



## Process Change Notification Form

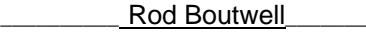
<b>PCN Number:</b>	PCN_0237_CS5460A
<b>Date of Notification:</b>	08/01/08
<b>Cirrus Logic P/N(s):</b>	CS5460A-BS, CS5460A-BSR, CS5460A-BSZ, CS5460A-BSZR
<b>Date PCN Effective:</b>	10/25/08
<b>Reason for Change:</b>	<input checked="" type="checkbox"/> Design /New Rev. <input type="checkbox"/> Fab Site <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 type="checkbox"/> Performance Improvement <input checked="" type="checkbox"/> Other Mask retooling, no change to features or performance. These devices are lead-free, RoHS compliant. The CS5460A-BS and CS5460A-BSR 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, CS5460A-BSZ and CS5460A-BSZR.
<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: YFNACXHAYYWW To: YFNADXHAYYWW  <i>[Any Fab, Assembly, or Design changes results in pack mark changes, please provide detail]</i>
<b>Lot Effective Date:</b>	08/30/08 <i>[Contact the area sales representative for availability of samples if applicable]</i>
<b>Quality &amp; Reliability impact:</b>	<b>*SEE PAGES BELOW*</b> 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: 7/31/2008

Page 1 of 3

## Reliability Report: QRR080711

<p><b>Subject/Purpose:</b> This is to qualify the CS5460A-BSZ/D device manufactured at MagnaChip (F) and assembled in the Pb and Pb-free 24SSOP package at Amkor P1 (Philippines).</p>	<p><b>APPROVALS:</b>   <div style="text-align: center;">   <b>Reliability Engineering</b> </div> </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
QJ1522 (ZK3F-Similarity)	5.25 Volts		548 Hours	1	0/77
QJ1617	Dynamic		1000 Hours	1	0/77
			1072 Hours	1	0/77
	125 °C		144 Hours	2	0/77
	5.5 Volts		548 Hours	2	0/77
	2.5 Volts		1000 Hours	2	0/77
	Dynamic				
ESD Machine Model	25 °C	JESD22-A115	200 Volts	1	0/5
QJ1621			300 Volts	1	0/5
ESD Human Body Model	25 °C	JESD22-A114	2000 Volts	1	0/5
QJ1621			3000 Volts	1	0/5
ESD CDM (Charged Device Model)	25 °C	JESD22-C101	500/750 Volts	1	0/3
QJ1621			1000 Volts	1	0/3
			1500 Volts	1	0/3
Latch-Up VDD	85 °C	JESD78	1.5*Vmax Volts	1	0/6
QJ1621	1.5*Vmax Volts			1	0/6
QJ1632				1	0/6
			1.5*Vmax Volts	2	0/6
				2	0/6
				2	0/6
Latch-Up I/O	85 °C	JESD78	+/-400 mA	1	0/6
QJ1621					
QJ1632			+/-400 mA	2	0/6

**Background Information:**

Part #: CS5460A	Rev: D	Fab: MagnaChip (F)	Lead Finish: Pb-free
Package: 24SSOP		Assembly: Amkor P1 (Philippines)	

Prepared by: Rod Boutwell

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# RELIABILITY QUALIFICATION REPORT

Report Date: 7/31/2008

Page 2 of 3

## Reliability Report: QRR080711

<u>Stress</u>	<u>Conditions</u>	<u>Method</u>	<u>Duration</u>	<u>Lot</u>	<u>Results (Fail/sample)</u>
Precondition MSL-3	24HR 125 °C Bake	JESD22-A113	Precondition	1	0/241
1100-1 (Sumitomo G700-Similarity)	192HR 30°C/60%RH Soak				
1105-1 (Sumitomo G700-Similarity)	3 pass 260 °C -IR/VP reflow		Precondition	2	0/241
QJ1478 (Sumitomo G700-Similarity)			Precondition	3	0/231
HAST	130 °C	JESD22-A110	96 Hours	1	0/77
QJ1478 (Sumitomo G700-Similarity)	85 %RH 3.6 Volts				
THB	85 °C	JESD22-A101	500 Hours	1	0/77
1100-1 (Sumitomo G700-Similarity)	85 %RH		1000 Hours	1	0/77
1105-1 (Sumitomo G700-Similarity)	5.25 Volts		500 Hours	2	0/77
			1000 Hours	2	0/75
Comments: Lot 2: Two units EOS discounted at 500 hours, FA DAR#041405a.					
Temperature Cycle cond. C	-65 °C	JESD22-A104	500 Cycles	1	0/77
1100-1 (Sumitomo G700-Similarity)	+150 °C				
1105-1 (Sumitomo G700-Similarity)	air to air		500 Cycles	2	0/77
QJ1478 (Sumitomo G700-Similarity)			500 Cycles	3	0/77
			1000 Cycles	3	0/77
Comments: Lot 3: 1000 cycles for information purposes only per engineering.					
Tomography (CSAM)		J-STD-035	500 TCC	1	0/5
1100-1 (Sumitomo G700-Similarity)					
1105-1 (Sumitomo G700-Similarity)			500 TCC	2	0/5
QJ1478 (Sumitomo G700-Similarity)			500 TCC	3	0/5

### Background Information:

**Part #:** CS5460A  
**Package:** 24SSOP

**Rev:** D

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

**Lead Finish:** Pb-free

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# RELIABILITY QUALIFICATION REPORT

Report Date: 7/31/2008

Page 3 of 3

Reliability Report: QRR080711

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<u>Stress</u>	<u>Conditions</u>	<u>Method</u>	<u>Duration</u>	<u>Lot</u>	<u>Results (Fail/sample)</u>
Autoclave/PPOT	121 °C	JESD22-A102	96 Hours	1	0/77
1100-1 (Sumitomo G700-Similarity)	15 psig				
1105-1 (Sumitomo G700-Similarity)	100% R.H.		96 Hours	2	0/77
QJ1478 (Sumitomo G700-Similarity)	2 atm				
			96 Hours	3	0/77
			168 Hours	3	0/77
Solderability	93 °C steam aging	JESD22-B102	Solderability	1	0/15
QJ1478 (Sumitomo G700-Similarity)	8 Hours				
	245 °C solder bath				
	5 Seconds				
HTSL (High Temp Storage Life)	150 °C	JESD22-A103	48 Hours	1	0/77
QJ1490 (Sumitomo G700-Similarity)			500 Hours	1	0/77
			1000 Hours	1	0/77

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## Background Information:

Part #: CS5460A

Rev: D

Fab: MagnaChip (F)

Lead Finish: Pb-free

Package: 24SSOP

Assembly: Amkor P1 (Philippines)

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Cirrus Logic PCN administrator: \_\_\_\_\_ Date: \_\_\_\_\_

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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)***