

Date Created : 2007/12/04
 Date Issued On : 2007/12/07
 PCN# : Q4074107-A

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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 Phone:

PCN Originator:

Name: Kim, Sangseop
 E-mail: Sangseop.Kim@fairchildsemi.com
 Phone:

Implementation of change:

Expected 1st Device Shipment Date: 2008/03/12

Earliest Year/Work Week of Changed Product: 8011

Change Type Description: Passivation Material

Description of Change (From): passivation layer without Polyimide coating

Description of Change (To): Polyimide coating will be added on the passivation layer

Reason for Change : Polyimide coating is added to reduce the potential for electrical performance shift due to surface ionic charge.

Qual/REL Plan Numbers : Q20070388

Qualification :

The qual. result of Polyimide addition is good regarding 1000hr.

Results/Discussion

Test: (Autoclave)			
Lot	Device	96-HOURS	Failure Code
Q20070388AAACLV	FSDH321	0/77	
Test: (Gate Leakage Negative)			
Lot	Device	Results	Failure Code
Q20070388AAGATE-	FSDH321	0/10	
Test: (Gate Leakage Positive)			
Lot	Device	Results	Failure Code
Q20070388AAGATE+	FSDH321	0/10	
Test: (High Temperature Op Life)			

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070388AAHTOL	FSDH321	0/77			
			0/77		
				0/77	
Test: (High Temperature Reverse Bias)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070388AAHTRB		0/77			
			0/77		
				0/77	
Test: (High Temperature Storage Life)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070388AAHTSL		0/77			
			0/77		
				0/77	
Test: (Temperature Humidity Biased Test)					
Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070388AATHBT		0/77			
			0/77		
				0/77	
Test: -65C, 150C (Temperature Cycle)					
Lot	Device	200-CYCLES	500-CYCLES	Failure Code	
Q20070388AATMCL1	FSDH321	0/77			
Q20070388AATMCL1	FSDH321		0/77		

Product Id Description :

Affected FSIDs :

FSDH0170RNB	FSDH0265RL	FSDH0265RLD
FSDH0265RLDX	FSDH0265RLDX_NL	FSDH0265RLD_NL
FSDH0265RLX	FSDH0265RLX_SB82109	FSDH0265RL_NL
FSDH0265RN	FSDH0265RN_NL	FSDH0270RNB
FSDH0370RNB	FSDH321	FSDH321B
FSDH321L	FSDH321LX	FSDH321LX_NL
FSDH321Z	FSDH321Z_NL	FSDL0165RL
FSDL0165RL_NL	FSDL0165RN	FSDL0365RL
FSDL0365RL_NL	FSDL0365RNB	FSDL321
FSDL321L	FSDL321L_NL	FSDL321_NL
FSDM0265RL	FSDM0265RL_NL	FSDM0265RNB
FSDM0265RNB_NL	FSDM0265RNC	FSDM0265RNC_NL
FSDM0265RN_NL	FSDM0365RL	FSDM0365RLX
FSDM0365RL_NL	FSDM0365RN	FSDM0365RNB
FSDM0365RNC	FSDM0365RN_NL	FSQ0170RNA
FSQ0270RNA	FSQ0370RNA	