



Process Change Notification

PCN Number: PCN-2019-119a

PCN Notification Date: 02/07/2020

Final PCN: Add-On Amendment

28L SSOP molding process migration from MGP (Multi Gang Pot) to Automold with mold compound material and part marking format change
MSL migration from 2 to 3 for WM8716, WM8214, WM8740, WM8741, and WM8742 material

Dear Customer,

This is an add-on amendment to the submitted Final PCN-2019-119. As communicated on the final PCN, the 28L SSOP devices which have changed the molding process with material change have successfully completed qualification.

The successful qualification was based on a Moisture Sensitivity Level (MSL) 3, which is the standard MSL level for the molding material used by the assembly supplier and harmonizes to the industry standard for this type of package.

Note: MSL3 material requires adherence to JEDEC J-STD-033D.

Additionally, as a result of this add-on amendment, the label details and packaging for WM8716, WM8214, WM8740, WM8741, and WM8742 material will conform to MSL3 accordingly. (i.e. MBB with MSL labeling, HIC and Desiccant)

And the existing Wolfson data sheet has been converted to the Cirrus Logic data sheet format along with an update to the ordering information as well as the absolute maximum ratings accordingly.

Note: Cirrus Logic acquired Wolfson in August 2014.

The described change is effective as of the date of customer's agreement for this notification and delivery will commence immediately to ensure continuity of supply without disruption.

Cirrus Logic would like to take this opportunity to thank our customers for their cooperation and assistance in this respective matter. Any specific or immediate inquiries should be directed to your local Field Sales Representative.

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 subsequent pages are the complete list of affected devices. According to our records, one or more of these devices have been purchased by your organization 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:	28L SSOP molding process migration from MGP to Automold with mold compound material and part marking format change MSL migration from 2 to 3 for WM8716, WM8214, WM8740, WM8741, and WM8742 material				
Customer Contact:	Local Field Sales Representative	Phone	(512) 851-4000	Dept:	Customer Quality
Proposed 1st Ship Date:	Various (Note1)		Estimated Sample Availability Date:	Various (Note1)	
Change Type:					
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	
Test Site		Test Process		Design	
Electrical Specification		Mechanical Specification		Part Number	
Packing/Shipping/Labeling	X	Other			
Comments:	"Other" – Marking format Note 1: Please, contact you sales representative for the shipment date and sample availability date.				

PCN Details

Description of Change(s):

- **Process flow and material have been changed for 28L SSOP**

Process change	Before	After
Molding Process	MGP (Multi Gang Pot)	Automold


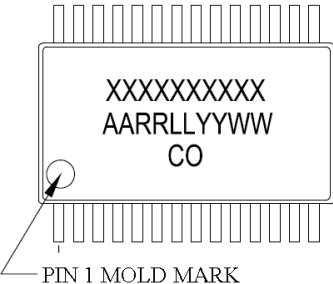
Material Change	Before	After
Mold compound	Hitachi CEL 9220HF	Sumitomo G631LT

Note: Material Declarations or Product Content reports available upon request.

MSL Level	Before	After
WM8716SEDS/(R)V	2	3
WM8214SCDS/(R)V	2	3
WM8740SEDS/(R)V	2	3
WM8741GEDS/(R)V	2	3
WM8742GEDS/(R)V	2	3

- Marking Format: Consistent with Cirrus Logic Mark Format Standard**

Note: Cirrus Logic acquired Wolfson in August 2014

From	To	
<p>Wolfson Marking Format</p> 	<p>Cirrus Logic Marking Format</p> 	<p>Line 1: Part Number (10 characters maximum) Line 2: Package Mark (10 characters maximum) Line 3: Country of Origin (2 characters as shown on PO)</p> <p>AA = Assembly Site Code RR = Device Rev Code LL = Lot Sequence Code YY = Year of Manufacture WW = Work Week of Manufacture</p>

- Datasheet update:**

Ordering Information and Absolute Maximum Ratings are updated to the Cirrus standard format for WM8716, WM8214, WM8740, WM8741, and WM8742 devices. Note: MSL is not designated in Cirrus Logic data sheets.

Absolute Maximum Ratings

Before change



ESD Sensitive Device. This device is manufactured on a CMOS process. It is therefore generically susceptible to damage from excessive static voltages. Proper ESD precautions must be taken during handling and storage of this device.

Wolfson tests its package types according to IPC/JEDEC J-STD-020 for Moisture Sensitivity to determine acceptable storage conditions prior to surface mount assembly. These levels are:

- MSL1 = unlimited floor life at <30°C / 85% Relative Humidity. Not normally stored in moisture barrier bag.
- MSL2 = out of bag storage for 1 year at <30°C / 60% Relative Humidity. Supplied in moisture barrier bag.
- MSL3 = out of bag storage for 168 hours at <30°C / 60% Relative Humidity. Supplied in moisture barrier bag.

The Moisture Sensitivity Level for each package type is specified in Ordering Information.

After change



ESD Sensitive Device. This device is manufactured on a CMOS process. It is therefore generically susceptible to damage from excessive static voltages. Proper ESD precautions must be taken during handling and storage of this device.

Ordering Information – WM8716SEDS/(R)V

Before change (Rev 4.2)

ORDERING INFORMATION

DEVICE	TEMPERATURE RANGE	PACKAGE	MOISTURE SENSITIVITY LEVEL	PEAK SOLDERING TEMPERATURE
WM8716SEDS/V	-25 to +85°C	28-lead SSOP (Pb- free)	MSL2	260°C
WM8716SEDS/RV	-25 to +85°C	28-lead SSOP (Pb- free, tape and reel)	MSL2	260°C

After change (Rev 4.3)

ORDERING INFORMATION

DEVICE	TEMPERATURE RANGE	PACKAGE	PEAK SOLDERING TEMPERATURE
WM8716SEDS/V	-25 to +85°C	28-lead SSOP (Pb- free)	260°C
WM8716SEDS/RV	-25 to +85°C	28-lead SSOP (Pb- free, tape and reel)	260°C

Datasheet reference:

<https://www.cirrus.com/products/wm8716/>

Ordering Information – WM8214SCDS/(R)V

Before change (Rev 4.4)

ORDERING INFORMATION

DEVICE	TEMP. RANGE	PACKAGE	MOISTURE SENSITIVITY LEVEL	PEAK SOLDERING TEMPERATURE
WM8214SCDS/V	0 to 70°C	28-lead SSOP (Pb-free)	MSL2	260°C
WM8214SCDS/RV	0 to 70°C	28-lead SSOP (Pb-free, tape and reel)	MSL2	260°C

After change (Rev 4.5)

ORDERING INFORMATION

DEVICE	TEMP. RANGE	PACKAGE	PEAK SOLDERING TEMPERATURE
WM8214SCDS/V	0 to 70°C	28-lead SSOP (Pb-free)	260°C
WM8214SCDS/RV	0 to 70°C	28-lead SSOP (Pb-free, tape and reel)	260°C

Datasheet reference:

<https://www.cirrus.com/products/wm8214/>

Ordering Information – WM8740SEDS/(R)V

Before change (Rev 4.4)

ORDERING INFORMATION

DEVICE	TEMPERATURE RANGE	PACKAGE	MOISTURE SENSITIVITY LEVEL	PEAK SOLDERING TEMPERATURE
WM8740SEDS/V	-40° to +85°C	28-pin SSOP	MSL2	260°C
WM8740SEDS/RV	-40° to +85°C	28-pin SSOP	MSL2	260°C

After change (Rev 4.5)

ORDERING INFORMATION

DEVICE	TEMPERATURE RANGE	PACKAGE	PEAK SOLDERING TEMPERATURE
WM8740SEDS/V	-40° to +85°C	28-pin SSOP	260°C
WM8740SEDS/RV	-40° to +85°C	28-pin SSOP	260°C

Datasheet reference:

<https://www.cirrus.com/products/wm8740/>

Ordering Information – WM8741GEDS/(R)V

Before change (Rev 4.3)

ORDERING INFORMATION

DEVICE	TEMPERATURE RANGE	PACKAGE	MOISTURE SENSITIVITY LEVEL	PEAK SOLDERING TEMPERATURE
WM8741GEDS/V	-0° to +70°C	28-lead SSOP (Pb-free)	MSL2	260°C
WM8741GEDS/RV	-0° to +70°C	28-lead SSOP (Pb-free, tape and reel)	MSL2	260°C

After change (Rev 4.4)

ORDERING INFORMATION

DEVICE	TEMPERATURE RANGE	PACKAGE	PEAK SOLDERING TEMPERATURE
WM8741GEDS/V	-0° to +70°C	28-lead SSOP (Pb-free)	260°C
WM8741GEDS/RV	-0° to +70°C	28-lead SSOP (Pb-free, tape and reel)	260°C

Datasheet reference:

<https://www.cirrus.com/products/wm8741/>

Ordering Information – WM8742GEDS/(R)V

Before change (Rev 4.3)

ORDERING INFORMATION

DEVICE	TEMPERATURE RANGE	PACKAGE	MOISTURE SENSITIVITY LEVEL	PEAK SOLDERING TEMPERATURE
WM8742GEDS/V	-0° to +70°C	28-lead SSOP (Pb-free)	MSL2	260°C
WM8742GEDS/RV	-0° to +70°C	28-lead SSOP (Pb-free, tape and reel)	MSL2	260°C

After change (Rev 4.4)

ORDERING INFORMATION

DEVICE	TEMPERATURE RANGE	PACKAGE	PEAK SOLDERING TEMPERATURE
WM8742GEDS/V	-0° to +70°C	28-lead SSOP (Pb-free)	260°C
WM8742GEDS/RV	-0° to +70°C	28-lead SSOP (Pb-free, tape and reel)	260°C

Datasheet reference:

<https://www.cirrus.com/products/wm8742/>

Reason for Change:

Cirrus Logics' 28L SSOP has migrated the existing molding process from MGP to Automold and aligned with OSE's standard molding process flow. Because the standard process and material for the 28L SSOP package type is MSL3, Cirrus Logic has harmonized to the industry standard for this package type.

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

No anticipated adverse impact to the quality and/or reliability of said product but the storage condition must meet the MSL 3, JEDEC J-STD-033D standard.

However, the customers may have to adjust their Pick-N-Place recognition system to adapt to the Cirrus Logic part marking standardization.

Anticipated Impact on Material Declaration:

- No Impact to the Material Declaration
 Material Declarations or Product Content reports are driven from production data and will be available following the production release.



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Product Affected:

Cirrus Logic Part Number
WM8196SCDS/RV
WM8196SCDS/V
WM8510GEDS/RV
WM8510GEDS/V
WM8716SEDS/RV (Note2)
WM8716SEDS/V (Note2)
WM8778SEDS/RV
WM8778SEDS/V
WM8199SCDS/RV
WM8199SCDS/V
WM8213SCDS/RV
WM8213SCDS/V
WM8214SCDS/RV (Note2)
WM8214SCDS/V (Note2)
WM8740SEDS/RV (Note2)
WM8740SEDS/V (Note2)
WM8731SEDS/RV
WM8731SEDS/V
WM8569SEDS/RV
WM8569SEDS/V
WM8741GEDS/RV (Note2)
WM8741GEDS/V (Note2)
WM8742GEDS/RV (Note2)
WM8742GEDS/V (Note2)
WM8766GEDS/RV
WM8766GEDS/V
WM8805GEDS/RV
WM8805GEDS/V

(Note2) Devices with MSL migration from 2 to 3.

Qualification Result

Qualification: <input type="checkbox"/> Plan <input checked="" type="checkbox"/> Test Results			
Reliability Test	Standard	Conditions	Sample Size (PASS/FAIL)
HTS (High Temperature Storage)	JESD22-A103	150 Deg.C, 1000 Hrs. No PC needed	3 Lots @ 77 pcs ea. Passed
PC (Precondition)	J-STD-020	Bake: 24Hr 125°C; MSL 3 192Hr 30°C / 60% RH Soak, (Reflow 260°C x3)	3 Lots @ 154 pcs ea. Passed
TC (Temperature Cycling)	JESD22-A104	-40°C to +125°C for 1000 cycles	3 Lots @ 77 pcs ea. Passed
BHAST (Biased Highly Accelerated Temperature and Humidity Stress Test)	JESD22-A110	110°C/85% RH, 264 hrs	3 Lots @ 77 pcs ea. Passed
Pkg Physical DIM			3 Lots @ 10 pcs ea. Passed
Notes: <ul style="list-style-type: none"> • Qualification tests “pass” on zero fails for each test. • The WM8741 component served as the primary qualification vehicle • The WM8569, WM8196 and WM8716 components passed HTSL, MSL, and TC. BHAST is QBS (Qualified By Similarity). • The remaining components are QBS (Qualified By Similarity). 			