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PCN# : P364A
Issue Date : Oct. 18, 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 : Jan. 16, 2014

Expected First Date Code of Changed Product :1340

Description of Change (From) :
6/8-in wafer fabrication line at Fairchild Semiconductor Salt Lakes USA for MV5 fast track FSID.

Description of Change (To) :
8-in wafer fabrication line at Fairchild Semiconductor Bucheon Korea.

Reason for Change:
Fairchild Semiconductor is increasing wafer fabrication capacity by qualifying an 8-in 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-in wafer fabrication line are summarized below. The specific groups of products technologies are listed in the affected FSIDs list. 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):

FDB075N15A	FDMC86324	FDMS86101
FDMS86101A	FDMS86101_SN00155	FDMS86101_SN00235
FDMS86103L	FDMS86105	FDMS86200
FDMS86322	FDP075N15A_F102	FDS86242

Qualification Plan	Device	Package	Process	No. of Lots
QP13060005	FDB075N15A_F085	TOLL	MV5N Automotive	3

Reliability Test	Condition	Standard	Device Name	FDB075N15A	FDB075N15A	FDB075N15A
			Lot No.	FCP1327201	FCP1327202	FCP1327203
			Duration	Result/FA	Result/FA	Result/FA
Preconditioning	Per spec	AEC-Q101		0/385	0/385	0/385
TMCL	-55 to 150C, 15min dwell	AEC-Q101	1000cyc	0/77	0/77	0/77
ACLV	121C, 15psi, 100%RH	AEC-Q101	96hrs	0/77	0/77	0/77
H3TRB	85C, 85%RH,Vr=100V	AEC-Q101	1000hrs	0/77	0/77	0/77
HTRB	175C, Vr=120V	AEC-Q101	1000hrs	0/77	0/77	0/77
HTGB	175C, Vgs=20V	AEC-Q101	1000hrs	0/77	0/77	0/77
HTSL	150C	AEC-Q101	1000hrs	0/77	0/77	0/77
PRCL	T On/Off=3.5min, Delta Tj=100C	AEC-Q101	8572cyc	0/77	0/77	0/77
Gate Leakage	155C +400V and -400V	AEC-Q100	15min+2 mins soak	0/6	0/6	0/6

Qualification Plan	Device	Package	Process	No. of Lots
QP13060005	FDB075N15A_SN00284	TOLL	MV5N Automotive	1

Reliability Test	Condition	Standard	Device Name	FDB075N15A_SN00284
			Lot No.	FCP1327507
			Duration	Result/FA
Preconditioning	Per spec	AEC-Q101		0/385
TMCL	-55 to 150C, 15min dwell	AEC-Q101	1000cyc	0/77
ACLV	121C, 15psi, 100%RH	AEC-Q101	96hrs	0/77
H3TRB	85C, 85%RH,Vr=100V	AEC-Q101	1000hrs	0/77
HTRB	175C, Vr=120V	AEC-Q101	1000hrs	0/77
HTGB	175C, Vgs=20V	AEC-Q101	1000hrs	0/77
HTSL	150C	AEC-Q101	1000hrs	0/77
PRCL	T On/Off=3.5min, Delta Tj=100C	AEC-Q101	8572cyc	0/77
Gate Leakage	155C +400V and -400V	AEC-Q100	15min+2mins soak	0/6

Qualification Plan	Device	Package	Process	No. of Lots
QP13101033A	FDMS86101	PQFN56	MV5N 100/20V standard gate	3

Reliability Test	Condition	Standard	Device Name	FDMS86101	FDMS86101	FDMS86101
			Lot No.	FCP1326405	FCP1326406	FCP1326407
			Duration	Result/FA	Result/FA	Result/FA
Preconditioning	Per spec	JESD22A-113		0/154	0/154	0/154
HTRB	150C, Vr=80V	JESD22-A108	1000hrs	0/77	0/77	0/77
HTGB	150C, Vgs=20V	JESD22-A108-B	1000hrs	0/77	0/77	0/77
TMCL	-65 to 150C, 30min/cycle	JESD22-A104	500cyc	0/77	0/77	0/77
HAST	130C, 85%RH, Vr=42V	JESD22-A110-B JESD22A-101	96hrs	0/77	0/77	0/77
PRCL	T on/off=2min, Delta Tj=100C	Mil Std 750 Method 1037 JESD22-A105	10000cyc	0/77	0/77	0/77
HTSL	150C	JESD22-A103	1000hrs	0/77	0/77	0/77