Date Created : **2008/05/09**
Date Issued On : **2008/05/14**
PCN# : **Q2081907**

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: 2008/08/10

Earliest Year/Work Week of Changed Product: WW33

Change Type Description: Passivation Material, Fab Process Change

Description of Change (From): There is 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

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	FQPF6N90C	0/77			
			0/77		
				0/77	
Q20070212ABTHBT	FQPF6N90C	0/77			
			0/77		
				0/77	
Q20070212ACTHBT	FQPF6N90C	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 QFETs.

Affected FSIDs :

FQA13N50C	FQB12N60CTM	FQB13N50CTM
FQB3N60CTM	FQB5N50CTM	FQB9N50CTM
FQB9N50CTM_WS	FQD2N60CTF	FQD2N60CTF_F105
FQD2N60CTM	FQD2N60CTM_WS	FQD3N50CTF
FQD3N50CTM	FQD3N50CTM_F101	FQD3N50CTM_WS
FQD3N60CTM	FQD3N60CTM_WS	FQD5N50CTF
FQD5N50CTF_SBEC001	FQD5N50CTM	FQD5N50CTM_F101
FQD5N50CTM_F105	FQD5N50CTM_WS	FQD6N50CTM
FQD6N50CTM_F101	FQD6N50CTM_F105	FQD6N50CTM_WS
FQI13N50CTU	FQI5N50CTU	FQI9N50CTU
FQP12N60C	FQP12N60C_F080	FQP13N50C
FQP13N50C_F080	FQP13N50C_F105	FQP2N60C
FQP2N60C_F105	FQP3N50C	FQP3N50C_F080
FQP3N60C	FQP5N50C	FQP5N50C_F080
FQP5N50C_F105	FQP6N50C	FQP9N50C
FQP9N50C_F080	FQPF12N60C	FQPF12N60CT
FQPF13N50C	FQPF13N50CSDTU	FQPF13N50CT
FQPF13N50C_F105	FQPF13N50C_TC003	FQPF2N60C
FQPF2N60C_F105	FQPF3N50C	FQPF5N50C
FQPF5N50CT	FQPF9N50C	FQPF9N50CT
FQPF9N50CYDTU	FQU2N60CTU	FQU3N50CTU
FQU3N60CTU	FQU5N50CTU	FQU5N50CTU_WS