



Process Change Notification

PCN Number: PCN-2015-27

PCN Notification Date: 11/03/2015

Informational

WM8727CGED Leadframe Change

Dear Customer,

This notification is to advise you of the following change(s).

Due to a fire at our WM8727 lead-frame supplier, we have qualified MITSUI as our new supplier.

If you have any questions, please contact your Sales Representative.

Sincerely,

Quality Systems Administrator
Cirrus Logic Corporate Quality
Phone: +1(512) 851-4000



Process Change Notification

PCN Number: PCN-2015-27

PCN Notification Date: 11/03/2015

Products Affected:

The devices listed on this page are the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

Technical details of this Process / Product Change follow on the next page(s).

Title:	WM8727CGED Leadframe Supplier Change				
Customer Contact:	Local Field Sales Representative	Phone:	(512) 851-4000	Dept:	Corporate Quality
Proposed 1st Ship Date:	01 2016	Estimated Sample Availability Date:	10 2015		
Change Type:					
	Assembly Site	Assembly Process	x	Assembly Materials	
	Wafer Fab Site	Wafer Fab Process		Wafer Fab Materials	
	Wafer Bump Site	Wafer Bump Process		Wafer Bump Material	
	Test Site	Test Process		Design	
	Electrical Specification	Mechanical Specification		Part Number	
	Packing/Shipping/Labeling	Other			
Comments:					

PCN Details

Description of Change:

Due to a fire at the current WM8727 leadframe manufacturer we have qualified a new supplier

	Current Leadframe	New Leadframe
Manufacturer	PSMC	MITSUI

Reason for Change:

In order to ensure continuity of supply for our customers

Anticipated Impact on Form, Fit, Function, Quality or Reliability:

No impact to form, fit or function

Product Affected:

Cirrus Logic Part Number	Customer Part Number
WM8727CGED	
WM8727CGED/R	



Process Change Notification

PCN Number: PCN-2015-27

PCN Notification Date: 11/03/2015

Changes To Product Identification Resulting From This PCN:
Current leadframe product MMC : 5UI New leadframe product MMC : CY3

Qualification Data:

Qualification	Completed	10 2015	Status	Passed
----------------------	------------------	---------	---------------	--------



Reliability Engineering Qualification Report

WM8727CGED

Wafer Fabrication – MagnaChip Semiconductor, CF2 Fab, Korea
Package Assembly – ASE Chungli, SOIC8



Russell McMillan, Senior Reliability Engineer

Date: 28/10/15



Dan Liu, Senior Reliability Engineer

Date: 29/10/15



Gary Morton, Manager of Supply Chain PTE

Date: 29/10/15



Andrew McLean, Director of Quality

Date: 29/10/15

CONFIDENTIAL: This document is the property of Cirrus Logic International Semiconductor Ltd, and may not be copied in full or in part, or the information contained within disclosed to a third party, without the written permission of the company.

© Cirrus Logic International Semiconductor Ltd. 2015

Revision | 1.0

Page 1

Summary

The WM8727CGED device has passed all Cirrus product qualification requirements.

Silicon level reliability

- 1000 hours of High Temperature Operating Life (HTOL) testing.
- Electrostatic Discharge (ESD) testing.
- Latch-Up testing.

The package level reliability was qualified by similarity to the WM8762CGED device for HTS, MSL and TC which is assembled in an ASE Chungli SOIC8 package.

Package level reliability

- 1000 hours of High Temperature Storage (HTS) testing.
- 1000 hours of Temperature, Humidity & Bias (THB) testing.
- Moisture Sensitivity Level (MSL) testing at MSL 1 and subsequent Temperature Cycling for 500 cycles.

Reliability Test Results

Test Lots: (1) 4923 (31ACABX)
 (2) 16761A (73AIR6X)
 (3) 31031 (0AAA5UI)
 (4) 423511 (56AAUJM)

Silicon Level Tests

Stress Test	Test Conditions	JESD22 Spec	Pre-condition	Test Duration	Fails/Passes (Lot)
High Temperature Operating Life (HTOL) testing	125°C V _I = 5.5V Dynamic	A108	-	1000 hours	0/77(1)
Electrostatic Discharge (ESD) Sensitivity Testing Human Body Model (HBM)	>= Class 2 ESD pulse of 2000V HBM	A114	-	-	0/3 (1)
Electrostatic Discharge (ESD) Sensitivity Testing Machine Model (MM)	>= Class B ESD pulse of 200V MM	A115	-	-	0/3 (1)
Field-Induced Charged-Device Model (CDM) Test Method for Electrostatic Discharge (ESD)	>= Class III ESD pulse of 500V CDM	C101	-	-	0/3 (2)
IC Latch-Up Test	Class II Level A +/-100mA Current Injection and 1.5xMax V _{supply} Overvoltage	JESD78	-	-	0/3 (1)

Package Level Tests

Stress Test	Test Conditions	JESD22 Spec	Pre-condition	Test Duration	Fails/Passes (Lot)
High Temperature Storage (HTS) testing	150°C No bias	A103	-	1000 hours	0/77 (4)
Temperature, Humidity & Bias (THB) testing	85°C/85%RH V _I = 5.5 V	A101	(a)	1000 hours	0/77 (3)
Moisture Sensitivity Level (MSL) testing	MSL 1 (Peak IR reflow temperature = 260°C)	J-STD-020	-	-	0/77 (4)
Temperature Cycling	-65°C to +150°C Transfer time < 1 minute Soak time > 10 minutes	A104	(a)	500 cycles	0/77 (4)

(a) Pre-condition: JEDEC Moisture Sensitivity Level 1 (JESD22 - A113)

Revision History

Revision	Date	Originator	Change
1.0	29/06/2011	Melwin Antony	Initial release
1.1	23/08/2011	Melwin Antony	Added 'C' to the part number to indicate copper bond wire
1.2	28/10/2015	Russell McMillan	HTS, MSL and TC rerun for new leadframe material

Revision	1.0
----------	-----

Page 4