

Date Created : 2007/10/10  
Date Issued On : 2007/10/30  
PCN# : Q4074103

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: 2008/01/25

Earliest Year/Work Week of Changed Product: 0806

Change Type Description: Lead Frame Dimensions (Internal and External)

Description of Change (From): Current dual lead frame (433086, 436489, 422170, 422162, 427732)

Description of Change (To): New matrix lead frame (426895Q, 436896Q, 436897Q, 436898Q, 436899Q)

Reason for Change : To set up and qualify QSOP matrix line as an alternative and an eventual replacement for the existing line.

Qual/REL Plan Numbers : Q20060297

All the reliability tests as defined in Q20060297 qualification plan completed with no failure. Therefore, Carsem, QSOP packages with Matrix Leadframe is qualified.

Qualification :

All the reliability tests as defined in Q20060297 qualification plan completed with no failure.

**Results/Discussion**

Test: (Autoclave)			
Lot	Device	96-HOURS	Failure Code
Q20060297AAACL	FAN5236QSCX	0/77	
Q20060297ABACL	FAN5236QSCX	0/77	
Q20060297ACACL	FAN5236QSCX	0/77	

Test: (Gate Leakage Negative)					
Lot	Device	Results	Failure Code		
Q20060297AAGATE-	FAN5236QSCX	0/3			
Q20060297ABGATE-	FAN5236QSCX	0/3			
Q20060297ACGATE-	FAN5236QSCX	0/3			
Test: (Gate Leakage Positive)					
Lot	Device	Results	Failure Code		
Q20060297AAGATE+	FAN5236QSCX	0/3			
Q20060297ABGATE+	FAN5236QSCX	0/3			
Q20060297ACGATE+	FAN5236QSCX	0/3			
Test: (High Temperature Storage Life)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20060297AAHTSL	FAN5236QSCX	0/77			
			0/77		
				0/77	
Q20060297ABHTSL		0/77			
			0/77		
				0/77	
Q20060297ACHTSL		0/77			
			0/77		
				0/77	
Test: (Temperature Humidity Biased Test)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20060297AATHBT		0/77			
			0/77		
				0/77	
Test: -65C, 150C (Temperature Cycle)					
Lot	Device	100-CYCLES	500-CYCLES	Failure Code	
Q20060297AATMCL1	FAN5236QSCX	0/77			
Q20060297AATMCL1	FAN5236QSCX		0/77		
Q20060297ABTMCL1	FAN5236QSCX	0/77			
Q20060297ABTMCL1	FAN5236QSCX		0/77		
Q20060297ACTMCL1	FAN5236QSCX	0/77			
Q20060297ACTMCL1	FAN5236QSCX		0/77		
Test: MSL(2), PKG(Small), PeakTemp(260c), Cycles(3) (Precondition)					
Lot	Device	Results	Failure Code		
Q20060297AAPCNL2A	FAN5236QSCX	0/231			
Q20060297ABPCNL2A	FAN5236QSCX	0/154			
Q20060297ACPCNL2A	FAN5236QSCX	0/154			

Product Id Description : Change current dual lead frame to matrix lead frame for QSOP 16L/24L/28L assemble in Carsem.

Affected FSIDs :

FAN5234QSC	FAN5234QSCX	FAN5234QSCX_NL
FAN5235QSCX	FAN5236QSC	FAN5236QSCX
FAN5236QSCX_NA3C165	FAN5236QSCX_NA3C207	FAN5236QSCX_NL
FAN5240QSC	FAN5240QSCX	