

Date Created : 2008/03/25
Date Issued On : 2008/04/28
PCN# : Q1081301

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: Hong, JuHyung
E-mail: Juhyung.Hong@notes.fairchildsemi.com
Phone: 82-32-680-1481

PCN Originator:

Name: Hong, JuHyung
E-mail: Juhyung.Hong@notes.fairchildsemi.com
Phone: 82-32-680-1481

Implementation of change:

Expected 1st Device Shipment Date: 2008/08/04

Earliest Year/Work Week of Changed Product: 0832

Change Type Description: Lead Frame Dimensions (Internal and External)

Description of Change (From): Lead frame vendor: Mitsui Hitec/Samsung Techwin/Poongsan Philippine

Description of Change (To): Lead frame vendor: Mitsui Hitec/Samsung Techwin/Poongsan Philippine and Ningbo Kangqiang Electronics Co.,Ltd.(china)

Reason for Change : New lead frame vendor addition for better supply flexibility

Qual/REL Plan Numbers : Q20080009

Qualification :

Two lead frame suppliers applied to the qualification of new lead frame vendor for the subcontractor SZEC. 'Ningbo Kang-Qiang' in China is qualified as the new lead frame vendor per the qualification plan Q20080009. But another 'Xiamen Yong-Hong' was disqualified due to the die crack failure during temperature cycle (Lot :Q20080009BDTMCL1).

Change To

| Package (DAP) | Current L/F vendor | New L.F vendor (2nd source) | Package (DAP) | Current L/F vendor | New L.F vendor (2nd source) |
|--------------------|--------------------|-----------------------------|--|---------------------|-----------------------------|
| 8DIP (80'80) | Samsung Techwin | KANG QIANG | 14DIP (110'140) | Poongsan Philippine | KANG QIANG |
| | | | | | |
| Package | Current L/F vendor | New L.F vendor (2nd source) | Note> Package Outline Drawing(POD) is not affected by this dimension(internal/external) change | | |
| 16DIP (110'140) | Mitsui Hitec | KANG QIANG | | | |
| | | | | | |

Results/Discussion

| Test: (Autoclave) | | | | |
|--------------------------------------|----------|------------|--------------|-------------------------------|
| Lot | Device | 96-HOURS | Failure Code | |
| Q20080009AAACL | FAN7680N | 0/77 | | |
| Q20080009ABACL | FAN7680N | 0/77 | | |
| Q20080009ACACL | FAN7680N | 0/77 | | |
| Q20080009ADACL | FAN7680N | 0/77 | | |
| Q20080009AEACL | FAN7680N | 0/77 | | |
| Q20080009AFACL | FAN7680N | 0/77 | | |
| Q20080009BAACL | KA3846 | 0/77 | | |
| Q20080009BBACL | KA3846 | 0/77 | | |
| Q20080009BCACL | KA3846 | 0/77 | | |
| Q20080009BDACL | KA3846 | 0/77 | | |
| Q20080009BEACL | KA3846 | 0/77 | | |
| Q20080009BFACL | KA3846 | 0/77 | | |
| Test: -65C, 150C (Temperature Cycle) | | | | |
| Lot | Device | 200-CYCLES | 500-CYCLES | Failure Code |
| Q20080009AATMCL1 | FAN7680N | 0/77 | | |
| Q20080009AATMCL1 | FAN7680N | | 0/77 | |
| Q20080009ABTMCL1 | FAN7680N | 0/77 | | |
| Q20080009ABTMCL1 | FAN7680N | | 0/77 | |
| Q20080009ACTMCL1 | FAN7680N | 0/77 | | |
| Q20080009ACTMCL1 | FAN7680N | | 0/77 | |
| Q20080009ADTMCL1 | FAN7680N | 0/77 | | |
| Q20080009ADTMCL1 | FAN7680N | | 0/77 | |
| Q20080009AETMCL1 | FAN7680N | 0/77 | | |
| Q20080009AETMCL1 | FAN7680N | | 0/77 | |
| Q20080009AFTMCL1 | FAN7680N | 0/77 | | |
| Q20080009AFTMCL1 | FAN7680N | | 0/77 | |
| Q20080009BATMCL1 | KA3846 | 0/77 | | |
| Q20080009BATMCL1 | KA3846 | | 0/77 | |
| Q20080009BBTMCL1 | KA3846 | 0/77 | | |
| Q20080009BBTMCL1 | KA3846 | | 0/77 | |
| Q20080009BCTMCL1 | KA3846 | 0/77 | | |
| Q20080009BCTMCL1 | KA3846 | | 0/77 | |
| Q20080009BDTMCL1 | KA3846 | 0/77 | | |
| Q20080009BDTMCL1 | KA3846 | | 1/77 | Die, Cracked (Thermal Stress) |
| Q20080009BETMCL1 | KA3846 | 0/77 | | |
| Q20080009BETMCL1 | KA3846 | | 0/77 | |
| Q20080009BFTMCL1 | KA3846 | 0/77 | | |
| Q20080009BFTMCL1 | KA3846 | | 0/77 | |

Product Id Description : Products affected by this change are listed in the below "Affected FSIDs" section.

Affected FSIDs :

| | | |
|----------|----------|---------|
| FAN7680N | KA3501 | KA3505 |
| KA3524 | KA3525A | KA3846 |
| KA7500B | UC3525AN | UC3846N |