32P5	NC7ST86L6X
NC7ST86L6X_F113	NC7ST86M5X	NC7ST86M5
NC7ST86P5X	NC7ST86P5	NC7SU04L6X
NC7SU04L6X_F113	NC7SU04M5X	NC7SU04M5
NC7SU04P5X	NC7SU04P5X_F080	NC7SU04P5X_F40
NC7SU04P5	NC7SZ00L6X	NC7SZ00L6X_F113
NC7SZ00M5X	NC7SZ00M5X_F40	NC7SZ00M5
NC7SZ00P5X	NC7SZ00P5X_F080	NC7SZ00P5X_F40
NC7SZ00P5	NC7SZ02L6X	NC7SZ02L6X_F113
NC7SZ02M5X	NC7SZ02M5	NC7SZ02P5X
NC7SZ02P5X_F40	NC7SZ02P5	NC7SZ02P5_F042
NC7SZ04CW	NC7SZ04L6X	NC7SZ04L6X_F087
NC7SZ04L6X_F113	NC7SZ04M5X	NC7SZ04M5X_F40
NC7SZ04M5	NC7SZ04P5X	NC7SZ04P5X_F080
NC7SZ04P5X_F40	NC7SZ04P5	NC7SZ05L6X
NC7SZ05L6X_F113	NC7SZ05M5X	NC7SZ05M5
NC7SZ05P5X	NC7SZ05P5X_F080	NC7SZ05P5X_F40
NC7SZ05P5	NC7SZ08CW	NC7SZ08L6X
NC7SZ08L6X_F087	NC7SZ08L6X_F113	NC7SZ08M5X
NC7SZ08M5X_F40	NC7SZ08M5	NC7SZ08P5X

NC7SZ08P5X_F042	NC7SZ08P5X_F080	NC7SZ08P5X_F40
NC7SZ08P5X_G	NC7SZ08P5	NC7SZ125L6X
NC7SZ125L6X_F087	NC7SZ125L6X_F113	NC7SZ125M5X
NC7SZ125M5X_F40	NC7SZ125M5	NC7SZ125P5X
NC7SZ125P5X_F080	NC7SZ125P5X_F40	NC7SZ125P5X_G
NC7SZ125P5	NC7SZ126L6X	NC7SZ126L6X_F087
NC7SZ126L6X_F113	NC7SZ126M5X	NC7SZ126M5
NC7SZ126P5X	NC7SZ126P5X_F080	NC7SZ126P5X_F40
NC7SZ126P5	NC7SZ14L6X	NC7SZ14L6X_F087
NC7SZ14L6X_F113	NC7SZ14M5X	NC7SZ14M5X_F40
NC7SZ14M5	NC7SZ14P5X	NC7SZ14P5X_F080
NC7SZ14P5X_F40	NC7SZ14P5	NC7SZ157L6X
NC7SZ157L6X_F113	NC7SZ157P6X	NC7SZ157P6X_F080
NC7SZ157P6X_F40	NC7SZ18L6X	NC7SZ18L6X_F113
NC7SZ18P6X	NC7SZ19L6X	NC7SZ19L6X_F113
NC7SZ19P6X	NC7SZ19P6X_F080	NC7SZ19P6
NC7SZ32CW	NC7SZ32L6X	NC7SZ32L6X_F087
NC7SZ32L6X_F113	NC7SZ32M5X	NC7SZ32M5X_F40
NC7SZ32M5	NC7SZ32P5X	NC7SZ32P5X_F042
NC7SZ32P5X_F080	NC7SZ32P5X_F40	NC7SZ32P5
NC7SZ38CW	NC7SZ38L6X	NC7SZ38L6X_F087
NC7SZ38L6X_F113	NC7SZ38M5X	NC7SZ38M5
NC7SZ38P5X	NC7SZ38P5	NC7SZ57L6X
NC7SZ57L6X_F113	NC7SZ57P6X	NC7SZ58L6X
NC7SZ58L6X_F087	NC7SZ58L6X_F113	NC7SZ58P6X
NC7SZ86L6X	NC7SZ86L6X_F113	NC7SZ86M5X
NC7SZ86M5X_SF500979	NC7SZ86M5	NC7SZ86P5X
NC7SZ86P5X_F40	NC7SZ86P5	NC7SZU04L6X
NC7SZU04L6X_F113	NC7SZU04M5X	NC7SZU04M5
NC7SZU04M5_F40	NC7SZU04P5X	NC7SZU04P5X_F40
NC7SZU04P5	NC7WZ04CW	NC7WZ04L6X
NC7WZ04L6X_F113	NC7WZ04P6X	NC7WZ04P6X_F080
NC7WZ04P6X_F40	NC7WZ04P6	NC7WZ07L6X
NC7WZ07L6X_F113	NC7WZ07P6X	NC7WZ07P6X_F042
NC7WZ07P6X_F080	NC7WZ07P6X_F40	NC7WZ07P6
NC7WZ14L6X	NC7WZ14L6X_F087	NC7WZ14L6X_F113
NC7WZ14P6X	NC7WZ14P6X_F080	NC7WZ14P6X_F40
NC7WZ14P6	NC7WZ16L6X	NC7WZ16L6X_F087
NC7WZ16L6X_F113	NC7WZ16P6X	NC7WZ16P6X_F042
NC7WZ16P6X_F080	NC7WZ16P6X_F40	NC7WZ16P6
NC7WZ17CW	NC7WZ17L6X	NC7WZ17L6X_F087
NC7WZ17L6X_F113	NC7WZ17P6X	NC7WZ17P6X_F080
NC7WZ17P6X_F40	NC7WZ17P6	