

Date Created : 2006/06/12
Date Issued On : 2006/10/18
PCN# : Q2062501

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:

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Implementation of change:
Expected 1st Device Shipment Date: 2006/10/30

Earliest Year/Work Week of Changed Product: 0645

Change Type Description: Alternate Fab Location, Die Revision

Description of Change (From): Products listed are 6-lead Tiny Logic devices which are currently produced on the FACT2.0 and CS80C fab processes. These processes are run in South Portland 6-inch fab.

Description of Change (To): These products will also be produced on the FS35C5L fab process, also located in South Portland 6-inch fab. The FS35C5L process is bond over active, but this product will be interchangeable with material produced on CS80C and FACT2.0 processes. All current product package materials, dimensions, markings, and electrical specifications will remain unchanged.

Reason for Change : To improve product availability and manufacturing flexibility.

Qual/REL Plan Numbers : Q20050146

Qualification :

Qualification Plan Q20050146 provides data results of Tiny Logic devices fabricated using FS35C5L process.

Results/Discussion

Test: (Autoclave)				
Lot	Device	96-HOURS	288	Failure Code
Q20050146AAACLV	NC7SZ125P5	0/77		
Q20050146AAACLV	NC7SZ125P5		1/77	Mechanical Failure Before Electrical Test
Q20050146ABACLV	NC7SZ125P5	0/77		

Q20050146ABACLV	NC7SZ125P5		0/77	
Q20050146ACACLV	NC7SZ125P5	0/77		
Q20050146ACACLV	NC7SZ125P5		0/77	
Test: (High Temperature Storage Life)				
Lot	Device	168-HOURS	1000-HOURS	Failure Code
Q20050146AAHTSL	NC7SZ125P5	0/77		
Q20050146AAHTSL	NC7SZ125P5		0/77	
Q20050146ABHTSL	NC7SZ125P5	0/77		
Q20050146ABHTSL	NC7SZ125P5		0/77	
Q20050146ACHTSL	NC7SZ125P5	0/77		
Q20050146ACHTSL	NC7SZ125P5		0/77	
Test: (Static Op Life)				
Lot	Device	168-HOURS	1000-HOURS	Failure Code
Q20050146AASOPL1	NC7SZ125P5	0/77		
Q20050146AASOPL1	NC7SZ125P5		0/77	
Q20050146ABSOPL1	NC7SZ125P5	0/77		
Q20050146ABSOPL1	NC7SZ125P5		0/77	
Q20050146ACSOPL1	NC7SZ125P5	0/77		
Q20050146ACSOPL1	NC7SZ125P5		0/77	
Test: -65C, 150C (Temperature Cycle)				
Lot	Device	500-CYCLES	1000-CYCLES	Failure Code
Q20050146AATMCL1	NC7SZ125P5	0/77		
Q20050146AATMCL1	NC7SZ125P5		0/77	
Q20050146ABTMCL1	NC7SZ125P5	0/77		
Q20050146ABTMCL1	NC7SZ125P5		0/77	
Q20050146ACTMCL1	NC7SZ125P5	0/77		
Q20050146ACTMCL1	NC7SZ125P5		0/77	
Test: 130C (Highly Accelerated Stress Test)				
Lot	Device	96-HOURS	192	Failure Code
Q20050146AAHAST1	NC7SZ125P5	0/45		
Q20050146AAHAST1	NC7SZ125P5		0/45	
Q20050146ABHAST1	NC7SZ125P5	0/45		
Q20050146ABHAST1	NC7SZ125P5		0/45	
Q20050146ACHAST1	NC7SZ125P5	0/45		
Q20050146ACHAST1	NC7SZ125P5		0/45	
Test: MSL(1), PKG(Small), PeakTemp(260c), Cycles(3) (Precondition)				
Lot	Device	Results	Failure Code	
Q20050146AAPCNL1A	NC7SZ125P5	0/276		
Q20050146ABPCNL1A	NC7SZ125P5	0/276		
Q20050146ACPCNL1A	NC7SZ125P5	0/276		

Product Id Description :

Affected FSIDs :

NC7SZ157L6X	NC7SZ157L6X_F012	NC7SZ157P6X
NC7SZ157P6X_F094	NC7SZ157P6X_F40	NC7SZ157P6X_NF40
NC7SZ157P6X_NL	NC7SZ157P6X_Q	NC7SZ157P6X_QF40
NC7SZ18L6X	NC7SZ18L6X_F012	NC7SZ18P6X
NC7SZ18P6X_NL	NC7SZ18P6X_Q	NC7SZ19L6X
NC7SZ19L6X_F012	NC7SZ19P6	NC7SZ19P6X
NC7SZ19P6X_F042	NC7SZ19P6X_F40	NC7SZ19P6X_NF042
NC7SZ19P6X_NF40	NC7SZ19P6X_NL	NC7SZ19P6X_Q
NC7SZ19P6X_QF042	NC7SZ19P6X_QF40	NC7SZ57L6X
NC7SZ57L6X_F012	NC7SZ57L6X_NL	NC7SZ57P6X
NC7SZ57P6X_F094	NC7SZ57P6X_F40	NC7SZ57P6X_NL
NC7SZ57P6X_Q	NC7SZ57P6X_QF40	NC7SZ58L6X
NC7SZ58L6X_F012	NC7SZ58P6X	NC7SZ58P6X_F40
NC7SZ58P6X_NF40	NC7SZ58P6X_NL	NC7SZ58P6X_Q

NC7SZ58P6X_QF40	NC7WZ04L6X	NC7WZ04L6X_F012
NC7WZ04P6	NC7WZ04P6X	NC7WZ04P6X_F042
NC7WZ04P6X_F094	NC7WZ04P6X_F40	NC7WZ04P6X_NF40
NC7WZ04P6X_NL	NC7WZ04P6X_Q	NC7WZ04P6X_QF042
NC7WZ04P6X_QF40	NC7WZ04P6_F40	NC7WZ04P6_NL
NC7WZ04P6_QF40	NC7WZ07L6X	NC7WZ07L6X_F012
NC7WZ07L6X_NL	NC7WZ07P6	NC7WZ07P6X
NC7WZ07P6X_F042	NC7WZ07P6X_F094	NC7WZ07P6X_F40
NC7WZ07P6X_NF042	NC7WZ07P6X_NF40	NC7WZ07P6X_NL
NC7WZ07P6X_Q	NC7WZ07P6X_QF042	NC7WZ07P6X_QF40
NC7WZ07P6_F40	NC7WZ07P6_NL	NC7WZ07P6_QF40
NC7WZ14L6X	NC7WZ14L6X_F012	NC7WZ14L6X_F087
NC7WZ14L6X_NL	NC7WZ14P6	NC7WZ14P6X
NC7WZ14P6X_F40	NC7WZ14P6X_NF40	NC7WZ14P6X_NL
NC7WZ14P6X_Q	NC7WZ14P6X_QF40	NC7WZ14P6_F40
NC7WZ14P6_NL	NC7WZ14P6_QF40	NC7WZ16L6X
NC7WZ16L6X_F012	NC7WZ16P6	NC7WZ16P6X
NC7WZ16P6X_F042	NC7WZ16P6X_F094	NC7WZ16P6X_F40
NC7WZ16P6X_NF042	NC7WZ16P6X_NF40	NC7WZ16P6X_NL
NC7WZ16P6X_Q	NC7WZ16P6X_QF042	NC7WZ16P6X_QF40
NC7WZ16P6_NL	NC7WZ16P6_Q	NC7WZ17L6X
NC7WZ17L6X_F012	NC7WZ17P6	NC7WZ17P6X
NC7WZ17P6X_F042	NC7WZ17P6X_F094	NC7WZ17P6X_F40
NC7WZ17P6X_NF042	NC7WZ17P6X_NF40	NC7WZ17P6X_NL
NC7WZ17P6X_Q	NC7WZ17P6X_QF042	NC7WZ17P6X_QF40
NC7WZ17P6_F40	NC7WZ17P6_NL	NC7WZ17P6_Q
NC7WZ17P6_QF40	NC7WZU04L6X	NC7WZU04L6X_F012
NC7WZU04P6	NC7WZU04P6X	NC7WZU04P6X_F40
NC7WZU04P6X_NF40	NC7WZU04P6X_NL	NC7WZU04P6X_Q
NC7WZU04P6X_QF40		