Process Change Notification Form

PCN Number:	PCN_0242_CS510x_CS532x_ANST
Date of Notification:	11/07/08
Cirrus Logic P/N(s):	CS5102A-BLZ, CS5102A-BLZR, CS5102A-JLZ, CS5102A-JLZR, CS5101A-BL8Z, CS5101A-BL8ZR, CS5101A-JL8Z, CS5101A-JL8ZR, CS5321-BLZ, CS5321-BLZR, CS5322-BLZ, CS5322-BLZR
Date PCN Effective:	12/31/08
Reason for Change:	☐ Design /New Rev. ☐ Fab Site ☐ Fab Process ☐ Additional Fab Source ☐ Assembly Site ☐ Assembly Process ☒ Additional Assembly Source ☐ Other (specify)
Description of Change:	☐ Fix errata ☐ Yield enhancement ☐ Fix known bug ☐ Performance Improvement ☒ Other: 1) Addition of ANST assembly site 2) MSL = 2, peak reflow = 245°C 3) ASE to ANST – Bill of Materials Comparison – See attachment *****SEE PAGES BELOW*****
Cirrus Logic P/N Change:	☐ Yes, New Part Number: ☒ No
Pack Mark Change:	☒ Yes ☐ No ***If Yes, briefly explain:*** The assembly identifier will change from TA to AA. GFTARXXX to GFAARXXX *[Any Fab, Assembly, or Design changes results in pack mark changes, please provide detail]*
Lot Effective Date:	12/31/08 *[Contact the area sales representative for availability of samples if applicable]*
Quality & Reliability impact:	Qualification Data: ☒ Required ☐ Not Required Assembly Qualification Data attached. *****SEE PAGES BELOW*****
Datasheet Change Required?	☐ Yes ☒ No If Yes, briefly explain:
Software Change Required?	☐ Yes ☒ No If Yes, briefly explain:

ASE to ANST – Bill of Materials Comparison

	ASE – Kaohsiung (Current)	**ANST (New)**
Leadframe	Copper 320x320 mil die pad	Copper 320x320 mil die pad
Die Attach	Sumitomo 1076DS	Ablestik 8290
Mold Compound	Sumitomo G700A	Sumitomo G700
Bond Wire	Gold - 1.2 mil diameter	Gold - 1.2 mil diameter
Plating	100% matte tin	100% matte tin
Marking	Ink	Laser

	ASE – Kaohsiung (Current)	**ANST (New)**
Leadframe	Copper 260x260 mil die pad	Copper 260x260 mil die pad
Die Attach	Sumitomo 1076DS	Ablestik 8290
Mold Compound	Sumitomo G700A	Sumitomo G700
Bond Wire	Gold - 1.2 mil diameter	Gold - 1.2 mil diameter
Plating	100% matte tin	100% matte tin
Marking	Ink	Laser

	ASE – Kaohsiung (Current)	**ANST (New)**
Leadframe	Copper 350x350 mil die pad	Copper 350x350 mil die pad
Die Attach	Sumitomo 1076DS	Ablestik 8290
Mold Compound	Sumitomo G700A	Sumitomo G700
Bond Wire	Gold - 1.2 mil diameter	Gold - 1.2 mil diameter
Plating	100% matte tin	100% matte tin
Marking	Ink	Laser

RELIABILITY QUALIFICATION REPORT

Reliability Report: QRR070903

Subject/Purpose:

This is to qualify the ANST assembly site for the 28PLCC and 44PLCC family of packages for both SnPb and Pb-Free.

APPROVALS:

Rod Boutwell
Reliability Engineering

Results:

Qualification successful.

STATUS:

Complete - Pass

Stress	Conditions	Method	Duration	Lot	Results (Fail/Sample)
Preconditioning MSL-2 QJ1429	24HR 125 °C Bake 168HR 85/60 °C/%RH Soak 3 pass 260 °C Convection reflow	JESD22-A113	Precondition	1	0/231
TMCL-C QJ1429	-65 °C +150 °C air to air	JESD22-A104	500 Cycles	1	0/77
Tomography QJ1429		J-STD-035	500 TCC	1	0/11
Autoclave/PPOT QJ1429	121 °C 15 psig 100% R.H.	JESD22-A102	96 Hours	1	0/77
Solderability QJ1429	93 °C steam aging 8 Hours 245 °C solder bath 5 Seconds	JESD22-B102	Solderability	1	0/15
HTSL (high-temp storage life) QJ1429	150 °C	JESD22-A103	500 Hours 1000 Hours	1 1	0/77 0/77
Preconditioning MSL-2 QJ1440	24HR 125 °C Bake 168HR 85/60 °C/%RH Soak 3 pass 260 °C Convection	JESD22-A113	Precondition	1	0/231
THB QJ1440	85 °C 85 %RH	JESD22-A101	500 Hours 1000 Hours	1 1	0/77 0/77
TMCL-C QJ1440	-65 °C +150 °C air to air	JESD22-A104	500 Cycles	1	0/77

Background Information:

Part #: ANST PLCC **Rev:** **Fab:** **Lead Finish:** SnPb and Pb-free
Package: PLCC **Assembly:** ANST (China)

Reliability Report: QRR070903

Stress	Conditions	Method	Duration	Lot	Results (Fail/sample)
Tomography QJ1440		J-STD-035	500 TCC	1	0/11
Autoclave/PPOT QJ1440	121 °C 15 psig 100% R.H.	JESD22-A102	96 Hours	1	0/77
Preconditioning MSL-2 QJ1462 QJ1463 QJ1464	24HR 125 °C Bake 168HR 85/60 °C/%RH Soak 3 pass 245 °C Convection reflow	JESD22-A113	Precondition	1	0/231
			Precondition	2	0/231
			Precondition	3	0/231
TMCL-C QJ1462 QJ1463 QJ1464	-65 °C +150 °C air to air	JESD22-A104	500 Cycles	1	0/77
			500 Cycles	2	0/77
			500 Cycles	3	0/77
Tomography QJ1462		J-STD-035	500 TCC	1	0/5
QJ1463			500 TCC	2	0/5
QJ1464			500 TCC	3	0/5
Autoclave/PPOT QJ1462 QJ1463 QJ1464	121 °C 15 psig 100% R.H.	JESD22-A102	96 Hours	1	0/77
			96 Hours	2	0/77
			96 Hours	3	0/77
Unbiased HAST QJ1462	130 °C 85 %RH	JESD22-A118	96 Hours	1	0/77

Background Information:

Part #: ANST PLCC **Rev:** **Fab:** **Lead Finish:** SnPb and Pb-free
Package: PLCC **Assembly:** ANST (China)

Reliability Report: QRR070903

Stress	Conditions	Method	Duration	Lot	Results (Fail/sample)
Solderability QJ1462	93 °C steam aging 8 Hours 245 °C solder bath 5 Seconds	JESD22-B102	Solderability	1	0/15
Unbiased HAST QJ1463	130 °C 85 %RH	JESD22-A118	96 Hours	1	0/77
Unbiased HAST QJ1464	130 °C 85 %RH	JESD22-A118	96 Hours	1	0/77
HTSL (high-temp storage life) QJ1462	150 °C	JESD22-A103	500 Hours 1000 Hours	1 1	0/77 0/77

Background Information:

Part #: ANST PLCC **Rev:** **Fab:** **Lead Finish:** SnPb and Pb-free

Package: PLCC **Assembly:** ANST (China)

Cirrus Logic PCN administrator: Cirrus Logic - Customer Quality

Digitally signed by Cirrus Logic - Customer Quality
DN: cn=Cirrus Logic - Customer Quality, c=US, ou=Cirrus Logic Austin, email=customer_quality@cirrus.com
Reason: All signatures on file
Date: 2008.11.19 15:09:32 -06'00'

Acknowledgement of Receipt of Notice:

Does customer waive PCN Effective Date? ☐ **YES** ☐ **NO**

Company Name: _____

Name (please print)**:** _____ **Title:** _____

Signature: _____ **Date:** _____

Customer Representative is to obtain the customer acknowledgement/signature and return this notification to Cirrus Logic Corp. Quality, attn: PCN administrator at fax number (512) 851-4656

NOTE: Lack of acknowledgement within 30 days of the date of notice, constitutes acceptance of change.
(Reference JEDEC Industry Standard: JESD-46)