

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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PCN Originator:

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Implementation of change:

Expected 1st Device Shipment Date: 2011/06/14

Earliest Year/Work Week of Changed Product: 1125

Change Type Description: Alternate Assembly/Test Location/Qualification

Description of Change (From): Products currently assembled in the SC70-5L, SC70-6L and SOT23-5L packages at Hana Microelectronics, Jia Xing and products assembled in the SC70-5L, SC70-6L, SOT23-5L, SOT23-6L, MSOP-8L and MSOP-10L packages assembled at Hana Semiconductor, Thailand and at Carsem Semiconductor, Malaysia.

Description of Change (To): Products assembled in the SC70-5L, SC70-6L, SOT23-5L, SOT23-6L, MSOP-8L and MSOP-10L packages assembled at Hana Semiconductor, Thailand and Carsem Semiconductor, Malaysia and Hana Microelectronics, Jia Xing.

Reason for Change : Hana Microelectronics, Jia Xing was qualified in 2008 as an assembly site for SC70-5L, SC70-6L and SOT23-5L packages. (Reference PCN Q4074705-A.) This PCN covers a leadframe and plating change for the products listed in PCN Q4074705-A. This PCN includes additional products assembled in the SC70-5L, SC70-6L and SOT23-5L packages and the qualification of the SOT23-6L, MSOP-8L and MSOP-10L packages. Hana Microelectronics, Jia Xing uses a different Bill Of Materials (BOM) than Hana Semiconductor, Thailand and Carsem Semiconductor, Malaysia and is shown below. 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 products. If you require data or samples to evaluate this change, please contact Fairchild Semiconductor within 30 days of receipt of this notification. 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 needs if your evaluation of this change will require more than 90 calendar days.

Qual/REL Plan Number(s): Q20100445

Qualification :

Products assembled in the SC70-5L, SC70-6L, SOT23-5L, SOT23-6L, MSOP-8L and MSOP-10L Packages have passed all required qualification testing with an MSL 1 rating.

Change From

BOM	Hana Semiconductor, Thailand.	Carsem Semiconductor, Malaysia.	Hana Microelectronics (JiaXing), China.
Wire	Tanaka Au 99.99%	Tanaka Au 99.99%	Heraeus Au 99.99%
Die Attach	Ablebond 2200D	Ablebond 84-1LMISR4	Ablebond 2200D
Leadframe	ASM C194	DCI Cu CDA194	ASM A194 Ag Plating
Mold Compound	Sumitomo EME-G600	Sumitomo EME-6600HR	Sumitomo EME-G600
Lead Finish	Matte Sn	Matte Sn	Matte Sn

Change To

BOM	Hana Semiconductor, Thailand.	Hana Microelectronics (JiaXing), China.
Wire	Tanaka Au 99.99%	Heraeus Au 99.99%
Die Attach	Ablebond 2200D	Ablebond 2200D
Leadframe	ASM C194	ASM A194
Mold Compound	Sumitomo EME-G600	Sumitomo EME-G600
Lead Finish	Matte Sn	NiPdAu pre-plated

Results/Discussion for Qual Plan Number(s): Q20100445

Test: (Autoclave) Conditions: 100%RH, 121C Standard: JESD22-A102				
Lot	Device	96-HOURS	Failure Code	
Q20100445AAACLV	FAN4274IMU8X	0/77		
Q20100445BAACLV	FHP3230IMU8X	0/77		
Q20100445CAACLV	FSA2267AMUX	0/77		
Q20100445DAACLV	NC7SZ66M5X	0/77		
Q20100445EAACLV	FPF2106	0/77		
Q20100445FAACLV	NC7SZ125P5X	0/77		
Q20100445GAACLV	NC7SB3157P6X	0/77		
Test: (Gate Leakage Negative) Conditions: 155C, -400V Standard: AEC-Q100-006				
Lot	Device	Results	Failure Code	
Q20100445AAGATE-	FAN4274IMU8X	0/3		
Q20100445BAGATE-	FHP3230IMU8X	0/3		
Q20100445CAGATE-	FSA2267AMUX	0/3		
Q20100445DAGATE-	NC7SZ66M5X	0/3		
Q20100445EAGATE-	FPF2106	0/3		
Q20100445FAGATE-	NC7SZ125P5X	0/3		
Q20100445GAGATE-	NC7SB3157P6X	0/3		
Test: (Gate Leakage Positive) Conditions: 155C, 400V Standard: AEC-Q100-006				
Lot	Device	Results	Failure Code	
Q20100445AAGATE+	FAN4274IMU8X	0/3		
Q20100445BAGATE+	FHP3230IMU8X	0/3		
Q20100445CAGATE+	FSA2267AMUX	0/3		
Q20100445DAGATE+	NC7SZ66M5X	0/3		
Q20100445EAGATE+	FPF2106	0/3		
Q20100445FAGATE+	NC7SZ125P5X	0/3		
Q20100445GAGATE+	NC7SB3157P6X	0/3		
Test: (High Temperature Storage Life) Conditions: 150C Standard: JESD22-A103				
Lot	Device	168-HOURS	1000-HOURS	Failure Code
Q20100445AAHTSL	FAN4274IMU8X	0/77		
Q20100445BAHTSL	FHP3230IMU8X	0/77		
Q20100445CAHTSL	FSA2267AMUX		0/77	
Q20100445DAHTSL	NC7SZ66M5X	0/77		
Q20100445EAHTSL	FPF2106	0/77		
Q20100445FAHTSL	NC7SZ125P5X		0/77	
Q20100445GAHTSL	NC7SB3157P6X	0/77		

Test: (Highly Accelerated Stress Test) Conditions: 85%RH, 110C, 4.3V Standard: JESD22-A110			
Lot	Device	264-HOURS	Failure Code
Q20100445CAHAST2	FSA2267AMUX	0/45	
Test: (Highly Accelerated Stress Test) Conditions: 85%RH, 110C, 5V Standard: JESD22-A110			
Lot	Device	264-HOURS	Failure Code
Q20100445AAHAST2	FAN4274IMU8X	0/45	
Q20100445BAHAST2	FHP3230IMU8X	0/45	
Q20100445DAHAST2	NC7SZ66M5X	0/45	
Q20100445EAHAST2	FPF2106	0/45	
Q20100445FAHAST2	NC7SZ125P5X	0/45	
Q20100445GAHAST2	NC7SB3157P6X	0/45	
Test: (Lead Integrity) Conditions: Standard: JESD22-B105			
Lot	Device	Results	Failure Code
Q20100445AALINTC	FAN4274IMU8X	0/5	
Q20100445BALINTC	FHP3230IMU8X	0/5	
Q20100445CALINTC	FSA2267AMUX	0/5	
Q20100445DALINTC	NC7SZ66M5X	0/5	
Q20100445EALINTC	FPF2106	0/5	
Q20100445FALINTC	NC7SZ125P5X	0/5	
Q20100445GALINTC	NC7SB3157P6X	0/5	
Test: (Moisture Sensitivity) Conditions: Standard: J-STD_020			
Lot	Device	Results	Failure Code
Q20100445AAMSLNL1A	FAN4274IMU8X	0/11	
Q20100445BAMSLNL1A	FHP3230IMU8X	0/11	
Q20100445CAMSLNL1A	FSA2267AMUX	0/11	
Q20100445DAMSLNL1A	NC7SZ66M5X	0/11	
Q20100445EAMSLNL1A	FPF2106	0/11	
Q20100445FAMSLNL1A	NC7SZ125P5X	0/11	
Q20100445GAMSLNL1A	NC7SB3157P6X	0/11	
Test: (Physical Dimensions) Conditions: Standard: JESD22-B100			
Lot	Device	Results	Failure Code
Q20100445AAPHYD	FAN4274IMU8X	0/5	
Q20100445BAPHYD	FHP3230IMU8X	0/5	
Q20100445CAPHYD	FSA2267AMUX	0/5	
Q20100445DAPHYD	NC7SZ66M5X	0/5	
Q20100445EAPHYD	FPF2106	0/5	
Q20100445FAPHYD	NC7SZ125P5X	0/5	
Q20100445GAPHYD	NC7SB3157P6X	0/5	
Test: (Precondition) Conditions: Standard: JESD22-A113			
Lot	Device	Results	Failure Code
Q20100445AAPCNL1A	FAN4274IMU8X	0/353	
Q20100445BAPCNL1A	FHP3230IMU8X	0/353	
Q20100445CAPCNL1A	FSA2267AMUX	0/353	
Q20100445DAPCNL1A	NC7SZ66M5X	0/353	
Q20100445EAPCNL1A	FPF2106	0/353	
Q20100445FAPCNL1A	NC7SZ125P5X	0/353	
Q20100445GAPCNL1A	NC7SB3157P6X	0/353	
Test: (Resistance to Solder Heat) Conditions: Standard: JESD22-B106			
Lot	Device	Results	Failure Code
Q20100445AARSDH	FAN4274IMU8X	0/5	
Q20100445BARSDH	FHP3230IMU8X	0/5	
Q20100445CARSDH	FSA2267AMUX	0/5	
Q20100445DARSDH	NC7SZ66M5X	0/5	
Q20100445EARSDH	FPF2106	0/5	
Q20100445FARSDH	NC7SZ125P5X	0/5	
Q20100445GARSDH	NC7SB3157P6X	0/5	
Test: (Solderability) Conditions: Standard: JESD22-B102			
Lot	Device	Results	Failure Code
Q20100445AASOLDAB	FAN4274IMU8X	0/10	
Q20100445BASOLDAB	FHP3230IMU8X	0/10	
Q20100445CASOLDAB	FSA2267AMUX	0/10	
Q20100445DASOLDAB	NC7SZ66M5X	0/10	
Q20100445EASOLDAB	FPF2106	0/10	
Q20100445FASOLDAB	NC7SZ125P5X	0/10	

Q20100445GASOLDAB	NC7SB3157P6X	0/10		
Test: (Static Op Life) Conditions: 150C, 4.3V Standard: JESD22-A108				
Lot	Device	168-HOURS	Failure Code	
Q20100445CASOPL1	FSA2267AMUX	0/77		
Test: (Static Op Life) Conditions: 150C, 5.5V Standard: JESD22-A108				
Lot	Device	168-HOURS	Failure Code	
Q20100445EASOPL1	FPF2106	0/77		
Test: (Static Op Life) Conditions: 150C, 5V Standard: JESD22-A108				
Lot	Device	168-HOURS	Failure Code	
Q20100445AASOPL1	FAN4274IMU8X	0/77		
Q20100445BASOPL1	FHP3230IMU8X	0/77		
Q20100445DASOPL1	NC7SZ66M5X	0/77		
Q20100445FASOPL1	NC7SZ125P5X	0/77		
Q20100445GASOPL1	NC7SB3157P6X	0/77		
Test: (Temperature Cycle) Conditions: -65C, 150C Standard: JESD22-A104				
Lot	Device	100-CYCLES	500-CYCLES	Failure Code
Q20100445AATMCL1	FAN4274IMU8X	0/77		
Q20100445AATMCL1	FAN4274IMU8X		0/77	
Q20100445BATMCL1	FHP3230IMU8X	0/77		
Q20100445BATMCL1	FHP3230IMU8X		0/77	
Q20100445CATMCL1	FSA2267AMUX	0/77		
Q20100445CATMCL1	FSA2267AMUX		0/77	
Q20100445DATMCL1	NC7SZ66M5X	0/77		
Q20100445DATMCL1	NC7SZ66M5X		0/77	
Q20100445EATMCL1	FPF2106	0/77		
Q20100445EATMCL1	FPF2106		0/77	
Q20100445FATMCL1	NC7SZ125P5X	0/77		
Q20100445FATMCL1	NC7SZ125P5X		0/77	
Q20100445GATMCL1	NC7SB3157P6X	0/77		
Q20100445GATMCL1	NC7SB3157P6X		0/77	

Product Id Description :

Affected FSIDs :

FAN4174IS5X	FAN4274IMU8X	FAN4274IMU8X_G
FAN4931IP5X	FHP3130IS5X	FHP3230IMU8X
FIN1001M5X	FIN1001M5	FIN1002M5X
FIN1002M5	FMS6141S5X	FPF2000
FPF2000_F065	FPF2001	FPF2002
FPF2003	FPF2004	FPF2005
FPF2005_F065	FPF2005_SB82164	FPF2006
FPF2006_NBAA006	FPF2007	FPF2094
FPF2095	FPF2100	FPF2101
FPF2102	FPF2102_SBAA008Z	FPF2102_SBAA011
FPF2103	FPF2104	FPF2105
FPF2106	FPF2107	FPF2108
FPF2108_SBAA007	FPF2109	FPF2110
FPF2110_F065	FPF2116	FPF2123
FPF2124	FPF2124_SBAA009Z	FPF2124_SBAA010
FPF2125	FPV338L	FPV668L
FSA1156P6X	FSA1157P6X	FSA201MUX
FSA2156P6X	FSA221MUX	FSA223MUX
FSA2257MUX	FSA2267AMUX	FSA3157P6X
FSA3157P6X_G	FSA4157AP6X	FSA4157P6X
FSA4159P6X	FSA5157P6X	FSA66P5X
FSUSB20MUX	FSUSB30MUX	FSUSB42MUX

FXLP34P5X	FXLP34P5X_G	LMV358AMU8X
NC7S00M5X	NC7S00M5	NC7S00P5X
NC7S02M5X	NC7S02M5	NC7S02P5X
NC7S04M5X	NC7S04M5X_G	NC7S04M5
NC7S04P5X	NC7S04P5X_G	NC7S08M5X
NC7S08M5X_SF500951	NC7S08M5	NC7S08P5X
NC7S14M5X	NC7S14M5X_SF500948	NC7S14M5
NC7S14P5X	NC7S32M5X	NC7S32M5
NC7S32P5X	NC7S32P5X_G	NC7S86M5X
NC7S86M5	NC7S86P5X	NC7S86P5X_G
NC7SB3157P6X	NC7SB3257P6X	NC7SBU3157P6X
NC7SP00P5X	NC7SP02P5X	NC7SP04P5X
NC7SP05P5X	NC7SP08P5X	NC7SP125P5X
NC7SP126P5X	NC7SP14P5X	NC7SP157P6X
NC7SP158P6X	NC7SP17P5X	NC7SP19P6X
NC7SP32P5X	NC7SP34P5X	NC7SP38P5X
NC7SP57P6X	NC7SP58P6X	NC7SP58P6X_G
NC7SP86P5X	NC7SPU04P5X	NC7ST00M5X
NC7ST00M5	NC7ST00P5X	NC7ST02M5X
NC7ST02M5	NC7ST02P5X	NC7ST04M5X
NC7ST04M5	NC7ST04P5X	NC7ST08M5X
NC7ST08M5	NC7ST08P5X	NC7ST32M5X
NC7ST32M5	NC7ST32P5X	NC7ST86M5X
NC7ST86M5	NC7ST86P5X	NC7SU04M5X
NC7SU04M5	NC7SU04P5X	NC7SV00P5X
NC7SV00P5X_G	NC7SV02P5X	NC7SV04P5X
NC7SV04P5X_G	NC7SV05P5X	NC7SV08P5X
NC7SV08P5X_G	NC7SV11P6X	NC7SV125P5X
NC7SV126P5X	NC7SV14P5X	NC7SV157P6X
NC7SV158P6X	NC7SV17P5X	NC7SV17P5X_G
NC7SV19P6X	NC7SV32P5X	NC7SV32P5X_G
NC7SV34P5X	NC7SV38P5X	NC7SV57P6X
NC7SV58P6X	NC7SV86P5X	NC7SVL04P5X
NC7SVL08P5X	NC7SVL32P5X	NC7SVU04P5X
NC7SZ00M5X	NC7SZ00M5	NC7SZ00P5X
NC7SZ02M5X	NC7SZ02M5	NC7SZ02P5X
NC7SZ04M5X	NC7SZ04M5X_G	NC7SZ04M5
NC7SZ04P5X	NC7SZ04P5X_G	NC7SZ05M5X
NC7SZ05M5	NC7SZ05P5X	NC7SZ08M5X
NC7SZ08M5X_G	NC7SZ08M5X_SN00135	NC7SZ08M5
NC7SZ08P5X	NC7SZ08P5X_G	NC7SZ10P6X
NC7SZ11P6X	NC7SZ125M5X	NC7SZ125M5
NC7SZ125P5X	NC7SZ125P5X_G	NC7SZ126M5X
NC7SZ126M5	NC7SZ126P5X	NC7SZ126P5X_G
NC7SZ14M5X	NC7SZ14M5	NC7SZ14P5X
NC7SZ157P6X	NC7SZ175P6X	NC7SZ175P6X_G
NC7SZ18P6X	NC7SZ19P6X	NC7SZ19P6X_G
NC7SZ27P6X	NC7SZ32M5X	NC7SZ32M5

NC7SZ32P5X	NC7SZ32P5X_G	NC7SZ332P6X
NC7SZ373P6X	NC7SZ374P6X	NC7SZ384M5X
NC7SZ384P5X	NC7SZ386P6X	NC7SZ38M5X
NC7SZ38M5	NC7SZ38P5X	NC7SZ57P6X
NC7SZ58P6X	NC7SZ66M5X	NC7SZ66P5X
NC7SZ86M5X	NC7SZ86M5X_SF500979	NC7SZ86M5
NC7SZ86P5X	NC7SZD384M5X	NC7SZD384P5X
NC7SZU04M5X	NC7SZU04M5	NC7SZU04P5X
NC7SZU04P5X_G	NC7WP14P6X	NC7WV04P6X
NC7WV07P6X	NC7WV14P6X	NC7WV16P6X
NC7WV16P6X_G	NC7WV17P6X	NC7WZ04P6X
NC7WZ04P6X_G	NC7WZ07P6X	NC7WZ14P6X
NC7WZ16P6X	NC7WZ17P6X	NC7WZ17P6X_G
NC7WZU04P6X	NC7WZU04P6X_G	