

PCN# : P647AA

Issue Date : Aug. 17, 2016

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 :Nov. 15, 2016

Expected First Date Code of Changed Product :1647

Description of Change (From): Wafer fabrication at TowerJazz Israel

Description of Change (To):

8-inch wafer fabrication at Fairchild in Bucheon, South Korea and wafer fabrication at TowerJazz Israel

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):

| 9V49_NB9V004 | FDC6301N | FDC6303N |
|-----------------|-------------------|-----------|
| FDC6304P | FDC653N | FDG6301N |
| FDG6301N_G | FDG6303N | FDG6304P |
| FDG6321C | FDG6322C | FDG6323L |
| FDN337N | FDN357N | FDS8433A |
| FDS8433A_G | FDS8928A | FDV301N_G |
| FDV301N_NB9V003 | FDV303N | FDV304P |
| FDV304P_D87Z | NDS331N | NDS332P |
| NDS355AN | NDS355AN_NB9L007A | NDS355N |
| NDT452AP | | |

| Qualification Plan | Device | Package | Process | No. of Lots |
|---------------------------|----------|---------|---------|-------------|
| Q20160056 | FDC6303N | SSOT6 | 5.0M N | 2 |

| Test Description: | Condition: | Standard : | Duration: | Results: |
|----------------------------------|----------------------------|-------------|--------------|-------------|
| MSL1 Precondition | 260°C, 3 cycles | JESD22-A113 | | 0/640 |
| Highly Accelerated Stress Test | 130°C, 85%RH, Vr = +20V | JESD22-A110 | 96 hrs | 0/160 |
| High Temperature Gate Bias | 150°C, Vgs = +8V | JESD22-A108 | 1000hrs | 15-Sep 2016 |
| High Temperature Reverse Bias | 150°C, Vr = +20V | JESD22-A108 | 1000hrs | 0/160 |
| Power Cycle | Delta 100CC, 2.0 Min cyc | JESD22-A105 | 10000 cycles | 0/160 |
| High Temperature Storage Life | 150°C | JESD22-A103 | 1000hrs | 0/160 |
| Temperature Cycle | -65°C, 150°C | JESD22-A104 | 500 cycles | 15-Sep-2016 |

| Qualification Plan | Device | Package | Process | No. of Lots |
|---------------------------|----------|------------|---------|-------------|
| Q20160056 | FDS8433A | SO8-Single | 10.0M P | 3 |

| Test Description: | Condition: | Standard : | Duration: | Results: |
|----------------------------------|-----------------------------|-------------|--------------|----------|
| MSL1 Precondition | 260°C, 3 cycles | JESD22-A113 | | 0/720 |
| Highly Accelerated Stress Test | 130°C, 85%RH, Vr = - 16V | JESD22-A110 | 96 hrs | 0/240 |
| High Temperature Gate Bias | 150°C, Vgs = -8V | JESD22-A108 | 1000hrs | 0/240 |
| High Temperature Reverse Bias | 150°C, Vr = - 16V | JESD22-A108 | 1000hrs | 0/240 |
| Power Cycle | Delta 100CC, 2.0 Min cyc | JESD22-A105 | 10000 cycles | 0/240 |
| Temperature Cycle | -65°C, 150°C | JESD22-A104 | 1000 cycles | 0/240 |

| Qualification Plan | Device | Package | Process | No. of Lots |
|--------------------|-----------|---------|---------|-------------|
| Q20160056 | NDB6030PL | TO-263 | 05.0 P | 1 |

| Test Description: | Condition: | Standard : | Duration: | Results: |
|-----------------------------------|----------------------------|-------------|-------------|-------------|
| MSL1 Precondition | 260°C, 3 cycles | JESD22-A113 | | 01-Aug 2016 |
| Highly Accelerated Stress Test | 130°C, 85%RH, Vr = +20V | JESD22-A110 | 96 hrs | 09-Sep 2016 |
| High Temperature Gate Bias | 150°C, Vgs = +8V | JESD22-A108 | 1000hrs | 27-Sep 2016 |
| High Temperature Reverse Bias | 150°C, Vr = +20V | JESD22-A108 | 1000hrs | 27-Sep 2016 |
| Power Cycle | Delta 100CC, 2.0 Min cyc | JESD22-A105 | 8572 cycles | 30-Sep 2016 |
| Temperature Cycle | -65°C, 150°C | JESD22-A104 | 500 cycles | 22-Aug 2016 |