



Date Created: 1/16/2004
Date Issued: 2/23/2004
PCN # 20040302

DESIGN/PROCESS CHANGE NOTIFICATION -- FINAL

This is to inform you that a design and/or process change will be made to the following product(s). This notification is for your information and concurrence.

If you require data or samples to qualify this change, please contact **Fairchild Semiconductor within 30 days of receipt of this notification.**

If you have any questions concerning this change, please contact:

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PCN Type: Die Revision

Effectivity

Expected 1st Device Shipment Date: 5/24/2004
Earliest Year/Work Week of Changed Product: 0422
(Note: Package marking may differ from this format)

Product ID (Description):

The product affected by this change is listed below in the "Affected FSIDs" section.

Description of Change:

As part of Fairchild Semiconductor's effort to provide value added products in the SO-8 package and continue to improve customer service, we are planning to increase cell density on the subject product to enable a smaller die area.

Effect of Change:

The Rds(on) maximum limits have been tightening from 20mO/35mO at 10/4.5 volts to 19mO/33mO parametric limits of the datasheet. All other parametric limits will remain the same.

Qualification:

See qual results below.

Qual/REL Plan Numbers

Additional Qualification Data

RELIABILITY TEST RESULT SUMMARY

TEST	CONDITION	REL #	230331	230372	220018	220216
		DEVICE	FDN358P	FDN360P	FDW2506P	FDZ206P
		PKG	SOT-3	SOT-3	TSSOP-8	BGA
		DIE LOT#	X03AQ6NPMC	Z003LT6QAD	O00BU1WXNA	Z012WF3KUG
		DURATION	SAMPLES/ FAILURES	SAMPLES/ FAILURES	SAMPLES/ FAILURES	SAMPLES/ FAILURES
ACLV	12I C, 15 psi	96 hrs	55/0	55/0	55/0	55/0
TMCL	-55°C TO 150°C, 15MIN DWELL	500cyc	55/0	55/0	55/0	55/0
HAST	@130°C/85%RH, Vr=80% Bvdss	120hrs	55/0		55/0	55/0
HTGB	150°C, Vg=100% Vgs	168hrs				
		1000hrs		55/0	55/0	55/0
HTRB	150°C, Vr=80% Bvdss	168hrs				
		1000hrs		55/0	55/0	55/0
PRCL	Tj DELTA 100°C	10000cyc	55/0		55/0	55/0

RELIABILITY TEST RESULT SUMMARY (Continued)

TEST	CONDITION	REL #	220006	220021	230002	230223
		DEVICE	FDS6679Z	FDS4435	FDT458P	FDT458P
		PKG	SOIC-8	SOIC-8	SOT-223	SOT-223
		DIE LOT#	U01CI2KGAA	U01LR2KCCB	X02AQ4HTAB	X03AQ6DNTB
		DURATION	SAMPLES/ FAILURES	SAMPLES/ FAILURES	SAMPLES/ FAILURES	SAMPLES/ FAILURES
ACLV	12I C, 15 psi	96 hrs	55/0			55/0
TMCL	-55°C TO 150°C, 15MIN DWELL	500cyc	55/0			55/0
HAST	@130°C/85%RH, Vr=80% Bvdss	120hrs	55/0	55/0		
HTGB	150°C, Vg=100% Vgs	168hrs			55/0	55/0
		1000hrs		55/0		
HTRB	150°C, Vr=80% Bvdss	168hrs			55/0	55/0
		1000hrs	55/0	55/0		
PRCL	Tj DELTA 100°C	10000cyc	55/0	55/0		

Affected FSIDs
SI4835DY