



PCN Number: 1315 Chgnot.doc rev 10 04/13 - NO

Product/Process Change Notification (PCN)

Customer: North American & Asia Distribut	ors Date: 10/11/2013
Customer Part # and/Allegro part #:	
A8304SESTR-T	
Originator: J. Hurley Pho	ne: 508-854-5491 Fax: 508-853-3353
Duration of Change:	Permanent X Temporary (explain)
Summary description of change: Part Change:	X Process Change: Other:

Allegro currently assembles the 3 x 3 QFN package type at Stats ChipPAC, Kuala Lumpur, Malaysia, (SCM). Stats ChipPAC Malaysia (SCM) has informed Allegro that they will be closing this facility in June of 2014. Allegro will move the assembly site for the 3 x 3 QFN package type from Stats ChipPAC Malaysia (SCM) to Carsem Suzhou, China (CRC).

What is the part or process changing from (provide details)?

Allegro currently assembles the 3 x 3 QFN package type at Stats ChipPAC, Kuala Lumpur, Malaysia. Stats ChipPAC Malaysia (SCM) has informed Allegro that they will be closing this facility in June of 2014.

What is the part or process changing to (provide details)?

Allegro will move the assembly site for the 3 x 3 QFN package type to Carsem Suzhou, China.

Describe how this change affects the customer:

Carsem Suzhou, China has been primary QFN source for many years. Allegro has performed the necessary qualification and electrical tests to ensure the device is functionally equivalent to the data sheet specification.





PCN Number: 1315 Chgnot.doc rev 10 04/13 - NO

Product/Process Change Notification (PCN)

Is a PPAP update required?

Yes

Yes

No x

No (explain)

Is reliability testing required?

(If Yes, refer to attached plan) Per the below plan:



Reliability Qualification Plan/Results

Device: 9295/9296
Assy Lot #: 1310085LNAA
Fab Location: UMC
Package: ES (MLP)

Number of Leads: 20 Assembly Location: Carsem Tracking Number: 2258 Lead Finish: 100% Sn

Reason For Qualification: 9295/9296 Single LNB Supply and Control Voltage Regulator

Reliability Qualification Test Plan/Results							
9295, 9296 - STR#2258					Requirements		
Stress Test	Abv.	Test #	Test Method	Test Conditions	s.s.	Results	
Preconditioning	PC	A1	JESD22-A113	85°C/60% RH, 168 hrs, Peak Reflow=260°C	236	0 Rejects	
Temperature Humidity Bias	ТНВ	A2	JESD22-A101	85°C, 85% RH, 0, 1000 hrs	77	0 Rejects	
Autoclave	AC	А3	JESD22-A102	121°C, 100% RH, 15 PSIG, 0, 96 hrs	77	0 Rejects	
Temperature Cycle	TC	A4	JESD22-A104	-65°C to +175°C, 0, 500, 1000 Cycles	77	0 Rejects	
High Temperature Storage Life	HTSL	A6	JESD22-A103	150°C, 0, 1000 hrs	77	0 Rejects	
High Temperature Operating Life (STR#2334)	HTOL	B1	JESD22-A108	125°C, 0, 408, 1000 hrs	77	0 Rejects	
Early Life Failure Rate	ELFR	B2	AEC-Q100- 008 / JESD22-A108	125°C, 0, 48 hrs	800	0 Rejects	
Wire Bond Pull	WBP	C2	800021	Temp conditions and sample size are defined in the test method.		0 Rejects; Cpk>1.33	
Electrostatic Discharge Human Body Model	нвм	E2	JESD22-A114	Test Conditions, Sampling Size are defined in the Test Method		Classification H2, HBM =2.0 kV	
Electrostatic Discharge Charged Device Model	CDM	E3	JESD22-C101	Test Conditions, Sampling Size are defined in the Test Method		Classification = IV, > 1kV	
Latch-Up	LU	E4	AEC Q100- 004	Test Conditions, Sampling Size are defined in the Test Method		Class II, Level A	
Electrical Distributions	ED	E5	AEC Q100- 009	Tri-Temp Characterization	30 pieces	0 Rejects; Cpk>1.67	

This device qualification is considered to be passing all environmental stress evaluations per the $Allegro\ MicroSystems,\ Inc.\ 900019$.





Expected completion date for internal qualification: Complete

Expected PPAP availability date: N/A

Target implementation date: December 2013

Estimated date of first shipment: January 2014

Expected sample availability date: December 2013

Customer Approval Required: For Notification Only

Nox

cc: Allegro Sales/Marketing/Quality