



Date Created: 3/26/2004
Date Issued: 4/16/2004
PCN # 20041303

FORECAST CHANGE NOTIFICATION

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. This is a preliminary notification. A final PCN will be issued when qualification is complete and data is available.

If you require data or samples to qualify this change, please contact **Fairchild Semiconductor within 30 days of receipt of this notification.**

If you have any questions concerning this change, please contact:

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REL Engineer

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PCN Type: Alternate Assembly Site Location/Qualification

Effectivity

Expected 1st Device Shipment Date: 7/15/2004
Earliest Year/Work Week of Changed Product: 0429
(Note: Package marking may differ from this format)

Product ID (Description):

All visible LED's supplied by Fairchild Semiconductor.

Description of Change:

Fairchild will be adding Lite-On Technology as an alternate subcontracted source for all visible LED's listed hereafter.

Effect of Change:

No changes are expected to the existing LED products. Fairchild is working with Lite-On Technology to match the datasheets for our existing LED products as closely as possible. Any minor differences that may be identified during our review with Lite-On will be included in the final version of this PCN.

Qualification:

Refer to the currently available qualification data below. Additional qualification data for other package types will be included in the final version of this PCN.

Qual/REL Plan Numbers

Additional Qualification Data

Product Qualification Plan

Test vehicle: QTLP601CEBL

Chip used: ES-CEBH712

Test result:

| TEST | STRESS CONDITION | DEVICES TESTED | FAILURE | Iv and Vf change change in % |
|--|---|----------------|---------|---------------------------------|
| ROOM TEMP OPERATION LIFE | 25 DEG. C IF=20MA TEST TIME=1000HRS | 25 | 0 | Vf=-2.65% Iv=-2.54% |
| HIGH TEMP STORAGE | 105 DEG. C TEST TIME=1000HRS | 25 | 0 | Vf=-0.44% Iv=-9.17% |
| LOW TEMP STORAGE | -55 DEG. C TEST TIME=1000HRS | 25 | 0 | Vf=-0.14% Iv=-1.31% |
| TEMPERATURE CYCLING (AIR TO AIR) | -55 DEG TO 105 DEG. C TEST TIME=500 CYCLES | 25 | 0 | Vf=3.16% Iv=4.09% |
| TERMAL SHOCK | -40 DEG. C TO 85 DEG. C TEST TIME=100 CYCLES | 25 | 0 | Vf=-0.8% Iv=-8.2% |
| HIGH TEMP & | TEMP =85 DEG. C | 25 | 0 | Vf=-0.51% Iv=-15.89% |

| | | | | |
|------------------|--|----|---|-------------------------|
| HIGH HUMIDITY | RH = 85% TEST TIME=1000HRS | | | |
| SOLDER RESISTANT | TEMP=260 +/- 5 DEG.C MIN. 10 SEC | 25 | 0 | Vf=-1.28% Iv=-15.41% |
| SOLDERABILITY | TEMP=235 +/- 5 DEG.C MIN. 2 SEC | 25 | 0 | Vf=-2.65% Iv=-2.54% |
| HTOL | TEMP=55 +/- 5 DEG.C IF=20MA TEST TIME=1000HRS | 25 | 0 | Vf=-0.0% Iv=-34.13% |
| HTRB | TEMP=55 +/- 5 DEG.C HUMIDITY 90% TEST TIME=1000HRS | 25 | 0 | Vf=-2.2% Iv=-32.01% |
| ESD | HBM VOLTAGE STRESS START FROM 100V ,STOP AT 8000V | 5 | 0 | >2300V |

Criteria:

Iv<35/50%(avg/max)

Vf<20%

Affected FSIDs

FLV110
FOL215WTR
FOL625CIWTR
HLMAQH00AGR
HLMAQH00AZR
HLMAQL00AZR
HLMP0300
HLMP0300E4R0
HLMP0400E4R0
HLMP0503
HLMP0503E4R0
HLMP1300C6R0
HLMP1301C4R0

FLV110A34R0
FOL215W_7865D
HLMAQH00A
HLMAQH00AYB
HLMAQL00AGR
HLMAQL00A_7677D
HLMP0300E3A0
HLMP0301
HLMP0401
HLMP0503E3A0
HLMP0504
HLMP1300D6A0
HLMP1301C6R2

FOL1313RGBTR
FOL216WTR
HLMAQH00AGB
HLMAQH00AYR
HLMAQL00AYR
HLMAQL00A_7763D
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HLMP1302C5R0
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HLMP1585C6R0
HLMP1700C1R0
HLMP1700C3R0
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