

Date Created : 2008/10/09  
Date Issued On : 2008/10/15  
PCN# : Q1081306-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:

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Phone:

Implementation of change:  
Expected 1st Device Shipment Date: 2008/11/16

Earliest Year/Work Week of Changed Product: 0847

Change Type Description: Alternate Fab Location

Description of Change (From): Optoelectronics detector devices currently fabrication at China Resources (CRS).

Description of Change (To): Optoelectronics detector devices will be fabricated at an alternate source located in Taiwan. Product using die from the alternate source will be fully compliant to all published databook specifications and will be interchangeable with the existing die. Quality and reliability will remain at the highest level already demonstrated with Fairchild existing products.

Reason for Change : Establish an additional die source to enhance manufacturing flexibility.

Qual/REL Plan Numbers : Q20080216

Qualification :  
passed

**Results/Discussion for Qual Plan Number - Q20080216**

| Test: (Autoclave)   Conditions: 100%RH, 121C   Standard: JESD22-A102 |          |          |        |              |
|--|----------|----------|--------|--------------|
| Lot  | Device   | Setpoint | Result | Failure Code |
| Q20080216AAACLVA   | MOC3052M | 96-HOURS | 0/45   |              |
| Q20080216ABACLVA   |          | 96-HOURS | 0/45   |              |
| Q20080216ACACLVA   |          | 96-HOURS | 0/45   |              |

| Test: (High Temperature Op Life)   Conditions: 85C   Standard:                                  |          |            |        |              |
|---|----------|------------|--------|--------------|
| Lot   | Device   | Setpoint   | Result | Failure Code |
| Q20080216AAHTOLA  | MOC3052M | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000-HOURS | 0/45   |              |
| Q20080216ABHTOLA  |          | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000-HOURS | 0/45   |              |
| Q20080216ACTOLA   |          | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000-HOURS | 0/45   |              |
| Test: (High Temperature Reverse Bias)   Conditions: 85C, 480V   Standard: JESD22-A108           |          |            |        |              |
| Lot   | Device   | Setpoint   | Result | Failure Code |
| Q20080216AAHTRBA  | MOC3052M | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000-HOURS | 0/45   |              |
| Q20080216ABHTRBA  |          | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000-HOURS | 0/45   |              |
| Q20080216ACHTRBA  |          | 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 |
| Q20080216AAHTSLA  | MOC3052M | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000-HOURS | 0/45   |              |
| Q20080216ABHTSLA  |          | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000-HOURS | 0/45   |              |
| Q20080216ACTSLA   |          | 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 |
| Q20080216AALTSA   | MOC3052M | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000       | 0/45   |              |
| Q20080216ABLTSA   |          | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000       | 0/45   |              |
| Q20080216ACL TSA  |          | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000       | 0/45   |              |
| Test: (Precondition)   Conditions:   Standard: JESD22-A113                                      |          |            |        |              |
| Lot   | Device   | Setpoint   | Result | Failure Code |
| Q20080216AAPCOPTO1BA  | MOC3052M |            | 0/225  |              |
| Q20080216ABPCOPTO1BA  |          |            | 0/225  |              |
| Q20080216ACPCOPTO1BA  |          |            | 0/225  |              |
| Test: (Temperature Cycle)   Conditions: -40C, 125C   Standard: JESD22-A104                      |          |            |        |              |
| Lot   | Device   | Setpoint   | Result | Failure Code |
| Q20080216AATMCL1A   | MOC3052M | 100-CYCLES | 0/45   |              |
|   |          | 200-CYCLES | 0/45   |              |
| Q20080216ABTMCL1A   |          | 100-CYCLES | 0/45   |              |
|   |          | 200-CYCLES | 0/45   |              |
| Q20080216ACTMCL1A   |          | 100-CYCLES | 0/45   |              |
|   |          | 200-CYCLES | 0/45   |              |
| Test: (Temperature Humidity Biased Test)   Conditions: 85%RH, 85C, 100V   Standard: JESD22-A101 |          |            |        |              |
| Lot   | Device   | Setpoint   | Result | Failure Code |
| Q20080216AATHBTA  | MOC3052M | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000-HOURS | 0/45   |              |
| Q20080216ABTHBTA  |          | 168-HOURS  | 0/45   |              |
|   |          | 500-HOURS  | 0/45   |              |
|   |          | 1000-HOURS | 0/45   |              |

|                  |  |            |      |  |
|------------------|--|------------|------|--|
| Q20080216ACTHBTA |  | 168-HOURS  | 0/45 |  |
|                  |  | 500-HOURS  | 0/45 |  |
|                  |  | 1000-HOURS | 0/45 |  |

Product Id Description :

Affected FSIDs :

|                   |                  |                |
|-------------------|------------------|----------------|
| MOC3051M          | MOC3051SM        | MOC3051SR2M    |
| MOC3051SR2VM      | MOC3051SVM       | MOC3051TM      |
| MOC3051TVM        | MOC3051VM        | MOC3052M       |
| MOC3052M_F132     | MOC3052SM        | MOC3052SM_F132 |
| MOC3052SR2M       | MOC3052SR2M_F132 | MOC3052SR2VM   |
| MOC3052SR2VM_F132 | MOC3052SVM       | MOC3052TM      |
| MOC3052TVM        | MOC3052TVM_F132  | MOC3052VM      |
| MOC3052VM_F132    |                  |                |