



Date Created: 12/31/2003
Date Issued: 1/13/2004
PCN # 20034802-A

DESIGN/PROCESS CHANGE NOTIFICATION -- FINAL

This is the first revision of the PCN 20034802 to add affected FSIDs. FAN8035, FAN8035L, FAN8036L, FAN8036_NL, FAN8431B, KA5L0565RTU, and KA5L0565RYDTU have been added.

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: Alternate Fab Location

Effectivity

Expected 1st Device Shipment Date: 4/12/2004
Earliest Year/Work Week of Changed Product: 0416
(Note: Package marking may differ from this format)

Product ID (Description):

Some Motor, FPS, and Industrial devices which are manufactured by BCH4 or BCH4B process.

Description of Change:

FAIRCHILD Semiconductor is currently manufacturing some Analog products, which are manufactured using BCH4 or BCH4B process, at the both 'Bucheon in Korea and Maine in USA'.

As part of FAIRCHILD Semiconductor's ongoing effort to increase capacity, reduce cycle times and improve customer service, some more products will be manufactured at the both 'Bucheon in Korea and Maine in USA'.
 The BCH4 and BCH4B process are bipolar processes with a 1.5um technology and they were qualified at Bucheon in 1997 and Maine in 2002.

Effect of Change:

There will be no impact to the electrical characteristics of these products. This change will enlarge the production capacity to meet any customer's need.

Qualification:

The qualification plan is intended to meet all our criteria for qualifying an alternative fabrication site and the overall quality and reliability of our products.

Qual/REL Plan Numbers

Additional Qualification Data

The KA9259ED is a representative device for this reliability testing.

Item	Test condition	Sample Size	Read out	Results (failed samples / tested samples)
HTOL	Ta=125°C , Vcc=13.2V, Vin=2.5V	76 ea * 3lot	1000hr	0/ 76 ea * 3lot
HTSL	Ta=150°C	77ea * 3lot	1000hr	0/ 77ea * 3lot
THBT	Ta=85°C, RH=85%, VCC=8V, Vin=2.5V	15 ea * 3lot	1000hr	0/ 15 ea * 3lot
ACLV	Ta=121°C, RH=100%, 15 PSIG	77 ea * 3lot	96 hr	0/ 77 ea * 3lot
TMCL	Air to air, - 65°C ~ 150°C	77 ea * 3lot	500 Cycle	0/ 77 ea * 3lot
PRE-CON	Temp=85°C / Humidity=85%	231 ea * 3lot	168hr	0/ 231 ea * 3lot
ESD/EOS	MIL-STD-883 (HBM / MM / CDM)	120 ea *3lot	-	0/ 120 ea * 3lot

The KA5M0265RTU is also a representative device for this reliability testing.

Item	Test condition	Sample Size	Read out	Results (failed samples / tested samples)
HTOL	Ta=125°C , Vdd=100V, VCC=19V	76 ea * 1lot	1000hr,	0 / 76 ea * 1lot
HTRB	Ta=150°C , Vdd=520V	76 ea * 1lot		0 / 76 ea * 1lot
HTSL	Ta=150°C	45 ea * 1lot		0 / 45 ea * 1lot
THBT	Ta=85°C, RH=85%, VCC=19V->13V	45 ea * 1lot		0 / 45 ea * 1lot
ACLV	Ta=121°C, RH=100%, 15 PSIG	45 ea * 1lot	96 Hr	0 / 45 ea * 1lot
TMCL	Air to air, - 65°C ~ 150°C	45 ea * 1lot	500 Cycle,	0 / 45 ea * 1lot

ESD	MIL-STD-883 (HBM / MM / CDM)	100 ea * 1lot	-	0 / 100 ea * 1lot
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Affected FSIDs

FAN7000D	FAN7000DTF	FAN7527
FAN7527BM	FAN7527BMX	FAN7527BN
FAN7527D	FAN7527DTF	FAN7546AM
FAN7546AMX	FAN7546MX	FAN7547AM
FAN7547AMX	FAN7547MX	FAN8004
FAN8035	FAN8035L	FAN8036L
FAN8036_NL	FAN8039BD3	FAN8039BD3TF
FAN8039D3	FAN8039D3TF	FAN8082
FAN8082D	FAN8082DTF	FAN8403D3
FAN8403D3TF	FAN8420D3	FAN8420D3TF
FAN8423D3	FAN8423D3TF	FAN8431
FAN8431B	FS6M07652RTCSYD	FS6M07652RTCTU
FS6M07652RTCYDT	FS6M12653RTCSYD	FS6M12653RTCTU
FS6M12653RTCYDT	FS6S0765RCBSYDT	FS6S0765RCBTU
FS6S0765RCBYDTU	FS6S0765RCHSYDT	FS6S0765RCHTU
FS6S0765RCHYDTU	FS6S0965RCBSYDT	FS6S0965RCBTU
FS6S0965RCBYDTU	FS6S0965RCTU	FS6S0965RCYDTU
FS6S1265RBSYDTU	FS6S1265RBTU	FS6S1265RBYDTU
FS6S1265RESYDTU	FS6S1265RETU	FS6S1265REYDTU
FS8S0765RCATU	FS8S0765RCAYDTU	FS8S0765RCBSYDT
FS8S0765RCBTU	FS8S0765RCBYDTU	FS8S0765RCCSYDT
FS8S0765RCCYDTU	FS8S0765RCDSYDT	FS8S0765RCDTU
FS8S0765RCDYDTU	FS8S0765RCTU	FS8S0765RCYDTU
FS8S0965RCBSYDT	FS8S0965RCBTU	FS8S0965RCBYDTU
KA3082B	KA5L0565RTU	KA5L0565RYDTU
KA5Q0565RTTU	KA5Q0565RTYDTU	KA5Q0740RTYDTU
KA5Q0765RTHTU	KA5Q0765RTHYDTU	KA5Q0765RTTU
KA5Q0765RTYDTU	KA5Q12656RTHTU	KA5Q12656RTHYDT
KA5Q1265RFHTU	KA5Q1265RFHYDTU	KA5Q1265RFTU
KA5Q1265RFYDTU	KA7540	KA7540D
KA7540DTF	KA7541	KA7541D
KA7541DTF	KA78RM33	KA78RM33RTF
KA78RM33RTM	KA78RM33TSTU	KA78RM33TU