

CIRRUS LOGIC Process Change Notification

PCN Number: PCN-2019-126

PCN Notification Date: 11/22/2019

Initial PCN

Wafer Fabrication site transfers from Fab3E to Fab5 of Global Foundries in Singapore

Dear Customer,

This notification is to advise you of the following change.

Wafer fabrication site transfers from Fab3E to Fab5 of Global Foundries in Singapore.

Cirrus Logic will re-qualify all devices which are impacted by this change.

The described change(s) within this PCN will not take effect (i.e. Shipped) any earlier than 90 days from Initial PCN notification or the successful completion of the Cirrus Logic qualification, unless a customer agreement has been reached on an earlier implementation of the identified process change.

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 twentyfour (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:		Wafer Fabrication site transfers from Fab3E to Fab5 of Global Foundries in Singapore							
Customer Contact: Local Field Sales			Representative		Phone :	(512) 851-4000	Dept:	Corporate Quality	
Proposed 1 st Ship Date:			Q4 2	Q4 2020 Estimated Sample			ailability Date: Q2 2020		
Change Type:									
	Assembly Site			Assembly Process			Assembly Materials		
Х	Wafer Fab Site			Wafer Fab Process		6	Wafer Fab Materials		
	Wafer Bump Site			Wafer Bump Process		SS	Wafer Bump Material		
	Test Site			Test Process			Design		
	Electrical Specification			Mechanical Specification		cation	Part Number		
	Packing/Shipping/Labeling		Х	Other					
Comments: "Other" – Device marking format and pin orientation									

PCN Details

Description of Change(s):

Fabrication site change from GF (Global Foundries) Fab3E to Fab5 •

Affected Cirrus Logic Part Number
WM1699GEFL/RV
WM8233GEFL/RV
WM8234GEFL/RV
WM8235GEFL/RV
WM8231GEFL/RV
WM8962BECSN/R
WM8994ECS/R
WM8963ECSN/R
WM8958ECS/R
WM8963ECSN/R



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Marking Format and Pin Orientation: Consistent with Cirrus Logic Mark Format Standard Note: Cirrus Logic acquired Wolfson in August 2014 **Cirrus Logic Part** From То Number Ì XXXXXXXX TOP SIDE BRAND WM1699GEFL/RV WM1699G **RRLLYYWW** YMTTGTR CO Line 1: Part Number Line 2: Package Mark Line 3: Country of Origin XXXXXXXXXXX WM8233G PACKAGE MARK FIELDS WM8233GEFL/RV AARRLLYYWW CO YMTTXWR 12 character Package Mark appears on PO as 6 fields of 2 characters each in the following format: FFAARRLLYYWW where, FF = Foundry Code Þ AA = Assembly Site Code RR = Die Rev CodeXXXXXXXX LL = Lot Sequence Code WM8234G WM8234GEFL/RV **RRLLYYWW** YY = Year of Manufacture WW = Work Week of Manufacture YMTT6Y7 CO Ð XXXXXXXX WM8235G WM8235GEFL/RV **RRLLYYWW** CO YMTTTGR XXXXXXXXXXX WM8231G WM8231GEFL/RV AARRLLYYWW YMTTB5T CO • XXXXXXXXXXXXX FFAARRLLYYWW CO WM8962E WM8962BECSN/R YMTTM8T XXXXXXXXXXXXX FFAARRLLYYWW CO XXXXXXXXXXXXXX FFAARRLLYYWW CO WM8994ECS/R



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	Cirrus Logic Part Number	From	То				
	WM8963ECSN/R	WM8963E YMTTM2B	XXXXXXXXXXXX FFAARRLLYYW CD				
	WM8958ECS/R	WM8958E YMTTF7J	XXXXXXXXXXXX FFAARRLLYYW CD				
Roas	on for Change						
Reason for Change: Global Foundries Fab3E site will stop production by June 2020.							
Antio	ipated Impact on For	rm, Fit, Function, Qu	ality or Reliability:				
No anticipated adverse impact to the Quality and/or Reliability of said product. However, the customer may have to adjust Pick-N-Place recognition system to adapt to the Cirrus Logic part marking and pin orientation standardization.							
Antic	Anticipated Impact on Material Declaration:						
	No Impact to the Material Declarations or Product Content reports are driven from production data and will be available following the production release.						
Prod	uct Affected:						
		gic Part Number					
WM1699GEFL/RV							
WM8233GEFL/RV WM8234GEFL/RV							
		35GEFL/RV					
		31GEFL/RV					
	WM89	62BECSN/R					
WM8994ECS/R							
		063ECSN/R					
	VVM8	958ECS/R					



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Qualification Plan

Qualification: 🛛 Plan 🗌 Test Results						
Reliability Test	Standard	Conditions	Sample Size (PASS/FAIL)			
ESD-HBM (Human Body Model ESD)	JS-001	JS-001	1 Lot @ 3 pcs ea.			
ESD-CDM (Charged Device Model ESD)	JS-002	JS-002	1 Lot @ 3 pcs ea.			
LU (Latch-Up)	JESD78	+ / - 100 mA, 1.5xVDDmax	1 Lot @ 3 pcs ea.			
ELFR (Early Life Failure Rate)	JESD22-A108	125°C / Dynamic Bias, 48hrs	1 Lot @ 1000 pcs ea.			
HTOL (High Temperature Operating Life)	JESD22-A108	125°C / Dynamic Bias, 1000hrs	1 Lot @ 77 pcs ea.			
HTSL (High Temperature Storage Life)	JESD22-A103	150°C, 1000 Hrs	3 Lots @ 77 pcs ea.			
PC (Precondition)	J-STD-020	Bake: 24Hr 125°C; MSL 3 192Hrs 30°C / 60% RH Soak, (Reflow 260°C x3)	3 Lots @ 77 pcs ea.			
TC (Temperature Cycling)	JESD22-A104	-40°C to +125°C for 1000 cycles (Post Precon)	3 Lots @ 77 pcs ea.			

Notes:

- Qualification tests "pass" on zero fails for each test.
- The WM8235 component will serve as the primary qualification vehicle for silicon qualification and WM8231, WM8233, WM1699, and WM8234 components are QBS (Qualified By Similarity).
 Test HBM, CDM, LU, ELFR, HTOL and HTSL items
- The WM8958 component will serve as the primary qualification vehicle for silicon qualification and WM8962, WM8963, and WM8994 components are QBS.
 - Test HBM, CDM, LU, ELFR, HTOL and HTSL items
- The WM8233 component will serve as the primary qualification vehicle for package qualification and WM8231 component is QBS.
 - o Test HTSL, PC, and TC items
- The WM8235 component will serve as the primary qualification vehicle for package qualification and WM1699 and WM8234 components are QBS.
 - Test HTSL, PC, and TC items
- The WM8958 component will serve as the primary qualification vehicle for package qualification and WM8962, WM8963, and WM8994 components are QBS.
 - Test HTSL, PC, and TC items

Reliability Qualification Results:

• A summary of the final results will be communicated upon successful completion of the qualification.