



**PCN# : P365A**  
**Issue Date : Jun. 16, 2014**

**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](mailto:PCNSupport@fairchildsemi.com).

**Implementation of change:**

Expected First Shipment Date for Changed Product : Sep. 14, 2014

Expected First Date Code of Changed Product :1440

Description of Change (From) :  
5-inch and 6-inch wafer manufacturing

Description of Change (To) :  
Add 6-inch and 8-inch wafer manufacturing

Reason for Change:  
Increase flexibility and longevity of Fairchild's wafer manufacturing supply chain. 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): Please refer to the list of affected products in the addendum attached in the PCN email you received. This list is based on an analysis of your company's procurement history.

Qualification Plan	Device	Package	Process	No. of Lots
QP13031025	FDMS86201	PQFN08A	MV5N/MV5NZ	1
	FDMS86200DC	PQFN08D		3

Reliability Test	Condition	Standard	Device Name	FDMS86201
			Lot No.	FCP1336201
			Duration	Result/FA
<b>Preconditioning</b>	Per spec	JESD22A-113		0/154
<b>HTRB</b>	150C, Vr=96V	JESD22-A108	1000hrs	0/77
<b>HTGB</b>	150C, Vgs=20V	JESD22-A108-B	1000hrs	0/77
<b>TMCL</b>	-65 to 150C, 30min/cycle	JESD22-A104	500cyc	0/77
<b>HAST</b>	130C, 85%RH, Vr=42V	JESD22-A110-B JESD22A-101	96hrs	0/77
<b>PRCL</b>	T On/Off=2.0min, Delta Tj=100C	Mil Std 750 Method 1037 JESD22-A105	10000cyc	0/77
<b>HTSL</b>	150C	JESD22-A103	1000hrs	0/77

Reliability Test	Condition	Standard	Device Name	FDMS86200DC	FDMS86200DC	FDMS86200DC
			Lot No.	FCP1342401	FCP1342402	FCP1342403
			Duration	Result/FA	Result/FA	Result/FA
<b>Preconditioning</b>	Per spec	JESD22A-113		0/154	0/154	0/154
<b>HTRB</b>	150C, Vr=120V	JESD22-A108	1000hrs	0/77	0/77	0/77
<b>HTGB</b>	150C, Vgs=20V	JESD22-A108-B	1000hrs	0/77	0/77	0/77
<b>TMCL</b>	-65 to 150C, 30min/cycle	JESD22-A104	500cyc	0/77	0/77	0/77
<b>HAST</b>	130C, 85%RH Vr=42V	JESD22-A110-B JESD22A-101	96hrs	0/77	0/77	0/77
<b>PRCL</b>	T On/Off=2.0min Delta Tj=100C	Mil Std 750 Method 1037 JESD22-A105	10000cyc	0/77	0/77	0/77
<b>HTSL</b>	150C	JESD22-A103	1000hrs	0/77	0/77	0/77

Qualification Plan	Device	Package	Process	No. of Lots
QP13031025	FDMC86102LZ	MLP08S	MV5N/MV5NZ	3

Reliability Test	Condition	Standard	Device Name	FDMC86102LZ	FDMC86102LZ	FDMC86102LZ
			Lot No.	Q20140011AA	Q20140011AB	Q20140011AC
			Duration	Result/FA	Result/FA	Result/FA
<b>Preconditioning</b>	Per spec	JESD22A-113		0/158	0/158	0/158
<b>HTGB</b>	150C, Vgs=20V	JESD22-A108	1000hrs	0/79	0/79	0/79
<b>HTRB</b>	150C, Vr=80V	JESD22-A108	1000hrs	0/79	0/79	0/79
<b>HTSL</b>	175C	JESD22-A103	500hrs	0/79	0/79	0/79
<b>HAST</b>	130C, 85%RH, Vr=42V	JESD22-A110	96hrs	0/79	0/79	0/79
<b>MSL</b>		J-STD_020		0/22	0/22	0/22
<b>PRCL</b>	T On/Off=2.0min, Delta Tj=100C	Mil Std 750-1036	10000cyc	0/77		
<b>TMCL</b>	-65C,150C	JESD22-A104	500cyc	0/79	0/79	0/79

Qualification Plan	Device	Package	Process	No. of Lots
QP13031025	FDB86135	TO263-3L	MV5N/MV5NZ	1

Reliability Test	Condition	Standard	Device Name	FDB86135
			Lot No.	FSZ1341101
			Duration	Result/FA
<b>Preconditioning</b>	Per spec	JESD22A-113		0/154
<b>HTRB</b>	175C, Vr=80V	JESD22-A108	1000hrs	0/77
<b>HTGB</b>	175C, Vgs=20V	JESD22-A108	1000hrs	0/77
<b>HAST</b>	130C, 85%RH, Vr=42V	JESD22-A110	96hrs	0/77
<b>TMCL</b>	-65C,150C, 30min/cycle	JESD22-A104	500cyc	0/77
<b>PRCL</b>	T On/Off=3.5min, Delta Tj=125C	Mil Std 750	8572cyc	0/77
<b>HTSL</b>	150C	JESD22-A103	1000hrs	0/77

Qualification Plan	Device	Package	Process	No. of Lots
QP12120985G	FDMS0300S	PQFN	N-Channel Power Trench 8 SyncFET	3

Reliability Test	Condition	Standard	Device Name	FDMS0300S	FDMS0300S	FDMS0300S
			Lot No.	G6A6201	G6A6181	G6A45310
			Duration	Result/FA	Result/FA	Result/FA
<b>Preconditioning</b>	Per spec	JESD22A-113		0/154	0/154	0/154
<b>HTGB</b>	150C, Vgs=20V	JESD22-A108	1000hrs	0/77	0/77	0/77
<b>HTRB</b>	150C, Vr=80V	JESD22-A108	1000hrs	0/77	0/77	0/77
<b>HTSL</b>	175C	JESD22-A103	500hrs	0/77	0/77	0/77
<b>HAST</b>	130C, 85%RH, Vr=42V	JESD22-A110	96hrs	0/77	0/77	0/77
<b>PRCL</b>	T On/Off=2.0min, Delta Tj=100C	Mil Std 750-1036	10000cyc	0/77	0/77	0/77
<b>TMCL</b>	-65C,150C	JESD22-A104	500cyc	0/77	0/77	0/77

Qualification Plan	Device	Package	Process	No. of Lots
QP13181047	FDMS7656AS	PQFN	N-Channel Power Trench 7 SyncFET	3

Reliability Test	Condition	Standard	Device Name	FDMS7656AS	FDMS7656AS	FDMS7656AS
			Lot No.	T03G6A813	X3G6A814	T03G6A815
			Duration	Result/FA	Result/FA	Result/FA
<b>Preconditioning</b>	Per spec	JESD22A-113		0/77	0/77	0/77
<b>HTGB</b>	150C, Vgs=20V	JESD22-A108	1000hrs	0/77	0/77	0/77
<b>HTRB</b>	150C, Vr=80V	JESD22-A108	1000hrs	0/77	0/77	0/77
<b>HAST</b>	130C, 85%RH, Vr=42V	JESD22-A110	96hrs	0/77	0/77	0/77

Qualification Plan	Device	Package	Process	No. of Lots
QP13011024A	FDMS7650DC	PQFN_56CLP	PT7 N S	3
	FDMC8010	PQFN_33PC	PT8 N S	3

Reliability Test	Condition	Standard	Device Name	FDMS7650DC	FDMS7650DC	FDMS7650DC
			Lot No.	G6A827 A	G6A827 B	G6A827 C
			Duration	Result/FA	Result/FA	Result/FA
<b>Preconditioning</b>	Per spec	JESD22A-113		0/154	0/154	0/154
<b>HTGB</b>	150C, Vgs=20V	JESD22-A108	1000hrs	0/77	0/77	0/77
<b>HTRB</b>	150C, Vr=80V	JESD22-A108	1000hrs	0/77	0/77	0/77
<b>HTSL</b>	175C	JESD22-A103	500hrs	0/77	0/77	0/77
<b>HAST</b>	130C, 85%RH, Vr=42V	JESD22-A110	96hrs	0/77	0/77	0/77
<b>PRCL</b>	T On/Off=2.0min Delta Tj=100C	Mil Std 750-1036	10000cyc	0/77	0/77	0/77
<b>TMCL</b>	-65C,150C	JESD22-A104	500cyc	0/77	0/77	0/77

Reliability Test	Condition	Standard	Device Name	FDMC8010	FDMC8010	FDMC8010
			Lot No.	G6A8281	G6A8291	G6A8301
			Duration	Result/FA	Result/FA	Result/FA
<b>Preconditioning</b>	Per spec	JESD22A-113		0/154	0/154	0/154
<b>HTGB</b>	150C, Vgs=20V	JESD22-A108	1000hrs	0/77	0/77	0/77
<b>HTRB</b>	150C, Vr=80V	JESD22-A108	1000hrs	0/77	0/77	0/77
<b>HTSL</b>	175C	JESD22-A103	500hrs	0/77	0/77	0/77
<b>HAST</b>	130C, 85%RH, Vr=42V	JESD22-A110	96hrs	0/77	0/77	0/77
<b>PRCL</b>	T On/Off=2.0min, Delta Tj=100C	Mil Std 750-1036	10000cyc	0/77	0/77	0/77
<b>TMCL</b>	-65C,150C	JESD22-A104	500cyc	0/77	0/77	0/77

Qualification Plan	Device	Package	Process	No. of Lots
Q20140001	FDMC6676BZ	MLDEUC08	ST3 PZ	3

Reliability Test	Condition	Standard	Device Name	FDMC6676BZ	FDMC6676BZ	FDMC6676BZ
			Lot No.	Q20140001AA	Q20140001AB	Q20140001AC
			Duration	Result/FA	Result/FA	Result/FA
<b>Preconditioning</b>	Per spec	JESD22A-113		0/158	0/158	0/158
<b>HTGB</b>	150C, Vgs=20V	JESD22-A108	1000hrs	0/79	0/79	0/79
<b>HTRB</b>	150C, Vr=80V	JESD22-A108	1000hrs	0/79	0/79	0/79
<b>HTSL</b>	175C	JESD22-A103	500hrs	0/79	0/79	0/79
<b>HAST</b>	130C, 85%RH, Vr=42V	JESD22-A110	96hrs	0/79	0/79	0/79
<b>MSL</b>		J-STD_020		0/22	0/22	0/22
<b>PRCL</b>	T On/Off=2.0min Delta Tj=100C	Mil Std 750-1036	10000cyc	0/79	0/79	0/79
<b>TMCL</b>	-65C, 150C	JESD22-A104	500cyc	0/79	0/79	0/79

Qualification Plan	Device	Package	Process	No. of Lots
Q20140002	FDS6681Z_G	NMSONC08	ST3 PZ	3

Reliability Test	Condition	Standard	Device Name	FDS6681Z_G	FDS6681Z_G	FDS6681Z_G
			Lot No.	Q20140002AA	Q20140002AB	Q20140002AC
			Duration	Result/FA	Result/FA	Result/FA
<b>Preconditioning</b>	Per spec	JESD22A-113		0/158	0/158	0/158
<b>HTGB</b>	150C, Vgs=20V	JESD22-A108	1000hrs	0/79	0/79	0/79
<b>HTRB</b>	150C, Vr=80V	JESD22-A108	1000hrs	0/79	0/79	0/79
<b>HTSL</b>	175C	JESD22-A103	500hrs	0/79	0/79	0/79
<b>HAST</b>	130C, 85%RH, Vr=42V	JESD22-A110	96hrs	0/79	0/79	0/79
<b>MSL</b>		J-STD_020		0/22	0/22	0/22
<b>PRCL</b>	T On/Off=2.0min Delta Tj=100C	Mil Std 750-1036	10000cyc	0/79	0/79	0/79
<b>TMCL</b>	-65C, 150C	JESD22-A104	500cyc	0/79	0/79	0/79