Date Created : **2007/05/17**
Date Issued On : **2007/06/26**
PCN# : **Q2072004**

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:
Name: LEE, JEONGSOO
E-mail: JEONGSOO.LEE@fairchildsemi.com
Phone: 82-32-680-1311

PCN Originator:
Name: LEE, JEONGSOO
E-mail: JEONGSOO.LEE@fairchildsemi.com
Phone: 82-32-680-1311

Implementation of change:
Expected 1st Device Shipment Date: 2007/08/26

Earliest Year/Work Week of Changed Product: H35

Change Type Description: Passivation Material, Fab Process Change

Description of Change (From): There are no passivation layer.

Description of Change (To): Adding Passivation layer on front metal.

Reason for Change : To improve product quality.

Qual/REL Plan Numbers : Q20070212

All items were passed.

Qualification :

All items were passed.

Results/Discussion

Test: (Autoclave)

Lot	Device	96-HOURS	Failure Code
Q20070212AAACLV	FQPF6N90C	0/77	
Q20070212ABACLV	FQPF6N90C	0/77	
Q20070212ACACLV	FQPF6N90C	0/77	

Test: (High Temperature Gate Bias)

Lot	Device	500-HOURS	1000-HOURS	Failure Code
Q20070212AAHTGB	FQPF6N90C	0/77		
Q20070212AAHTGB	FQPF6N90C		0/77	
Q20070212ABHTGB	FQPF6N90C	0/77		
Q20070212ABHTGB	FQPF6N90C		0/77	

Q20070212ACHTGB	FQPF6N90C	0/77		
Q20070212ACHTGB	FQPF6N90C		0/77	

Test: (High Temperature Reverse Bias)

Lot	Device	500-HOURS	1000-HOURS	Failure Code
Q20070212AAHTRB	FQPF6N90C	0/77		
Q20070212AAHTRB	FQPF6N90C		0/77	
Q20070212ABHTRB	FQPF6N90C	0/77		
Q20070212ABHTRB	FQPF6N90C		0/77	
Q20070212ACHTRB	FQPF6N90C	0/77		
Q20070212ACHTRB	FQPF6N90C		0/77	

Test: (Temperature Humidity Biased Test)

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20070212AATHBT		0/77			
			0/77		
				0/77	
Q20070212ABTHBT		0/77			
			0/77		
				0/77	
Q20070212ACTHBT		0/77			
			0/77		
				0/77	

Test: -65C, 150C (Temperature Cycle)

Lot	Device	200-CYCLES	500-CYCLES	Failure Code
Q20070212AATMCL1	FQPF6N90C	0/77		
Q20070212AATMCL1	FQPF6N90C		0/77	
Q20070212ABTMCL1	FQPF6N90C	0/77		
Q20070212ABTMCL1	FQPF6N90C		0/77	
Q20070212ACTMCL1	FQPF6N90C	0/77		
Q20070212ACTMCL1	FQPF6N90C		0/77	

Product Id Description : There are some QFET products.

Affected FSIDs :

FQA10N80C_F109	FQA11N90C_F109	FQA6N90C_F109
FQA7N80C_F109	FQA8N100C	FQA8N80C_F109
FQA8N90C_F109	FQA9N90C	FQA9N90C_F109
FQAF11N90C	FQB5N60CTM_NL	FQB5N60CTM_WS
FQB6N60CTM_WS	FQB8N60CFTM	FQB8N60CTM
FQB8N60CTM_WS	FQD5N60CTF	FQD5N60CTM
FQD5N60CTM_NL	FQD5N60CTM_WS	FQD6N60CTF
FQD6N60CTF_WS	FQD6N60CTM	FQD6N60CTM_WS
FQI5N60CTU	FQI6N60CTU	FQI8N60CTU
FQP3N80C	FQP3N80C_NL	FQP4N90C
FQP5N60C	FQP5N60C_F080	FQP5N60C_NL
FQP6N60C	FQP6N80C	FQP6N90C
FQP7N80C	FQP8N60C	FQP8N60CTSTU
FQP8N60C_F080	FQP8N60C_F105	FQP8N80C
FQP8N80C_NL	FQP8N90C	FQP9N90C
FQPF3N80C	FQPF3N80CYDTU	FQPF4N90C
FQPF4N90CT	FQPF5N60C	FQPF5N60CYDTU
FQPF5N60C_F105	FQPF6N60C	FQPF6N80C
FQPF6N80CT	FQPF6N90C	FQPF6N90C_NL
FQPF7N80C	FQPF8N60C	FQPF8N60CT
FQPF8N60CT_NL	FQPF8N60CYDTU	FQPF8N60C_F105
FQPF8N80C	FQPF8N80CXDTU	FQPF8N80CYDTU
FQPF8N90C	FQPF9N90C	FQU5N60CTU