

PCN# : P613AAB

Issue Date : Feb. 03, 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 : May. 03, 2016

Expected First Date Code of Changed Product :1619

Description of Change (From):

6-inch wafer fabrication at Fairchild in Bucheon, South Korea

Description of Change (To):

6/8-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):

| FCP400N80Z FCPF400N80Z | FCPF400N80ZL1 |
|------------------------|---------------|
|------------------------|---------------|

| Qualification Plan | Device | Package | Process | No. of Lots |
|--------------------|-------------|---------|------------|-------------|
| QP131201 | FCPF400N80Z | TO-220F | Super-FET2 | 3 |

| Test Description: | Condition: | Standard : | Duration: | Results: |
|--------------------------------|------------------------|-------------|------------|----------|
| High Temperature Gate Bias | 150°C, Vgs = 20V | JESD22-A108 | 1000 hrs | 0/231 |
| High Temperature Reverse Bias | 150°C, Vr = 800V | JESD22-A108 | 1000 hrs | 0/231 |
| High Temperature Storage Life | 150°C | JESD22-A103 | 1000 hrs | 0/231 |
| Highly Accelerated Stress Test | 130°C, 85%RH, Vr = 42V | JESD22-A110 | 96 hrs | 0/231 |
| Temperature Cycle | -65°C, 150°C | JESD22-A104 | 500 cycles | 0/231 |



Title: Qualification Report for PCN: P613AAB

Date: Feb. 03, 2016

Affected devices:

С

| Product | Customer Part NumberBBB | Drawing |
|-------------|-------------------------|---------|
| FCPF400N80Z | Y | N |

Customer Name : DIGI-KEY (SPECIAL)

Customer Code : 0003948154

Product

Customer Part NumberBBB

Drawing

| Product | Customer Part NumberBBB | | Drawing |
|-------------|-------------------------|---|---------|
| FCPF400N80Z | | Υ | N |

Customer Name: DIGI-KEY CONSIGNMENT Customer Code: 0003948144

| Product | Customer Part NumberBBB | | Drawing |
|---------------|-------------------------|---|---------|
| FCPF400N80Z | | Υ | N |
| FCPF400N80ZL1 | | Υ | N |

Qualification Test Summary:

| Qualification Plan | Device | Package | Process | No. of Lots |
|--------------------|-------------|---------|------------|-------------|
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|--------------------------------|-------------------------|-------------|------------|----------|
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| High Temperature Reverse Bias | 150°C, <u>Vr</u> = 800V | JESD22-A108 | 1000 hrs | 0/231 |
| High Temperature Storage Life | 150°C | JESD22-A103 | 1000 hrs | 0/231 |
| Highly Accelerated Stress Test | 130°C, 85%RH, Vr = 42V | JESD22-A110 | 96 hrs | 0/231 |
| Temperature Cycle | -65°C, 150°C | JESD22-A104 | 500 cycles | 0/231 |

The selection methodology of qualification vehicles is aligned with JESD47 and if automotive devices are impacted by the PCN the selection of qualification vehicles is also align with the requirements in AEC-Q100 or AEC-Q101

Please contact your local Customer Quality Engineer if you have any questions concerning this data.