

Date Created : 2008/12/01
Date Issued On : 2008/12/15
PCN# : Q1080906-E

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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Implementation of change:

Expected 1st Device Shipment Date: 2009/01/18

Earliest Year/Work Week of Changed Product: 0904

Change Type Description: Alternate Fab Location, Wafer Diameter

Description of Change (From): Optoelectronics detector devices utilized in the assembly of the attached affected products are currently fabricated at China Resources (CRS) 4 inch fabrication facility located in Hong Kong, China.

Description of Change (To): Optoelectronics detector devices utilized in the assembly of the attached affected products will be fabricated at CRS 6 inch fabrication facility located in Wuxi, China. There will be no detector device, design, die size or die thickness changes for the affected FSID's. Product assembled with detector die manufactured at Wuxi facility will be fully compliant to all publish databook specifications and will be interchangeable with products manufactured at the existing wafer fab location. Quality and reliability will remain at the highest levels already demonstrated with Fairchild existing products.

Reason for Change : Optoelectronic detector devices utilized in the assembly of the attached list of affected products will no longer be fabricated in CRS Hong Kong facility. The planned transfer from CRS Hong Kong facility to their fabrication facility in Wuxi, China may impact the ability to supply existing qualified product during the routine PCN approval cycle for certain affected products. Fairchild will work with customer to manage any identified supply issues that may arise.

Qual/REL Plan Numbers : Q20080484;Q20080060

Qualification :

Passed

Results/Discussion for Qual Plan Number - Q20080484

Test: (Autoclave) Conditions: 100%RH, 121C Standard: JESD22-A102				
Lot	Device	Setpoint	Result	Failure Code
Q20080484AAACLV	H11B1M	96-HOURS	0/45	
Q20080484ABACLV		96-HOURS	0/45	
Q20080484ACACLV		96-HOURS	0/45	
Q20080484ADACLV		96-HOURS	0/45	
Test: (High Temperature Op Life) Conditions: 100C Standard:				
Lot	Device	Setpoint	Result	Failure Code
Q20080484AAHTOL	H11B1M	168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ABHTOL		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ACHTOL		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ADHTOL		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Test: (High Temperature Reverse Bias) Conditions: 100C, 24V Standard: JESD22-A108				
Lot	Device	Setpoint	Result	Failure Code
Q20080484AAHTRB	H11B1M	168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ABHTRB		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ACHTRB		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ADHTRB		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Test: (High Temperature Storage Life) Conditions: 150C Standard: JESD22-A103				
Lot	Device	Setpoint	Result	Failure Code
Q20080484AAHTSL	H11B1M	168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ABHTSL		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ACHTSL		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ADHTSL		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Test: (Low Temperature Storage) Conditions: -55C Standard:				
Lot	Device	Setpoint	Result	Failure Code
Q20080484AALTS	H11B1M	168-HOURS	0/45	
		500-HOURS	0/45	
		1000	0/45	
Q20080484ABLTS		168-HOURS	0/45	
		500-HOURS	0/45	
		1000	0/45	
Q20080484ACLTS		168-HOURS	0/45	
		500-HOURS	0/45	
		1000	0/45	
Q20080484ADLTS		168-HOURS	0/45	
		500-HOURS	0/45	
		1000	0/45	
Test: (Precondition) Conditions: Standard: JESD22-A113				

Lot	Device	Setpoint	Result	Failure Code
Q20080484AAPCOPTO1B	H11B1M		0/225	
Q20080484ABPCOPTO1B			0/225	
Q20080484ACPCOPTO1B			0/225	
Q20080484ADPCOPTO1B			0/225	
Test: (Temperature Cycle) Conditions: -40C, 125C Standard: JESD22-A104				
Lot	Device	Setpoint	Result	Failure Code
Q20080484AATMCL2	H11B1M	100-CYCLES	0/45	
		200-CYCLES	0/45	
		500	0/45	
Q20080484ABTMCL2		100-CYCLES	0/45	
		200-CYCLES	0/45	
		500	0/45	
Q20080484ACTMCL2		100-CYCLES	0/45	
		200-CYCLES	0/45	
		500	0/45	
Q20080484ADTMCL2		100-CYCLES	0/45	
		200-CYCLES	0/45	
		500	0/45	
Test: (Temperature Humidity Biased Test) Conditions: 85%RH, 85C, 24V Standard: JESD22-A101				
Lot	Device	Setpoint	Result	Failure Code
Q20080484AATHBT	H11B1M	168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ABTHBT		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ACTHBT		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080484ADTHBT		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	

Results/Discussion for Qual Plan Number - Q20080060

Test: (High Temperature Reverse Bias) Conditions: 85C, 20V Standard: JESD22-A108				
Lot	Device	Setpoint	Result	Failure Code
Q20080060AAHTRB	QSE158	168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080060ABHTRB		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080060ACHTRB		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Test: (High Temperature Storage Life) Conditions: 100C Standard: JESD22-A103				
Lot	Device	Setpoint	Result	Failure Code
Q20080060AAHTSL	QSE158	168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080060ABHTSL		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080060ACHTSL		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Test: (Low Temperature Storage) Conditions: -40C Standard:				
Lot	Device	Setpoint	Result	Failure Code
Q20080060AALTS	QSE158	168-HOURS	0/45	
		500-HOURS	0/45	
		1000	0/45	
Q20080060ABLTS		168-HOURS	0/45	
		500-HOURS	0/45	

		1000	0/45	
Q20080060ACLTS		168-HOURS	0/45	
		500-HOURS	0/45	
		1000	0/45	
Test: (Temperature Cycle) Conditions: -40C, 100C Standard: JESD22-A104				
Lot	Device	Setpoint	Result	Failure Code
Q20080060AATMCL2	QSE158	100-CYCLES	0/45	
		200-CYCLES	0/45	
Q20080060ABTMCL2		100-CYCLES	0/45	
		200-CYCLES	0/45	
Q20080060ACTMCL2		100-CYCLES	0/45	
		200-CYCLES	0/45	
Test: (Temperature Humidity Biased Test) Conditions: 85%RH, 85C, 5V Standard: JESD22-A101				
Lot	Device	Setpoint	Result	Failure Code
Q20080060AATHBT	QSE158	168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080060ABTHBT		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	
Q20080060ACTHBT		168-HOURS	0/45	
		500-HOURS	0/45	
		1000-HOURS	0/45	

Product Id Description :

Affected FSIDs :

H21B1	H21B1_0088K	H21B2
H21B2_0218	H21B3	H21B4
H21B5	H21B6	H21LOB
H21LOI	H21LTB	H21LTI
H22B1	H22B2	H22B3
H22B4	H22B5	H22B6
H22LOB	H22LOI	H22LTB
H22LTI	KAT00049	KAT00147
KAT00148	KAT00149	MOC8050M
MOC8050SR2M	MOC8050SR2VM	MOC8050TVM
MOC8050VM	QCK3	QRD1313
QSD733C	QSD733	QSE133C
QSE133	QSE156C	QSE156
QSE157	QSE158C	QSE158
QSE158_0223	QSE159E3R0	QSE159
QVE00112	QVE00120	