Date Created : **2011/05/11**
Date Issued On : **2011/06/14**
PCN# : **P151A**

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.**

Updated process quality documentation, such as FMEAs and Control Plans, are available for viewing upon request.

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

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Implementation of change:
Expected 1st Device Shipment Date: 2011/09/12

Earliest Year/Work Week of Changed Product: 1138

Change Type Description: Alternate Assembly/Test Location/Qualification

Description of Change (From): 8-lead MDIP and 14-lead MDIP packages assembled and tested in Shenyang and Nantong, China.

Description of Change (To): Adding Bangkok, Thailand as a qualified assembly and test location for 8-lead MDIP and 14-lead MDIP packages. Standardization of product marking with line 1 marked as FSC logo + plant code + bi-weekly date code + trace code and line 2 marked as device ID.

Reason for Change : Adding an alternate assembly and test site for 8-lead MDIP and 14-lead MDIP packages for supply chain improvement. This 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.

Qual/REL Plan Number(s): Q20110001, Q20110047, Q20110049, Q20110080

Qualification :

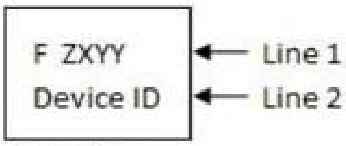
Bangkok, Thailand is qualified to manufacture MDIP-8L and MDIP-14L package based on the successful qualification result of KA358 (8DIP, BSP1) ,KA339 (14DIP, BCH4B), FAN7527BN (8DIP, BCH4B), KA3842B (8DIP, BSP1) and FAN7392N(14DIP) that meet Fairchild reliability requirements.

Change From

Bill of Materials:

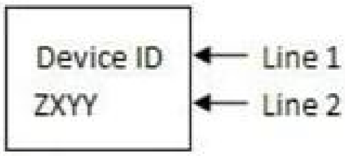
Item	MDIP-8L Details	MDIP-14L Details	MDIP-8L /14LDetails
Assembly Site	Shenyang, China	Shenyang, China	Nantong,China
Wire	Au 1.0, 1.2 mil	Au 1.0 mil	Au 1.0 mil
Die Attach	SK-5DK	SK-5DK	Henkel-8200T
Leadframe	Copper	Copper	Copper
Mold Compound	KTMC1000 (1030NFE)	SI-7200DM	KL4000-1T

Existing product marking format:



Remark:

F : Fairchild logo
Z : Plant code
X : Year code
YY : Weekly date code



Remark:

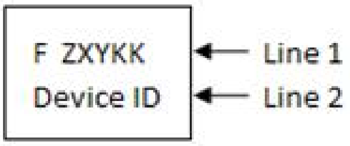
Z : Plant code
X : Year code
YY : Weekly date code

Change To

Bill of Materials:

Item	MDIP-8L /14LDetails	MDIP-8L Details	MDIP-14L Details
Assembly Site	Nantong ,China	Bangkok, Thailand	Bangkok, Thailand
Wire	Au 1.0 mil	Au 0.8 mil	Au 1.0 mil
Die Attach	Henkel-8200T	Ablestik : 2200D	Ablestik : 2200D
Leadframe	Copper	Copper	Copper
Mold Compound	KL4000-1T	GE- 800 (Nitto)	GE- 800 (Nitto)

Standardization of product marking format:



Remark:

F : Fairchild logo
Z : Plant code
X : Year code
Y : Bi-Weekly date code
KK : Two digit trace code

Results/Discussion for Qual Plan Number(s): Q20110001

Test: (High Temperature Op Life) | Conditions: 125C | Standard:

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20110001AAHTOL	FAN7527BN	0/77			
			0/77		
				0/77	

Test: (High Temperature Storage Life) | Conditions: 150C | Standard: JESD22-A103

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20110001AAHTSL		0/77			
			0/77		
				0/77	

Test: (Highly Accelerated Stress Test) | Conditions: 125%RH, 130C, 13V | Standard: JESD22-A110

Lot	Device	168-HOURS	500	1000	Failure Code
Q20110001AAHAST1		0/77			
			0/77		
				0/77	

Test: (Temperature Cycle) | Conditions: -65C, 150C | Standard: JESD22-A104

Lot	Device	100-CYCLES	500-CYCLES	Failure Code
Q20110001AATMCL1	FAN7527BN	0/77		
Q20110001AATMCL1	FAN7527BN		0/77	

Results/Discussion for Qual Plan Number(s): Q20110047

Test: (High Temperature Op Life) | Conditions: 70C | Standard:

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20110047AAHTOL	KA3842B	0/77			
			0/77		
				0/77	

Test: (High Temperature Storage Life) | Conditions: 150C | Standard: JESD22-A103

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code

Q20110047AAHTSL		0/77			
			0/77		
				0/77	

Test: (Temperature Cycle) | Conditions: -65C, 150C | Standard: JESD22-A104

Lot	Device	100-CYCLES	500-CYCLES	Failure Code
Q20110047AATMCL1	KA3842B	0/77		
Q20110047AATMCL1	KA3842B		0/77	

Test: (Temperature Humidity Biased Test) | Conditions: 85%RH, 85C, 18V | Standard: JESD22-A101

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20110047AATHBT		0/77			
			0/77		
				0/77	

Results/Discussion for Qual Plan Number(s): Q20110049

Test: (High Temperature Op Life) | Conditions: 125C | Standard:

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20110049AAHTOL	FAN7392N	0/77			
			0/77		
				0/77	
Q20110049ABHTOL		0/77			
			0/77		
				0/77	
Q20110049ACHTOL		0/77			
			0/77		
				0/77	
Q20110049ADHTOL		0/77			
			0/77		
				0/77	

Test: (High Temperature Storage Life) | Conditions: 150C | Standard: JESD22-A103

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20110049AAHTSL		0/77			
			0/77		
				0/77	
Q20110049ABHTSL		0/77			
			0/77		
				0/77	
Q20110049ACHTSL		0/77			
			0/77		
				0/77	
Q20110049ADHTSL		0/77			
			0/77		
				0/77	

Test: (Highly Accelerated Stress Test) | Conditions: 85%RH, 110C, 10V | Standard: JESD22-A110

Lot	Device	96-HOURS	264-HOURS	Failure Code
Q20110049AAHAST2	FAN7392N	0/77		
Q20110049AAHAST2	FAN7392N		0/77	
Q20110049ABHAST2	FAN7392N	0/77		
Q20110049ABHAST2	FAN7392N		0/77	
Q20110049ACHAST2	FAN7392N	0/77		
Q20110049ACHAST2	FAN7392N		0/77	
Q20110049ADHAST2	FAN7392N	0/77		
Q20110049ADHAST2	FAN7392N		0/77	

Test: (Temperature Cycle) | Conditions: -65C, 150C | Standard: JESD22-A104

Lot	Device	100-CYCLES	500-CYCLES	Failure Code
Q20110049AATMCL1	FAN7392N	0/77		
Q20110049AATMCL1	FAN7392N		0/77	
Q20110049ABTMCL1	FAN7392N	0/77		
Q20110049ABTMCL1	FAN7392N		0/77	
Q20110049ACTMCL1	FAN7392N	0/77		
Q20110049ACTMCL1	FAN7392N		0/77	
Q20110049ADTMCL1	FAN7392N	0/77		
Q20110049ADTMCL1	FAN7392N		0/77	

Results/Discussion for Qual Plan Number(s): Q20110080

Test: (High Temperature Storage Life) | Conditions: 150C | Standard: JESD22-A103

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20110080AAHTSL	KA358	0/77			
			0/77		
				0/77	
Q20110080BAHTSL	KA339	0/77			
			0/77		
				0/77	

Test: (Static Op Life) | Conditions: 125C, 30V | Standard: JESD22-A108

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20110080AASOPL1	KA358	0/77			
			0/77		
				0/77	
Q20110080BASOPL1	KA339	0/77			
			0/77		
				0/77	

Test: (Temperature Cycle) | Conditions: -65C, 150C | Standard: JESD22-A104

Lot	Device	100-CYCLES	500-CYCLES	Failure Code
Q20110080AATMCL1	KA358	0/77		
Q20110080AATMCL1	KA358		0/77	
Q20110080BATMCL1	KA339	0/77		
Q20110080BATMCL1	KA339		0/77	

Test: (Temperature Humidity Biased Test) | Conditions: 85%RH, 85C, 15V | Standard: JESD22-A101

Lot	Device	168-HOURS	500-HOURS	1000-HOURS	Failure Code
Q20110080AATHBT	KA358	0/77			
			0/77		
				0/77	
Q20110080BATHBT	KA339	0/77			
			0/77		
				0/77	

Product Id Description :

Affected FSIDs :

KA2803B	KA2902	KA2904
KA319	KA324A	KA324
KA331	KA339A	KA339
KA358A	KA358	KA393A
KA393	KA4558	L272AM
L272M	LF353N	LM258N
LM2901N	LM2902N	LM2903N
LM2904N	LM293AN	LM319N
LM324AN	LM324N	LM339AN
LM339N	LM358AN	LM358N
LM393AN	LM393N	LM555CN