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PCN # 20041601

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: Alternate Fab Location

Effectivity

Expected 1st Device Shipment Date: 8/6/2004
Earliest Year/Work Week of Changed Product: 0432
(Note: Package marking may differ from this format)

Product ID (Description):

Fairchild Semiconductor LCX, VHC, HC and LVX logic products currently being manufactured using Fairchild's CS080C process. Please refer to affected FSID listing attached.

Description of Change:

Fairchild Semiconductor is announcing an additional wafer fab location for the processing of the existing version of the LCX, VHC, HC and LVX devices currently being manufactured using Fairchild's CS080C process. These devices are currently manufactured in Fairchild's 6-inch wafer fab located in South Portland, ME. The additional manufacturing facility will be CSMC's 6-inch wafer fab located in Shanghai, China (PRC). This change is being implemented in order to improve product availability and manufacturing flexibility. Fairchild intends to supply these devices interchangeably from either wafer fab location. There are no die size, design, geometry or layout changes planned for the affected Fairchild products. These products will meet Fairchild's published data book specifications.

Effect of Change:

This change will not impact the parametric performance or electrical characteristics of the affected devices. Products manufactured at the new wafer fab location will continue to be fully compliant to all published databook specifications. Fairchild intends to supply product interchangeably from either wafer fab location. Quality and reliability will remain at the highest standards already demonstrated with Fairchild's existing products.

Qualification:

CMSM's fabrication process has been reviewed and found to meet or exceed Fairchild's quality system requirements. Fairchild has performed reliability stress testing to qualify the CMSM fabrication location as shown in the Qual section below.

Qual/REL Plan Numbers

Additional Qualification Data

Results/Discussion (FFM20040019)

Test: Preconditioning (FM-1)

Test Request	Device	Sbgrp	Sample Size	Rejects
RFM200300260	74LCX245MSA	A	320	0
RFM200300261	74LCX245MTC	A	320	0
RFM200300262	74LCX245SJ	A	320	0
RFM200300263	74LCX245WM	A	320	0

Test: Autoclave Test (ACLV)

Test Request	Device	Sbgrp	TP	Duration	Sample Size	Rejects
RFM200300260	74LCX245MSA	A	1	96	77	0
RFM200300261	74LCX245MTC	A	1	96	77	0
RFM200300262	74LCX245SJ	A	1	96	77	0
RFM200300263	74LCX245WM	A	1	96	77	0

Test: Highly Accelerated Stress Test (HAST)

Test Request	Device	Sbgrp	TP	Duration	Sample Size	Rejects
RFM200300260	74LCX245MSA	A	1	96	45	0
RFM200300261	74LCX245MTC	A	1	96	45	0
RFM200300262	74LCX245SJ	A	1	96	45	0
RFM200300263	74LCX245WM	A	1	96	45	0

Test: High Temperature Storage test (bake) (HTSL)

Test Request	Device	Sbgrp	TP	Duration	Sample Size	Rejects
RFM200300260	74LCX245MSA	A	1	168	77	0
RFM200300260	74LCX245MSA	A	2	1000	77	0
RFM200300261	74LCX245MTC	A	1	168	77	0
RFM200300261	74LCX245MTC	A	2	1000	77	0
RFM200300262	74LCX245SJ	A	1	168	77	0
RFM200300262	74LCX245SJ	A	2	1000	77	0
RFM200300263	74LCX245WM	A	1	168	77	0
RFM200300263	74LCX245WM	A	2	1000	77	0

Test: Operating Life Test (Static) (SOPL)

Test Request	Device	Sbgrp	TP	Duration	Sample Size	Rejects
RFM200300260	74LCX245MSA	A	1	168	77	0
RFM200300260	74LCX245MSA	A	2	500	77	0
RFM200300260	74LCX245MSA	A	3	1000	77	0
RFM200300261	74LCX245MTC	A	1	168	77	0
RFM200300261	74LCX245MTC	A	2	500	77	0
RFM200300261	74LCX245MTC	A	3	1000	77	0
RFM200300262	74LCX245SJ	A	1	168	77	0
RFM200300262	74LCX245SJ	A	2	500	77	0
RFM200300262	74LCX245SJ	A	3	1000	77	0
RFM200300263	74LCX245WM	A	1	168	77	0
RFM200300263	74LCX245WM	A	2	500	77	0
RFM200300263	74LCX245WM	A	3	1000	77	0

Test: Temperature Cycle (TMCL)

Test Request	Device	Sbgrp	TP	Duration	Sample Size	Rejects
RFM200300260	74LCX245MSA	A	1	500	77	0
RFM200300261	74LCX245MTC	A	1	500	77	0
RFM200300262	74LCX245SJ	A	1	500	77	0
RFM200300263	74LCX245WM	A	1	500	77	0

Mechanical Results:

Test: Wire Pull:

Test Request	Device	Sbgrp	Sample Size	Rejects
RFM200300260	74LCX245MSA	A	45	0
RFM200300261	74LCX245MTC	A	45	0
RFM200300262	74LCX245SJ	A	45	0
RFM200300263	74LCX245WM	A	45	0

Test: Ball Shear:

Test Request	Device	Sbgrp	Sample Size	Rejects
RFM200300260	74LCX245MSA	A	45	0
RFM200300261	74LCX245MTC	A	45	0
RFM200300262	74LCX245SJ	A	45	0
RFM200300263	74LCX245WM	A	45	0

Test: Die Shear:

Test Request	Device	Sbgrp	Sample Size	Rejects
RFM200300260	74LCX245MSA	A	5	0
RFM200300261	74LCX245MTC	A	5	0
RFM200300262	74LCX245SJ	A	5	0
RFM200300263	74LCX245WM	A	5	0

Test: Gate Leakage +/- 400 Volts:

Test Request	Device	Sbgrp	Sample Size	Rejects
RFM200300260	74LCX245MSA	A	3	0

RFM200300261	74LCX245MTC	A	3	0
RFM200300262	74LCX245SJ	A	3	0
RFM200300263	74LCX245WM	A	3	0

Affected FSIDs

74LCX00CW	74LCX00M	74LCX00MTC
74LCX00MTCX	74LCX00MX	74LCX00SJ
74LCX00SJX	74LCX04CW	74LCX04M
74LCX04MTC	74LCX04MTCX	74LCX04MX
74LCX04SJ	74LCX04SJX	74LCX06CW
74LCX06M	74LCX06MTC	74LCX06MTCX
74LCX06MX	74LCX06SJ	74LCX06SJX
74LCX07CW	74LCX07M	74LCX07MTC
74LCX07MTCX	74LCX07MX	74LCX07SJ
74LCX07SJX	74LCX08CW	74LCX08M
74LCX08MTC	74LCX08MTCX	74LCX08MX
74LCX08SJ	74LCX08SJX	74LCX14CW
74LCX14M	74LCX14MTC	74LCX14MTCX
74LCX14MX	74LCX14SJ	74LCX14SJX
74LCX2244CW	74LCX2244MSA	74LCX2244MSAX
74LCX2244MTC	74LCX2244MTCX	74LCX2244SJ
74LCX2244SJX	74LCX2244WM	74LCX2244WMX
74LCX240CW	74LCX240MSA	74LCX240MSAX
74LCX240MTC	74LCX240MTCX	74LCX240SJ
74LCX240SJX	74LCX240WM	74LCX240WMX
74LCX244CW	74LCX244MSA	74LCX244MSAX
74LCX244MTC	74LCX244MTCX	74LCX244SJ
74LCX244SJX	74LCX244WM	74LCX244WMX
74LCX32CW	74LCX32M	74LCX32MTC
74LCX32MTCX	74LCX32MX	74LCX32SJ
74LCX32SJX	74LCX86CW	74LCX86M
74LCX86MTC	74LCX86MTCX	74LCX86MX
74LCX86SJ	74LCX86SJX	74LVX00CW
74LVX00M	74LVX00MTC	74LVX00MTCX
74LVX00MX	74LVX00SJ	74LVX00SJX
74LVX04CW	74LVX04M	74LVX04MTC
74LVX04MTCX	74LVX04MX	74LVX04SJ
74LVX04SJX	74LVX08CW	74LVX08M
74LVX08MTC	74LVX08MTCX	74LVX08MX
74LVX08SJ	74LVX08SJX	74LVX132CW
74LVX132M	74LVX132MTC	74LVX132MTCX
74LVX132MX	74LVX132SJ	74LVX132SJX
74LVX14CW	74LVX14M	74LVX14MTC
74LVX14MTCX	74LVX14MX	74LVX14SJ
74LVX14SJX	74LVX244CW	74LVX244M
74LVX244MTC	74LVX244MTCX	74LVX244MX
74LVX244SJ	74LVX244SJX	74LVX273CW
74LVX273M	74LVX273MTC	74LVX273MTCX
74LVX273MX	74LVX273SJ	74LVX273SJX
74LVX32CW	74LVX32M	74LVX32MTC
74LVX32MTCX	74LVX32MX	74LVX32SJ
74LVX32SJX	74VHC00CW	74VHC00M
74VHC00MTC	74VHC00MTCX	74VHC00MX
74VHC00SJ	74VHC00SJX	74VHC04CW
74VHC04M	74VHC04MTC	74VHC04MTCX
74VHC04MX	74VHC04SJ	74VHC04SJX
74VHC08CW	74VHC08M	74VHC08MTC
74VHC08MTCX	74VHC08MX	74VHC08SJ
74VHC08SJX	74VHC132CW	74VHC132M
74VHC132MTC	74VHC132MTCX	74VHC132MX

74VHC132SJ
74VHC14M
74VHC14MX
74VHC164CW
74VHC164MTCX
74VHC164SJX
74VHC244MTC
74VHC244SJ
74VHC273M
74VHC273MX
74VHC32CW
74VHC32MTCX
74VHC32SJX
74VHCU04MTC
74VHCU04SJ
MM74HC00M
MM74HC00MX
MM74HC04CW
MM74HC04MTCX
MM74HC04SJX
MM74HC08MTC
MM74HC08SJ
MM74HC132M
MM74HC132MX
MM74HC14CW
MM74HC14MTCX
MM74HC14SJX
MM74HC164MTC
MM74HC240CW
MM74HC240SJ
MM74HC240WMX
MM74HC244MTCX
MM74HC244WM
MM74HC273MTC
MM74HC273SJX
MM74HC32CW
MM74HC32MTCX
MM74HC32SJX
MM74HCT04MTC
MM74HCT04SJ
MM74HCT05M
MM74HCT05MX
MM74HCT08CW
MM74HCT08MTCX
MM74HCT08SJX
MM74HCT14MTC
MM74HCT14SJ
MM74HCT164M
MM74HCT164SJX
MM74HCT240MTCX
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MM74HCT244SJX
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MM74HCT273SJ
MM74HCT273WMX
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MM74HCT32SJ
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74VHC132SJX
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74VHC244SJX
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MM74HCT244WM
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74VHC14CW
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74VHC14SJX
74VHC164MTC
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74VHC244M
74VHC244MX
74VHC273CW
74VHC273MTCX
74VHC273SJX
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