

Date Created : 2008/08/22
Date Issued On : 2008/09/29
PCN# : Q4074815-B

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: Choong, CH

E-mail: ch.choong@fairchildsemi.com

Phone:

PCN Originator:

Name: Lim, TengLi

E-mail: TengLi.Lim@notes.fairchildsemi.com

Phone: 604 6437 211 ext 2276

Implementation of change:

Expected 1st Device Shipment Date: 2008/10/29

Earliest Year/Work Week of Changed Product: 0844

Change Type Description: Mold Compound

Description of Change (From): SOT23 package assembly at UTL using non Green mold compound, Sumitomo EME-6710SJ.

Description of Change (To): SOT23 package assembly at UTL using Green mold compound, Sumitomo G600.

Reason for Change : 1) Current mold compound supplier has announced the discontinuance of LSA mold compound Sumitomo EME6710SJ. Based on current run rates there is a potential for a mold compound material shortage if this PCN is not approved within Sept 2008 timeframe. 2) Green initiative by Fairchild Semiconductor. Fairchild Semiconductor is dedicated to being a good corporate citizen. All Fairchild Semiconductor products are 2nd level interconnect lead-free and RoHS compliance. The referenced material changes have been made to provide a 'Full Green' (Halogen Free Flame Retardant) package. For additional details on the corporate wide green initiative please visit our Web site at:
<http://www.fairchildsemi.com/company/green/index.html> Manufacturing will occur at the same assembly facilities producing the current non-green products. Package outline drawings of the affected products remain un-changed. Green products will be fully compliant to all published data sheet specifications and will be interchangeable with current non-green product. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing products.

Qual/REL Plan Numbers : Q20070425

Qualification :

Qualification Plan Results are as stated in the Qualification Plan # Q20070425.

Results/Discussion for Qual Plan Number - Q20070425

| Test: (Flammability Certificate (3)) Conditions: Standard: UL94-0 | | | | |
|--|-------------|------------|--------|-----------------------------------|
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425AAFLAM | RV4145AN | | 0/1 | |
| Q20070425BAFLAM | FAN2502S25X | | 0/1 | |
| Q20070425CAFLAM | MM74C926N | | 0/1 | |
| Test: (Gate Leakage Negative) Conditions: 155C, -400V Standard: AEC-Q100-006 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425AAGATE- | RV4145AN | | 0/3 | |
| Q20070425BAGATE- | FAN2502S25X | | 0/3 | |
| Q20070425CAGATE- | MM74C926N | | 0/3 | |
| Test: (Gate Leakage Positive) Conditions: 155C, 400V Standard: AEC-Q100-006 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425AAGATE+ | RV4145AN | | 0/3 | |
| Q20070425BAGATE+ | FAN2502S25X | | 0/3 | |
| Q20070425CAGATE+ | MM74C926N | | 0/3 | |
| Test: (High Temperature Storage Life) Conditions: 150C Standard: JESD22-A103 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425AAHTSL | RV4145AN | 168-HOURS | 0/77 | |
| | | 1000-HOURS | 0/77 | |
| Q20070425BAHTSL | FAN2502S25X | 168-HOURS | 0/77 | |
| | | 1000-HOURS | 0/77 | |
| Q20070425CAHTSL | MM74C926N | 168-HOURS | 0/77 | |
| | | 1000-HOURS | 0/77 | |
| Test: (Highly Accelerated Stress Test) Conditions: 85%RH, 110C, Biased V Standard: JESD22-A110 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425CAHAST2 | MM74C926N | 264-HOURS | 0/77 | |
| Test: (Highly Accelerated Stress Test) Conditions: 85%RH, 130C, biased V Standard: JESD22-A110 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425BAHAST1 | FAN2502S25X | 96-HOURS | 0/77 | |
| Test: (Highly Accelerated Stress Test) Conditions: 85%RH, 130C, biasedV Standard: JESD22-A110 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425AAHAST1 | RV4145AN | 96-HOURS | 0/77 | |
| Test: (Moisture Sensitivity) Conditions: Standard: J-STD_020 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425AAMSLN1A | RV4145AN | | 0/11 | |
| Q20070425BAMSLN1A | FAN2502S25X | | 0/11 | |
| Q20070425CAMSLN1A | MM74C926N | | 0/11 | |
| Test: (Precondition) Conditions: Standard: JESD22-A113 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425AAPCNL1A | RV4145AN | | 0/308 | |
| Q20070425BAPCNL1A | FAN2502S25X | | 0/308 | |
| Q20070425CAPCNL1A | MM74C926N | | 0/308 | |
| Test: (Resistance to Solder Heat) Conditions: Standard: JESD22-B106 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425AARSDH | RV4145AN | | 0/5 | |
| Q20070425BARSDH | FAN2502S25X | | 0/5 | |
| Q20070425CARSDH | MM74C926N | | 0/5 | |
| Test: (Static Op Life) Conditions: 150C, Biased V Standard: JESD22-A108 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425CASOPL1 | MM74C926N | 168-HOURS | 0/77 | |
| | | 1000-HOURS | 0/77 | |
| Test: (Static Op Life) Conditions: 150C, biased V Standard: JESD22-A108 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425AASOPL1 | RV4145AN | 168-HOURS | 4/77 | Melted, Evaporated, Or Fused Open |
| | | 1000-HOURS | 0/77 | |
| Q20070425BASOPL1 | FAN2502S25X | 168-HOURS | 0/77 | |

| | | 1000-HOURS | 0/77 | |
|--|-------------|------------|--------|--------------|
| Test: (Temperature Cycle) Conditions: -65C, 150C Standard: JESD22-A104 | | | | |
| Lot | Device | Setpoint | Result | Failure Code |
| Q20070425AATMCL1 | RV4145AN | 100-CYCLES | 0/77 | |
| | | 500-CYCLES | 0/77 | |
| Q20070425BATMCL1 | FAN2502S25X | 100-CYCLES | 0/77 | |
| | | 500-CYCLES | 0/77 | |
| Q20070425CATMCL1 | MM74C926N | 100-CYCLES | 0/77 | |
| | | 500-CYCLES | 0/77 | |

Product Id Description : UTL SOT23 FSID Green EMC.

Affected FSIDs :

| | | |
|--------------|--------------|--------------|
| FAN2500S25X | FAN2500S26X | FAN2500S27X |
| FAN2500S285X | FAN2500S28X | FAN2500S30X |
| FAN2500S33X | FAN2500SX | FAN2501S25X |
| FAN2501S26X | FAN2501S27X | FAN2501S285X |
| FAN2501S28X | FAN2502S25X | FAN2502S26X |
| FAN2502S27X | FAN2502S285X | FAN2502S28X |
| FAN2502S30X | FAN2502S315X | FAN2502SX |
| FAN2503S25X | FAN2503S26X | FAN2503S27X |
| FAN2503S285X | FAN2503S28X | FAN2503S30X |
| FAN2503S33X | FAN2504S25X | FAN2504S26X |
| FAN2504S27X | FAN2504S285X | FAN2504S28X |
| FAN2504S30X | FAN2504S33X | FAN2505S26X |
| FAN2505S27X | FAN2505S285X | FAN2505S28X |
| FAN2505S30X | FAN2508S26X | FAN2508S27X |
| FAN2508S285X | FAN2508S28X | FAN2508SX |
| FAN2509S26X | FAN2509S27X | FAN2509S285X |
| FAN2509S28X | FAN2509S30X | FAN2510S25X |
| FAN2510S26X | FAN2510S27X | FAN2510S285X |
| FAN2510S28X | FAN2510S30X | FAN2510SX |
| FAN2511S25X | FAN2511S26X | FAN2511S27X |
| FAN2511S285X | FAN2511S28X | FAN2511S30X |
| FAN2512S25X | FAN2512S26X | FAN2512S27X |
| FAN2512S285X | FAN2512S28X | FAN2512S30X |
| FAN2512S33X | FAN2512SX | FAN2513S25X |
| FAN2513S26X | FAN2513S27X | FAN2513S285X |
| FAN2513S28X | FAN2513S30X | FAN2513S33X |
| FAN2514S25X | FAN2514S26X | FAN2514S27X |
| FAN2514S285X | FAN2514S28X | FAN2514S30X |
| FAN2514S33X | FAN2514SX | FAN2515S25X |
| FAN2515S26X | FAN2515S27X | FAN2515S285X |
| FAN2515S28X | FAN2515S30X | FAN2518S25X |
| FAN2518S26X | FAN2518S27X | FAN2518S28X |
| FAN2519S26X | FAN2519S27X | FAN2519S285X |
| FAN2519S28X | FAN2519S30X | FAN2535S26X |