



Standardized Information for Process/Product Change Notification (PCN)

1. PCN Basic Data		
1.1 Company		Allegro MicroSystems 955 Perimeter Rd, Manchester, New Hampshire 03103 U.S.A.
1.2 PCN No.	PbFreeCS	
1.3 Title of PCN	Lead (Pb) Free Conversion - Solder Bumps	
1.4 Customer	AVNET EUROPE	
1.5 Product Category	Active Components – Integrated Circuits	
1.6 Issue Date	19-Jul-2021	
1.7 PCN Revision History (optional)	1.8 Issue Date of Previous Revision (optional)	1.9 Delta to Previous Revision (optional)
NA		

2. PCN Team		
2.1 Contact Supplier		
2.1.1 Name	Heather Brogna	
2.1.2 Phone	603-626-2300	
2.1.3 Email	Hbrogna@allegromicro.com	
2.2 Team Supplier (optional)		
2.2.1 Name (optional)	2.2.2 Phone (optional)	2.2.3 Email (optional)

3. Changes			
No.	3.0 Identification	3.1 Category	3.2 Type of Change
#1	SEM-PA-06	PROCESS - ASSEMBLY	Bump Material / Metall System (internal)
#2	SEM-PA-14	PROCESS - ASSEMBLY	Change in process technology (e.g. sawing, die attach, bonding, moulding, and form, lead frame preparation, ...)
#3	SEM-PA-15	PROCESS - ASSEMBLY	Process integrity: tuning within specification
#4			
#5			
#6			
#7			

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#8			
#9			
#10			

4. Description of Change		
	Current	New
Change #1	Current parts utilize leaded (SnPb) solder bumps	New solder bumps will be made from silver
Change #2	Current parts do not include Epoxy Dotting	Epoxy dotting added to the assembly process
Change #3	Currently no Epoxy Dots	Adding Epoxy Dots to control bump height and improving the high voltage isolation performance
Change #4		
Change #5		
Change #6		
Change #7		
Change #8		
Change #9		
Change #10		
4.6 Anticipated Impact on Form, Fit, Function, Reliability or Processability?	No anticipated impact to fit, form or function but datasheet specification limits are increasing to meet device performance.	
4.7 Reference Parts with Customer Number (optional)		

5. Reason / Motivation for Change	
5.1 Motivation	The European Union (EU) has released Directive 2002/95/EC (RoHS) and 2011/65/EU (REACH) which requires parts with solder bumps to be lead (Pb) free (previously 7a exempt).
5.2 Additional Explanation (optional)	

6. Marking of Parts / Traceability of Change	
6.1 Description	Top brand moves from ACS713T to ACS713S to signify the SnAg version.

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7. Timing / Schedule			
7.1 Date of Qualification Results			
7.2 Last Order Date (optional)			
7.3 Last Delivery Date (optional)			
7.4 Intended Start of Delivery	2021.11.01		
7.5 Qualification Samples Available?	Yes		
	Date Available	Now	
7.6 Customer Feedback Required Until			
8. Qualification / Validation			
8.1 Description (e.g. qual. plan/report, AEC-Q...)	Qual Data, Q-100		
8.2 Qualification Report and Qualification Results		Issue Date	
9. Input to Customer for Risk Assessment Process			
Under Allegro's procedure for product/process change notification, Allegro strives, based on its technical judgment, to provide notification of significant changes that may affect form, fit, function, reliability/durability and processability/manufacturability. However, as Allegro cannot ensure evaluation of product changes for each and every application; the customer retains responsibility to validate the impact of a change on its application suitability.			
10. Attachments (e.g. new datasheet, additional documentation, pictures, process flow, sample plan, ...)			

