



## Process Change Notification Form

<b>PCN Number:</b>	PCN_0236_CS5550
<b>Date of Notification:</b>	09/05/08
<b>Cirrus Logic P/N(s):</b>	CS5550-IS, CS5550-ISR, CS5550-ISZ, CS5550-ISZR, YS1898-ISZ, YS1898-ISZR
<b>Date PCN Effective:</b>	11/28/08
<b>Reason for Change:</b>	<input checked="" type="checkbox"/> Design /New Rev. <input type="checkbox"/> Fab Site <input type="checkbox"/> Fab Process <input type="checkbox"/> Additional Fab Source <input type="checkbox"/> Assembly Site <input type="checkbox"/> Assembly Process <input type="checkbox"/> Additional Assembly Source <input type="checkbox"/> Other (specify)
<b>Description of Change:</b>	<input type="checkbox"/> Fix errata <input type="checkbox"/> Yield enhancement <input type="checkbox"/> Fix known bug <input checked="" type="checkbox"/> Performance Improvement <input type="checkbox"/> Other Improved RMS and DC offset calibration, better linearity (near 0). These devices are lead-free and RoHS compliant. The CS5550-IS and CS5550-ISR devices will be transitioned from leaded to lead-free package type with the new rev. Customers should be alerted to transition to the lead-free products, CS5550-ISZ and CS5550-ISZR.
<b>Cirrus Logic P/N Change:</b>	<input type="checkbox"/> Yes, New Part Number: <input checked="" type="checkbox"/> No
<b>Pack Mark Change:</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, briefly explain: From: YFNAB1HAYYWW To: YFNAD0HAYYWW <i>[Any Fab, Assembly, or Design changes results in pack mark changes, please provide detail]</i>
<b>Lot Effective Date:</b>	10/31/08 <i>[Contact the area sales representative for availability of samples if applicable]</i>
<b>Quality &amp; Reliability impact:</b>	<p style="text-align: center;"><b>**See pages below**</b></p> Qualification Data: <input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required
<b>Datasheet Change Required?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, briefly explain:
<b>Software Change Required?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, briefly explain:

# RELIABILITY QUALIFICATION REPORT

Report Date: 7/23/2008

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## Reliability Report: Combined

<p><b>Subject/Purpose:</b> This is to qualify the CS5550-ISZ/D0 and YS1898-ISZ/D0 devices manufactured at MagnaChip (F) and assembled in the Pb-free 24SSOP at Amkor P1 (Philippines).</p>	<p><b>APPROVALS:</b>  _____ Rod Boutwell _____ <b>Reliability Engineering</b></p>
<p><b>Results:</b> Qualification successful.</p>	<p><b>STATUS:</b> Complete - Pass</p>

<u>Stress</u>	<u>Conditions</u>	<u>Method</u>	<u>Duration</u>	<u>Lot</u>	<u>Results (Fail/Sample)</u>
HTOL	125 °C	JESD22-A108	48 Hours	1	0/77
QJ1502 (ZK3F- Similarity)	5.25 Volts		500 Hours	1	0/77
QJ1522 (ZK3F- Similarity)	Dynamic		1000 Hours	1	0/77
QJ1549 (ZK3F- Similarity)	125 °C		48 Hours	2	0/77
QJ1617 (ZK3F- Similarity)	5.25 Volts		548 Hours	2	0/77
	2.5 Volts		1000 Hours	2	0/77
	Dynamic		1072 Hours	2	0/77
			48 Hours	3	0/77
			500 Hours	3	0/77
			1000 Hours	3	0/77
			144 Hours	4	0/77
			548 Hours	4	0/77
			1000 Hours	4	0/77
ESD Machine Model	25 °C	JESD22-A115	200 Volts	1	0/5
QJ1622			300 Volts	1	0/5
ESD Human Body Model	25 °C	JESD22-A114	2000 Volts	1	0/5
QJ1622			3000 Volts	1	0/5
ESD CDM (Charged Device Model)	25 °C	JESD22-C101	500/750 Volts	1	0/3
QJ1622			1000 Volts	1	0/3
			1500 Volts	1	0/3
Latch-Up VDD	85 °C	JESD78	1.5*Vmax Volts	1	0/6
QJ1622			1.5*Vmax Volts	1	0/6
			1.5*Vmax Volts	1	0/6

**Background Information:**

**Part #:** CS5550 / YS1898 **Rev:** D0  
**Package:** 24SSOP

**Fab:** MagnaChip (F)  
**Assembly:** Amkor P1 (Philippines)

**Lead Finish:** Pb-free

Prepared by: Rod Boutwell

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# RELIABILITY QUALIFICATION REPORT

Report Date: 7/23/2008

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## Reliability Report: QRR080712

<u>Stress</u>	<u>Conditions</u>	<u>Method</u>	<u>Duration</u>	<u>Lot</u>	<u>Results (Fail/sample)</u>
Latch-Up I/O QJ1622	85 °C	JESD78	+/-400 mA	1	0/6
Precondition MSL-3 QJ1502 (G700-Similarity) QJ1549 (G700-Similarity)	24HR 125 °C Bake 192HR 30°C/60%RH Soak 3 pass 260 °C -IR/VP reflow	JESD22-A113	Precondition	1	0/241
			Precondition	2	0/241
THB QJ1549 (G700-Similarity) QJ1502 (G700-Similarity)	85 °C 85 %RH 5.25 Volts	JESD22-A101	500 Hours	1	0/77
			1000 Hours	1	0/77
			500 Hours	2	0/77
			1000 Hours	2	0/77
Temperature Cycle cond. C QJ1502 (G700-Similarity) QJ1549 (G700-Similarity)	-65 °C +150 °C air to air	JESD22-A104	500 Cycles	1	0/77
			500 Cycles	2	0/77
Tomography (CSAM) QJ1502 (G700-Similarity) QJ1549 (G700-Similarity)		J-STD-035	500 TCC	1	0/5
			500 TCC	2	0/5
Autoclave/PPOT QJ1502 (G700-Similarity) QJ1549 (G700-Similarity)	121 °C 15 psig 100% R.H. 2 atm	JESD22-A102	96 Hours	1	0/77
			96 Hours	2	0/77
Solderability QJ1502 (G700-Similarity)	93 °C steam aging 8 Hours 245 °C solder bath 5 Seconds	JESD22-B102	Solderability	1	0/15
HTSL (High Temp Storage Life) QJ1502 (G700-Similarity)	150 °C	JESD22-A103	48 Hours	1	0/77
			500 Hours	1	0/77
			1000 Hours	1	0/77

### Background Information:

**Part #:** CS5550 / YS1898 **Rev:** D0  
**Package:** 24SSOP

**Fab:** MagnaChip (F)  
**Assembly:** Amkor P1 (Philippines)

**Lead Finish:** Pb-free

Prepared by: Rod Boutwell

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Cirrus Logic PCN administrator:

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**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)***