**PCN# : P5A2AA**
**Issue Date : Nov. 24, 2015**

# DESIGN/PROCESS CHANGE NOTIFICATION

This is to inform you that a change is being made to the products listed below.

Unless otherwise indicated in the details of this notification, the identified change will have no impact on product quality, reliability, electrical, visual or mechanical performance and affected products will remain fully compliant to all published specifications. Products incorporating this change may be shipped interchangeably with existing unchanged products.

This change is planned to take effect in 90 calendar days from the date of this notification. Please work with your local Fairchild Sales Representative to manage your inventory of unchanged product if your evaluation of this change will require more than 90 calendar days.

Please contact your local Customer Quality Engineer within 30 days of receipt of this notification if you require any additional data or samples.

## Implementation of change:

Expected First Shipment Date for Changed Product :Feb. 22, 2016

Expected First Date Code of Changed Product :1609

Description of Change (From) :
5-inch wafer fabrication at Fairchild in Bucheon, South Korea

Description of Change (To) :
8-inch wafer fabrication at Fairchild in Bucheon, South Korea

Reason for Change:
Fairchild Semiconductor is increasing wafer fabrication capacity by qualifying 8-inch wafer fabrication line at Fairchild Semiconductor Bucheon Korea. Quality and reliability remain at the highest standards already demonstrated within Fairchild's existing products. The reliability qualification results used to qualify the 8-inch wafer fabrication line are summarized below.Design, die size and layout of the affected products will remain unchanged. There are no changes in the datasheet or electrical performance.

Affected Product(s): Please refer to the list of affected products in the addendum attached in the PCN email you received. This list is based on an analysis of your companys procurement history.

| Qualification Plan | Device | Package | Process | No. of Lots |
|---|---|---|---|---|
| Q20140060 | FFB20UP20DN_F085 | D2PAK | Ultrafast | 3 |

| Test Description: | Condition: | Standard: | Duration: | Results: |
|---|---|---|---|---|
| Precon | MSL1, 245C | JESD22-A113 | N/A | 0/924 |
| High Temperature Reverse Bias | 160V,175C | JESD22-A108 | 1000 hrs | 0/231 |
| High Humidity High Temp. Reverse Bias(H3TRB) | 85%RH, 85C,100V | JESD22-A101B | 1000 hrs | 0/231 |
| Autoclave | 100%RH, 121C | JESD22-A102 | 96 hrs | 0/231 |
| Temperature Cycle | -55C,150C | JESD22-A104 | 1000 cyc | 0/231 |
| Power Cycle | On/Off=3.5min, Delta Tj=100C | MIL-STD-750 M1037 | 8572 cyc | 0/77 |
| High Temperature Storage Life | 175C | JESD22-A103 | 1000 hrs | 0/231 |

| Qualification Plan | Device | Package | Process | No. of Lots |
|---|---|---|---|---|
| QP1411001 | RURP15100_F085 | TO220 | Ultrafast | 3 |

| Test Description: | Condition: | Standard: | Duration: | Results: |
|---|---|---|---|---|
| High Temperature Reverse Bias | 1000V,175C | JESD22-A108 | 1000 hrs | 0/231 |
| Highly Accelerated Stress Test | 85%RH, 130C,42V | JESD22-A110 | 96 hrs | 0/231 |
| Unbiased Accelerated Stress Test | 85%RH, 130C | JESD22-A118 | 96 hrs | 0/231 |
| Autoclave | 100%RH, 121C | JESD22-A102 | 96 hrs | 0/231 |
| Temperature Cycle | -55C,150C | JESD22-A104 | 1000 cyc | 0/231 |
| Power Cycle | On/Off=3.5min, Delta Tj=100C | MIL-STD-750 M1037 | 8572 cyc | 0/231 |
| High Temperature Storage Life | 150C | JESD22-A103 | 1000 hrs | 0/231 |

| Qualification Plan | Device | Package | Process | No. of Lots |
|---|---|---|---|---|
| Q20140059 | RHRG5060 | TO247 | Hyperfast | 3 |

| Test Description: | Condition: | Standard: | Duration: | Results: |
|---|---|---|---|---|
| High Temperature Reverse Bias | 480V,175C | JESD22-A108 | 1000 hrs | 0/231 |
| High Humidity High Temp. Reverse Bias(H3TRB) | 85%RH, 85C,100V | JESD22-A101B | 1000 hrs | 0/231 |
| Autoclave | 100%RH, 121C | JESD22-A102 | 96 hrs | 0/231 |
| Temperature Cycle | -55C,150C | JESD22-A104 | 1000 cyc | 0/231 |
| Power Cycle | On/Off 5 Min, Delta Tj=100C | MIL-STD-750 M1037 | 6000 cyc | 0/77 |
| High Temperature Storage Life | 175C | JESD22-A103 | 1000 hrs | 0/231 |

| Qualification Plan | Device | Package | Process | No. of Lots |
|---|---|---|---|---|
| Q20140061 | FSAM50SM60A | SPM32 | PT-PIGBT | 3 |

| Test Description: | Condition: | Standard: | Duration: | Results: |
|---|---|---|---|---|
| High Temperature Reverse Bias | 480V,125C | JESD22-A108 | 1000 hrs | 0/75 |
| Temperature Humidity Biased Test | 85%RH, 85C, Vpn=100V, Vcc=15V | JESD22-A101 | 1000 hrs | 0/75 |
| Temperature Cycle | -45C,125C | JESD22-A104 | 200 cyc | 0/228 |
| High Temperature Storage Life | 125C | JESD22-A103 | 1000 hrs | 0/231 |