



PCN Number: Chgnot.doc rev 13 1/14

Product/Process Change Notification (PCN)

Customer: Newark	Date: May 2015		
Customer Part # and/or Lot# affected:			
ACS756SCA-050B-PFF-T			
ACS756KCA-050B-PFF-T			
ACS756SCA-100B-PFF-T			
ACS756KCA-100B-PFF-T			
Originator: Kyle Purinton	Phone: 603-626-2307		
Duration of Change:	Permanent X Temporary (explain)		
Summary description of change: Part Cha	ange: X Process Change: Other:		

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

Allegro currently manufactures the ACS756 on a 6" line at PSL wafer FAB in Bloomington, MN.

What is the part or process changing to (describe the anticipated impact of this change on form, fit and/or function)?

Allegro has transferred the semiconductor wafer fabrication process used to manufacture the ACS756 integrated circuit (IC) to an 8" wafer line at UMC in Taiwan, primarily as a capacity enhancement and security of supply initiative. The fabrication process at UMC uses the same BiCMOS technology used to manufacture the ACS756 at PSL today.

As part of the conversion there will be two changes internal to the CA package, related to the core and lead-frame. The external package footprint will remain unchanged.

Here is a summary of the internal package change:

,	CA Package (Old)	CB Package (New)
Core Material	Ferrite	Laminated Steel
Lead-Frame buss bar width (mm)	1.7	3.2

The table outlines that the lead-frame bus-bar is wider. This wider lead-frame lowers the power dissipation of the package and improves surge current performance and is therefore an improvement to the operation of the sensor. The core material change to laminated steel provides for slightly improved magnetic offset error due to core hysteresis as well as improved saturation





performance. The sensor will perform the same or better as a true drop-in replacement over the operating temperature and frequency range specified in the datasheet.

There is no anticipated impact to fit, form or function of the IC. The schematic diagram and the layout of the ACS756 are identical at both PSL and UMC. No design changes were made during the process transfer.

<u>Note:</u> Validation of equivalence within a specific application is at the discretion of the Customer.





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Is a PPAP update required?		Yes	No X
Is reliability testing required? (If Yes, refer to attached plan)		Yes X	No (explain)
Expected completion	date for internal	qualification: Qualific	cation is complete.
Expected PPAP availa	ubility date: N/A	A	
Target implementatio	n date: October	2015	
Estimated date of firs	t shipment: Octo	ober 2015	
Expected sample avai	lability date: Sar	mples are available	
Customer Approval Required:		equired: ation Only	
Please note: It is our intention to a Allegro's procedure for product/judgment, to provide notification However, as Allegro cannot ensurapplication; the customer retains suitability. If samples are needed information provided herein. Pleasung the suitability is a suitability of the customer retains the suitability. If samples are needed information provided herein. Pleasung the suitability is a suitability of the suitability of the suitability. It is a suitability of the suitability	process change no of significant char re evaluation of pr responsibility to va- for validation of a ase contact your A est your consideral	tification, Allegro strivents that may affect for coduct/process changes alidate the impact of a change, requests may be account Manager or location so we can meet our	es, based on its technical m, fit or function. s for each and every change on its application be made via the contact al Sales contact for any target date for
Customer comments/Conditions o	f Acceptance:		
Approved by: cc: Allegro Sales/Marketing/Quality	Date:		Γitle: