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:

<u>Implementation of change:</u>

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 N	Negative)		
Lot	Device	Results	Failure Code
Q20070388AAGATE-	FSDH321	0/10	
Test: (Gate Leakage F	Positive)		
Lot	Device	Results	Failure Code
Q20070388AAGATE+	FSDH321	0/10	
Test: (High Temperatu	ure Op Life)		

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070388AAHTOL	FSDH321	0/77			
			0/77		
				0/77	
Test: (High Tempe	rature Reverse E	Bias)			
_ot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070388AAHTRB		0/77			
			0/77		
				0/77	
Test: (High Tempe	rature Storage L	ife)			
_ot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070388AAHTSL		0/77			
			0/77		
				0/77	
Test: (Temperature	Humidity Biase	d Test)			
_ot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070388AATHBT		0/77			
			0/77		
				0/77	
Test: -65C, 150C (Temperature Cy	cle)			
Lot	Device	200-C	YCLES	500-CYCLES	Failure Code
Q20070388AATMCL1	FSDH321	0/77			
Q20070388AATMCL1	FSDH321			0/77	
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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	