



# Process Change Notification

PCN Number: PCN-2016-69

PCN Notification Date: 01/09/2017

## Final PCN

WM9081GICN/[R]V Assembly and Test Transfer

Dear Customer,

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

WM9081GICN/[R]V assembly is being transferred from Unisem Malaysia to ASE Chungli and for test from Unisem Malaysia to Amkor Taiwan.

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

Sincerely,

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



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## 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).

<b>Title:</b>	WM9081GICN/[R]V Assembly and Test Transfer				
<b>Customer Contact:</b>	Local Field Sales Representative	<b>Phone:</b>	(512) 851-4000	<b>Dept:</b>	Corporate Quality
<b>Proposed 1<sup>st</sup> Ship Date:</b>	Estimated Q2 2017	<b>Estimated Sample Availability Date:</b>		Now	
<b>Change Type:</b>					
x	Assembly Site	x	Assembly Process	x	Assembly Materials
	Wafer Fab Site		Wafer Fab Process		Wafer Fab Materials
	Wafer Bump Site		Wafer Bump Process		Wafer Bump Material
x	Test Site		Test Process		Design
	Electrical Specification		Mechanical Specification		Part Number
x	Packing/Shipping/Labeling		Other		
<b>Comments:</b>					

## PCN Details

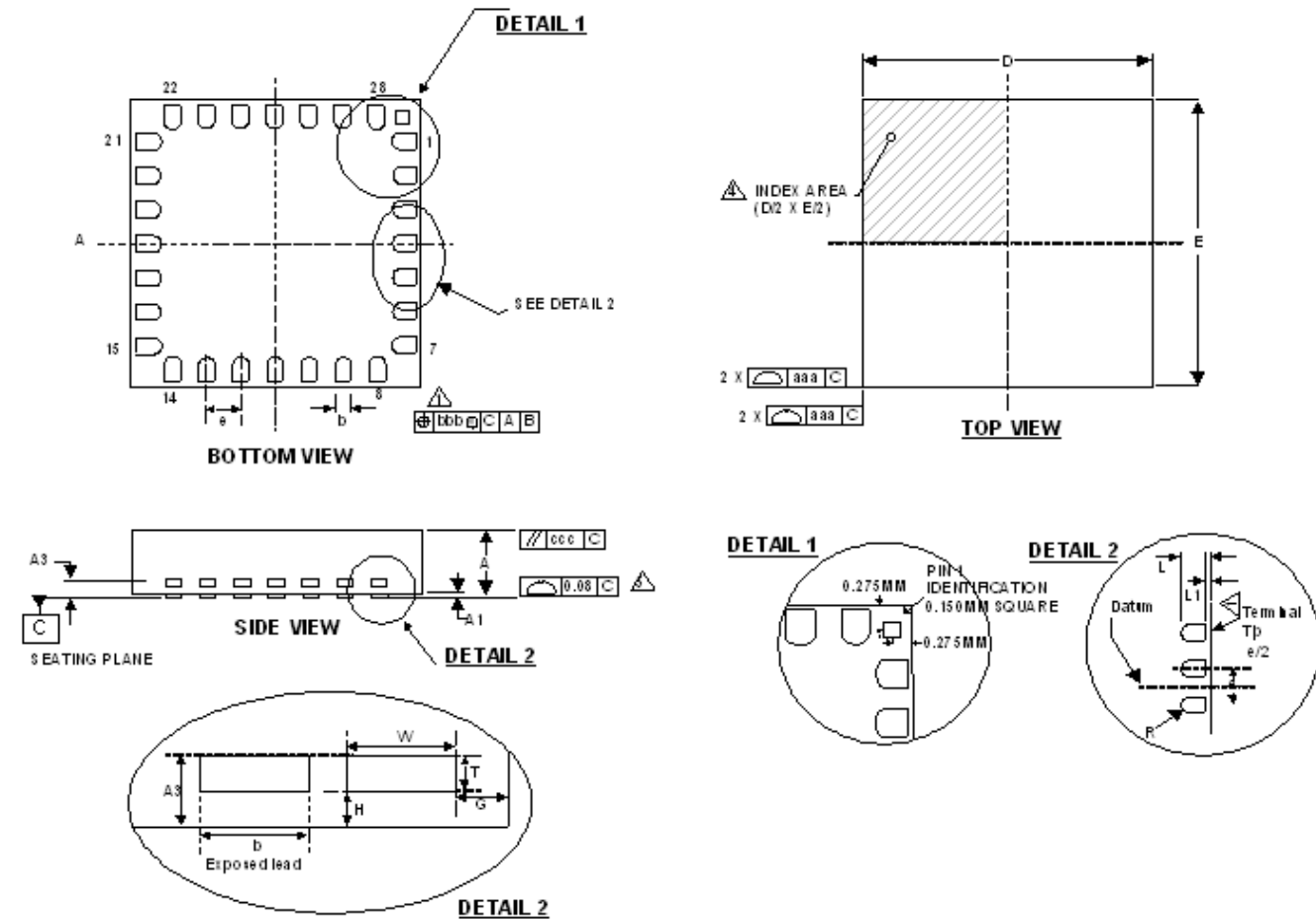
### Description of Change:

- Assembly will move from Unisem Malaysia to ASE Chungli, and to Amkor Taiwan for test
- MSL level will remain the same: MSL 3
- Package quantity in Reel will remain the same : 3.5k
- Marking will change, and logo will be removed, details below
- Minor changes in Package Outline Diagram (POD)
  - These will have no significant impact on footprint
- Key Changes for new Site:

	CURRENT	NEW
Assembly Location	Unisem Malaysia	ASE Chungli
Test Location	Unisem Malaysia	Amkor Taiwan
Die attach	Henkel 8006NS(Print)	Ablestik / ATB-125(Film)
Bondwire	1 mil Au	Nippon / EX1 (1 mil Cu-Pd)
Mould compound	Sumitomo / EME-G770HCD	Sumitomo / EME-G631
Mark Code	WPF	TSV
Package Outline Diagram	Refer to POD below	Refer to POD below

## Package Outline Diagram

### Unisem POD

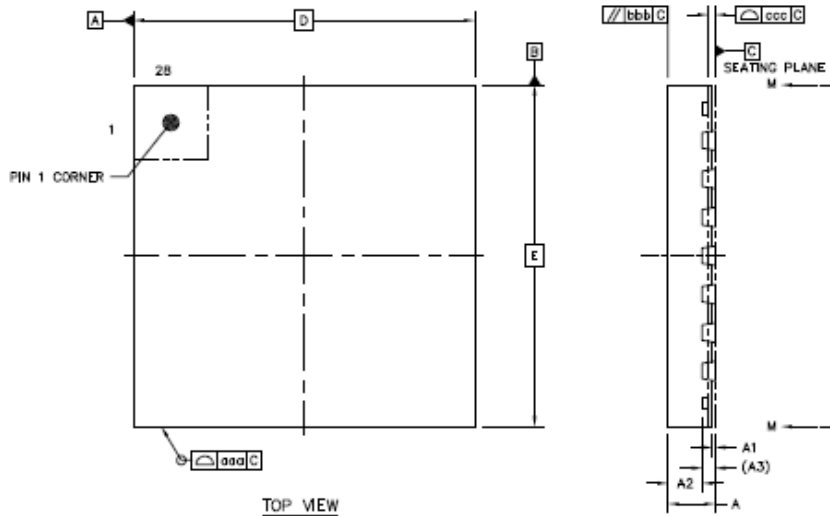


Symbols	Dimensions (mm)			
	MIN	NOM	MAX	NOTE
A	0.500	0.550	0.600	
A1	0	0.025	0.05	
A3		0.152 REF		
b	0.18	0.23	0.28	1
D	3.95	4.00	4.05	
E	3.95	4.00	4.05	
e		0.45 BSC		
G		0.535 REF		
H		0.076 REF		
L		0.40 REF		
L1		0.05 REF		5
T		0.076 REF		
W		0.230 REF		
<b>Tolerances of Form and Position</b>				
aaa		0.15		
bbb		0.10		
ccc		0.10		
REF:		JEDEC, MO-220		

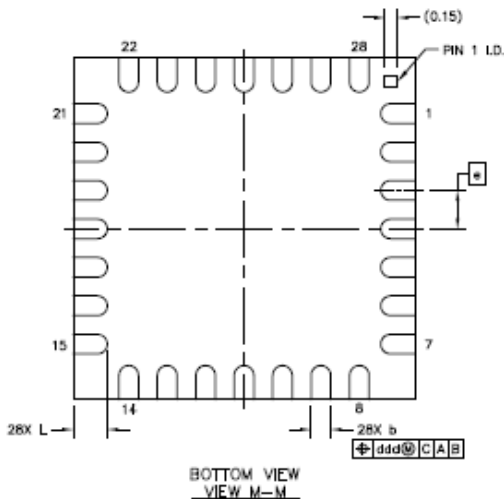
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## Amkor POD



	SYMBOL	MIN	NOM	MAX
TOTAL THICKNESS	A	0.5	0.55	0.6
STAND OFF	A1	0	0.035	0.05
MOLD THICKNESS	A2	---	0.4	---
L/F THICKNESS	A3	0.152 REF		
LEAD WIDTH	b	0.18	0.23	0.28
BODY SIZE	X	4 BSC		
	Y	4 BSC		
LEAD PITCH	e	0.45 BSC		
LEAD LENGTH	L	0.35	0.4	0.45
PACKAGE EDGE TOLERANCE	aaa	0.1		
MOLD FLATNESS	bbb	0.1		
COPLANARITY	ccc	0.08		
LEAD OFFSET	ddd	0.1		



**NOTES**

- 1.0 COPLANARITY APPLIES TO LEADS, CORNER LEADS AND DIE ATTACH PAD.
- 2.0 TOTAL THICKNESS NOT INCLUDE SAW BURR.

### Reason for Change:

Assembly and test are being consolidated at our volume assembly and test suppliers in order to ensure continuity of supply.

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

No change



### Product Affected:

Device	Cirrus Logic Part Number
1	WM9081GICN/[R]V

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**Changes To Product Identification Resulting From This PCN:**

CURRENT MARKING	NEW MARKING
	

**Qualification Data:**

This qualification has been specifically developed for the validation of this change. The qualification data validates that the proposed change meets the applicable released technical specifications.

<b>Qualification Complete</b>	Oct 2016	<b>Status</b> :	PASSED
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# Reliability Report

Report: Project ID 2059-0  
Date: 16-November-2016  
Approved by: Russell McMillan

Purpose	Status
Qualification of WM9081GICN, MagnaChip GF3, ASE Chungli	Qualification successful

WM9081GICN							
<b>Fab:</b>	MagnaChip, GF3	<b>Assembly:</b>	Unisem (M) Berhad	<b>Rev:</b>	A	<b>Package:</b>	COL QFN28

Stress Name	Method	Conditions	Lot	Read Point	Results (Fail/Sample)
HTOL (High Temperature Op Life)	JESD22-A108	125°C / Dynamic Bias / VDDmax	1	1000 Hours	0 / 77
ESD HBM (Human Body Model)	JESD22-A114	25°C	1	2000 Volts	0 / 3
ESD CDM (Charged Device Model)	JESD22-C101	25°C	1	500 Volts	0 / 3
Latch-Up Over Voltage (VDD)	JESD78	85°C	1	1.5xVDDmax	0 / 3
Latch-Up Current Injection (I/O)	JESD78	85°C	1	+/- 100 mA	0 / 3

**WM9081GICN**

<b>Fab:</b>	MagnaChip, GF3	<b>Assembly:</b>	ASE, Chungli	<b>Rev:</b>	A	<b>Package:</b>	COL QFN28
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Stress Name	Method	Conditions	Lot	Read Point	Results (Fail/Sample)
Precondition	JESD22-A113	24HR 125°C Bake 192HR 30°C/60%RH Soak 3 pass 260°C peak reflow	1	Precon MSL3	0 / 154
THB (Temperature Humidity Bias)	JESD22-A101	85°C / 85%RH / VDDmax Post Precondition	1	1000 Hours	0 / 77
Temperature Cycle	JESD22-A104	-65 °C / +150 °C / air to air Post Precondition	1	500 Cycles	0 / 77
HTSL (High Temperature Storage Life)	JESD22-A103	150°C	1	1000 Hours	0 / 77