**PCN# : P64BAAB**
**Issue Date : Aug. 19, 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. 17, 2016

Expected First Date Code of Changed Product :1647

Description of Change (From) :
1) Wire bonding with 1.3mils Au in Fairchild Semiconductor Cebu.
2) Assembly in Fairchild Semiconductor Cebu.

| Package | Assembly Site | BOM | | | | | |
|---|---|---|---|---|---|---|---|
| | | Leadframe | Die & Clip Attach Material | Clip Material | Wire | Mold Compound | Terminal Finish |
| DRMOS PQFN6x6 | Fairchild Cebu, Philippines | C194 Cu leadframe with Ag spot plating | Indium Corp. NC-SMQ75 | C194 Cu Clip | 1.3 mils Au wire | Hitachi CEL9240HF10LS | Sn |

Description of Change (To) :
1) Standardize wire bonding to 1.0mils PCC in both Fairchild Semiconductor Cebu and sub-contractor Malaysia.
2) Added alternate assembly location in sub-contractor Malaysia. No changes to current marketing outline specification.

| Package | Assembly Site | BOM | | | | | |
|---|---|---|---|---|---|---|---|
| | | Leadframe | Die Attach Material | Clip Material | Wire | Mold Compound | Terminal Finish |
| DRMOS PQFN6x6 | Fairchild Cebu, Philippines | C194 Cu leadframe with Ag spot plating | Indium Corp. NC-SMQ75 | C194 Cu Clip | 1.0 mils PCC wire | Hitachi CEL9240HF10LS | Sn |
| DRMOS PQFN6x6 | Sub-contractor in Malaysia | C194 Cu leadframe with Ag spot plating | Indium Corp. NC-SMQ75 | C194 Cu Clip | 1.0 mils PCC wire | Hitachi CEL9240HF10LS | Sn |

Reason for Change:
Increase Supply Capacity and Flexibility

**Affected Product(s):**

| | | |
|---|---|---|
| FDMF3030 | FDMF6708N | FDMF6823 |

# QUALIFICATION DATA REPORT
# P64BAAB

| Qualification Plan | Device | Package | Package & Assembly Location | No. of Lots |
|---|---|---|---|---|
| Q20150476A | FDMF6820B | PQBFN | ASE-M | 3 |

| Test Description | Condition | Standard | Duration | Sample size | No. of lots | Results |
|---|---|---|---|---|---|---|
| Preconditioning, MSL 1 | Peak Temp (260°C) | JESD22-A113 | | 45, 77 | 15 | 0/828 |
| Highly Accelerated Stress Test | Preconditioning, 85%RH, 130C, Bias | JESD22-A110 | 96 hrs | 45 | 3 | 0/135 |
| Unbiased Highly Accelerated Stress Test | Preconditioning, 85%RH, 130C | JESD22-A118 | 96 hrs 192 hrs | 77 | 3 | 0/231 |
| Temperature Cycle | Preconditioning, -65C, 150C | JESD22-A104 | 100 cycles 500 cycles 1000 cycles | 77 | 3 | 0/231 |
| High Temperature Storage Life | Preconditioning, 150C | JESD22- A103 | 168 hrs 500 hrs 1000 hrs | 77 | 3 | 0/231 |
| Destructive Physical Analysis (after 1000cyc TMCL) | NA | AEC-Q101-004 Section 4 | After TMCL | 3 | 3 | 0/9 |

| Qualification Plan | Device | Package | Package & Assembly Location | No. of Lots |
|---|---|---|---|---|
| Q20150495 | FDMF6840C | PQBFN | ASE-M | 3 |

| Test Description | Condition | Standard | Duration | Sample size | No. of lots | Results |
|---|---|---|---|---|---|---|
| Preconditioning, MSL 1 | Peak Temp (260°C) | JESD22-A113 | | 45, 77 | 6 | 0/366 |
| Highly Accelerated Stress Test | Preconditioning, 85%RH, 110C, Bias | JESD22-A110 | 300 hrs | 45 | 3 | 0/135 |
| Temperature Cycle | Preconditioning, -65C, 150C | JESD22-A104 | 100 cycles | 77 | 3 | 0/231 |

| Qualification Plan | Device | Package | Package & Assembly Location | No. of Lots |
|---|---|---|---|---|
| Q20160052A | FDMF6821B | PQBFN | Cebu | 3 |

| Test Description | Condition | Standard | Duration | Sample size | No. of lots | Results |
|---|---|---|---|---|---|---|
| Preconditioning, MSL 1 | Peak Temp (260°C) | JESD22-A113 | | 77 | 3 | 0/231 |
| Highly Accelerated Stress Test | Preconditioning, 85%RH, 130C, Bias | JESD22-A110 | 96hrs<br>192 hrs | 77 | 1 | 0/77 |
| Temperature Cycle | Preconditioning, -65C, 150C | JESD22-A104 | 100 cycles<br>500 cycles<br>1000 cycles | 77 | 1 | 0/77 |
| High Temperature Storage Life | Preconditioning, 150C | JESD22- A103 | 168 hrs<br>500 hrs<br>1000 hrs | 77 | 1 | 0/77 |
| Destructive Physical Analysis (after 500cyc TMCL) | NA | AEC-Q101-004 Section 4 | After TMCL | 2 | 1 | 0/2 |