

### 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.

		ВОМ							
Package Assembly Sit	Assembly Site	Leadframe	Die & Clip Attach Material	Clip Material	Wire	Mold Compound	Terminal Finish		
DRMOS PQFN6x6		C194 Cu leadframe with Ag spot plating		C194 Cu Clip	1.3 mils Au wire	Hitachi CEL9240HF10LS	Sn		

Description of Change (To) :

 Standardize wire bonding to 1.0mils PCC in both Fairchild Semiconductor Cebu and sub-contractor Malaysia.
Added alternate assembly location in sub-contractor Malaysia. No changes to current marketing outline specification.

		BOM							
Package	Assembly Site	Leadframe	Die Attach Material	Clip Material	Wire	Mold Compound	Terminal Finish		
DRMOS PQFN6x6		C194 Cu leadframe with Ag spot plating	Indium Corp. NC- SMQ75	C194 Cu Clip	1.0 mils PCC wire	Hitachi CEL9240HF10LS	Sn		
DRMOS PQFN6x6		C194 Cu <u>leadframe</u> 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):

EDME3030	FDMF6708N	FDMF6823
FDIVIF3030	FDIVIF0700IN	FDIVIF0023

# 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	Preconditioning,	JESD22-A118	96 hrs	77	3	0/231
Accelerated Stress Test	85%RH, 130C	JESD22-A110	192 hrs		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	Durati on	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 192 hrs	77	1	0/77
Temperature Cycle	Preconditioning, -65C, 150C	JESD22-A104	100 cycles 500 cycles 1000 cycles	77	1	0/77
High Temperature Storage Life	Preconditioning, 150C	JESD22- A103	168 hrs 500 hrs 1000 hrs	77	1	0/77
Destructive Physical Analysis (after 500cyc TMCL)	NA	AEC-Q101-004 Section 4	After TMCL	2	1	0/2



# Title : Qualification Report for PCN : P64BAAB

Date : Aug. 18, 2016

### Affected devices :

С

Product	Customer Part NumberBBB	Drawing
FDMF3030	Y	Ν

**Qualification Test Summary :** 

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
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High Temperature Storage Life	Preconditioning, 150C	JESD22- A103	168 hrs 500 hrs 1000 hrs	77	1	0/77
Destructive Physical Analysis (after 500cyc TMCL)	NA	AEC-Q101-004 Section 4	After TMCL	2	1	0/2

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.