

PCN#: P382A

Issue Date : Sep. 26, 2013

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. Alternatively, you may send an email request for data, samples or other information to PCNSupport@fairchildsemi.com.

Implementation of change:

Expected First Shipment Date for Changed Product : Dec. 25, 2013

Expected First Date Code of Changed Product :1404

Description of Change (From):

Currently using 2.0mils Au wire and Die attach using EN4620K Epoxy

Description of Change (To):

Change to 2.0mils Cu wire and Die attach using QMI519 Epoxy

Reason for Change:

Au to Cu wire conversion for better electrical and thermal performance and epoxy standardization.



Affected Product(s):

| FDMS2572 | FDMS2672 | FDMS2734 |
|----------|----------|----------|
| FDMS3572 | FDMS3672 | FDMS5672 |

| Qualification Plan | Device | Package | Process | No. of Lots |
|--------------------|----------|----------|---------|-------------|
| F20120165 | FDMS3572 | MLDAMA08 | Mosfet | 1 |

| Test Description: | Condition: | Standard: | Duration: | Results: |
|--------------------------------|----------------------------|------------------|------------|----------|
| MSL1 Precondition | 260C, 3 cycles | JESD22-A113 | | 0/231 |
| Temperature Cycle | -65C, 150C | JESD22-A104 | 500 cycles | 0/77 |
| High Temperature Storage Life | 150C | JESD22-A103 | 2000 hrs | 0/77 |
| Power Cycle | 125°C TJC, delta Tj of 100 | JESD22-A122 | 10k cycles | 0/77 |
| | C, 2 min on, 2 min off | | | |
| Highly Accelerated Stress Test | 130C, 85%RH | JESD22-A110 | 192 hrs | 0/77 |
| MSL1 | 260C, 3 cycles | J-STD_020 | | 0/22 |
| Die Shear | 500g | MIL-STD-883-2019 | | 0/5 |
| Construction Analysis | | | | 0/2 |
| Bond Shear | 15g | AEC-Q100-001 | | 0/5 |
| Bond Pull | 3.0g | JESD22-C100 | | 0/5 |

| Qualification Plan | Device | Package | Process | No. of Lots |
|--------------------|----------|----------|---------|-------------|
| F20120165 | FDMS2672 | MLDAMA08 | Mosfet | 1 |

| Test Description: | Condition: | Standard: | Duration: | Results: |
|--------------------------------|------------------------|------------------|------------|----------|
| MSL1 Precondition | 260C, 3 cycles | JESD22-A113 | | 0/231 |
| Temperature Cycle | -65C, 150C | JESD22-A104 | 500 cycles | 0/77 |
| High Temperature Storage Life | | JESD22-A103 | 2000 hrs | 0/77 |
| Power Cycle | | JESD22-A122 | 10k cycles | 0/77 |
| | C, 2 min on, 2 min off | | | |
| Highly Accelerated Stress Test | 130C, 85%RH | JESD22-A110 | 192 hrs | 0/77 |
| MSL1 | 260C, 3 cycles | J-STD_020 | | 0/22 |
| Die Shear | 500g | MIL-STD-883-2019 | | 0/5 |
| Construction Analysis | | | | 0/2 |
| Bond Shear | 15g | AEC-Q100-001 | | 0/5 |
| Bond Pull | 3.0g | JESD22-C100 | | 0/5 |

| Qualification Plan | Device | Package | Process | No. of Lots |
|---------------------------|----------|----------|---------|-------------|
| F20120165 | FDMS5672 | MLDAMA08 | Mosfet | 1 |

| Test Description: | Condition: | Standard : | Duration: | Results: |
|--------------------------------|----------------------------|------------------|------------|----------|
| MSL1 Precondition | 260C, 3 cycles | JESD22-A113 | | 0/231 |
| High Temperature Reverse | 150°C Tj, 80% of Rated | JESD22-A108 | 1000 hrs | 0/77 |
| Bias Test | BV | | | |
| High Temperature Gate Bias | 150°C Tj, 100% of rated | JESD22-A108 | 1000 hrs | 0/77 |
| Test | VGS | | | |
| Temperature Cycle | -65C, 150C | JESD22-A104 | 500 cycles | 0/77 |
| High Temperature Storage Life | 150C | JESD22-A103 | 2000 hrs | 0/77 |
| Power Cycle | 125°C TJC, delta Tj of 100 | JESD22-A122 | 10k cycles | 0/77 |
| | C, 2 min on, 2 min off | | | |
| Highly Accelerated Stress Test | 130C, 85%RH | JESD22-A110 | 192 hrs | 0/77 |
| MSL1 | 260C, 3 cycles | J-STD_020 | | 0/22 |
| Die Shear | 500g | MIL-STD-883-2019 | | 0/5 |
| Construction Analysis | | | | 0/2 |
| Bond Shear | 15g | AEC-Q100-001 | | 0/5 |
| Bond Pull | 3.0g | JESD22-C100 | | 0/5 |