

Process Change Notification

PCN Number: PCN-2019-126 Phase 1 CSP

PCN Notification Date: 09/29/2020

Final PCN: Phase 1 for CSP components

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

Dear Customer,

We are pleased to announce the successful completion of wafer fabrication site transfer from Fab3E to Fab5 of Global Foundries in Singapore for the CSP (Chip Scale Package) components.

***Special Note:** Due to the global health and economic crisis, Cirrus Logic was required to change aspects of scheduling and amended the initial PCN into two phases.

Phase 1: CSP components Phase 2: QFN components

The Final PCN for QFN components will be submitted when the phase is completed.

The described change is effective as of the successful completion of the Cirrus Logic qualification 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



CIRRUS LOGIC Process Change Notification

PCN Number: PCN-2019-126 Phase 1 CSP

PCN Notification Date: 09/29/2020

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) 851-40	000	Dept:	Corporate Quality
Proposed 1 st Ship Date:			Note	e 1 Estimated Sample Avail			ability Da	ite: Now
Change Type:								
	Assembly Site			Assembly Process			Assembly Materials	
Х	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 Nu	mber
	Packing/Shipping/	/Labeling	X Other					
Comments:		"Other" – Device marking format and pin orientation Note 1 . Now for the WM8994 device and all other devices in Q4 onwards						

PCN Details

Description of Change(s):

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

Phase 1: CSP components

Affected Cirrus Logic Part Number
WM8962BECSN/R
WM8994ECS/R
WM8963ECSN/R
WM8958ECS/R

Marking Format and Pin Orientation: Consistent with Cirrus Logic Mark Format Standard . Note: Cirrus Logic acquired Wolfson in August 2014

Cirrus Logic Part Number	From	То	
WM8962BECSN/R	WM8962E YMTTM8T •	X X X X X X X X X X X X X X X X X X X	TOP SIDE BRAND Line 1: Part Number Line 2: Package Mark Line 3: Country of Origin



PCN Number: PCN-2019-126 Phase 1 CSP

PCN Notification Date: 09/29/2020

Cirrus Logic Part Number	From	То			
WM8994ECS/R	XXXXXXXXXXXX FFAARRILLYYWW CO	XXXXXXXXXXXXX FFAARRLLYYWW CO	PACKAGE MARK FIELDS 12 character Package Mark appears on PO as 6 fields of 2 characters each in the following format: FFARRLLYWW where, FF = Foundry Code AA = Assembly Site Code RR = Die Rev Code LL = Lot Sequence Code YY = Year of Manufacture		
WM8963ECSN/R	WM8963E YMTTM2B	XXXXXXXXXXXX FFAARRLLYYWW CO			
WM8958ECS/R	WM8958E YMTTF7J ●	XXXXXXXXXXXX FFAARRLLYYWW CD			
son for Change					
al Foundries Fab3E sit	e stopped production.				
cipated Impact on For	m, Fit, Function, Qua	lity or Reliability:			
nticipated adverse imp st Pick-N-Place recogni	act to the Quality and/o tion system to adapt to	or Reliability of said proc the Cirrus Logic part n	duct. However, the customer may have to narking and pin orientation standardization		
cipated Impact on Ma	terial Declaration:				
No Impact to the Material Declarati	on pro	terial Declarations or Pr duction data and will be	oduct Content reports are driven from available following the production release		
luct Affected:			y		
	c				
$\sim 1 \cdot C C D$ component	<u>s</u> Io Logio Dort Numbor	,			
Se 1: CSP components Affected Cirru	IS LOUIC FAIL NUMBER				
Se 1: CSP components Affected Cirru WM89	362BECSN/R				
Se 1: CSP components Affected Cirru WM89 WM	962BECSN/R 8994ECS/R				
Affected Cirru WM89 WM89 WM89 WM80 WM80 WM80	963BECSN/R 963ECSN/R 963ECSN/R				



CIRRUS LOGIC Process Change Notification

PCN Number: PCN-2019-126 Phase 1 CSP

PCN Notification Date: 09/29/2020

Qualification Result

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. Passed			
ESD-CDM (Charged Device Model ESD)	JS-002	JS-002	1 Lot @ 3 pcs ea. Passed			
LU (Latch-Up)	JESD78	+ / - 100 mA, 1.5xVDDmax	1 Lot @ 3 pcs ea. Passed			
ELFR (Early Life Failure Rate)	JESD22-A108	125°C / Dynamic Bias, 48hrs	1 Lot @ 1000 pcs ea. Passed			
HTOL (High Temperature Operating Life)	JESD22-A108	125°C / Dynamic Bias, 1000hrs	1 Lot @ 77 pcs ea. Passed			
HTSL (High Temperature Storage Life)	JESD22-A103	150°C, 1000 Hrs	3 Lots @ 77 pcs ea. Passed			
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. Passed			
TC (Temperature Cycling)	JESD22-A104	-40°C to +125°C for 1000 cycles (Post Precon)	3 Lots @ 77 pcs ea. Passed			

Notes:

- Qualification tests "pass" on zero fails for each test.
- The WM8958 component served 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 WM8958 component served as the primary qualification vehicle for package qualification and WM8962, and WM8963 components are QBS.
 - Test HTSL, PC, and TC items
- The WM8994 component served as a qualification vehicle for package qualification.
 - Test HTSL, PC, and TC items
- Phase 1 components: WM8962B, WM8994, WM8963, and WM8958