



DATE: 30<sup>th</sup> September, 2014

PCN #: 2143 – Rev01

PCN Title: Adding Qualified BOM Sets and Die Design Improvements

Dear Customer:

This is an announcement of change(s) to products that are currently being offered by Diodes Incorporated.

We request that you acknowledge receipt of this notification within 30 days of the date of this PCN. If you require samples for evaluation purposes, please make a request within 30 days as well. Otherwise, samples may not be built prior to this change. Please refer to the implementation date of this change as it is stated in the attached PCN form. Please contact your local Diodes sales representative to acknowledge receipt of this PCN and for any sample requests.

The changes announced in this PCN will not be implemented earlier than 90 days from the notification date stated in the attached PCN form.

Previously agreed upon customer specific change process requirements or device specific requirements will be addressed separately.

For questions or clarification regarding this PCN, please contact your local Diodes sales representative.

Sincerely,

Diodes Incorporated PCN Team



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**PRODUCT CHANGE NOTICE****PCN-2143 REV 01**

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Notification Date:	Implementation Date:	Product Family:	Change Type:	PCN #:
30 <sup>th</sup> September, 2014	29 <sup>th</sup> December, 2014	Analog	Adding Qualified BOM Sets and Die Design Improvements	<b>2143</b>
<b>TITLE</b>				
Adding Qualified BOM Sets and Die Design Improvements on select Analog Products				
<b>DESCRIPTION OF CHANGE</b>				
<p>This PCN is being issued to notify customers that Diodes has qualified additional bill of material (BOM) sets and die design improvements for the devices listed in Products Affected Section.</p> <p>Full electrical characterization and high reliability testing has been completed to ensure there are no changes in product Reliability.</p> <p>AL9910A has improved electrical performance; those changes are noted in the data sheet change Table 4.</p> <p>There is no change to the Form, Fit, or Function of other affected products in Table 1 and 2.</p> <p>Rev01 – Part numbers listed in <b>red text</b> have been corrected.</p>				
<b>IMPACT</b>				
Table 1 - Additional Qualified BOM Table 2 - Additional Qualified BOM Table 3 - Additional Qualified BOM and Die Design Improvements				
<b>PRODUCTS AFFECTED</b>				
Please see Tables 1 – 3.				
<b>WEB LINKS</b>				
<b>Manufacturer's Notice:</b>	<a href="http://www.diodes.com/quality/pcns">http://www.diodes.com/quality/pcns</a>			
<b>For More Information Contact:</b>	<a href="http://www.diodes.com/contacts">http://www.diodes.com/contacts</a>			
<b>Data Sheet:</b>	<a href="http://www.diodes.com/products">http://www.diodes.com/products</a>			
<b>DISCLAIMER</b>				
<b>Unless a Diodes Incorporated Sales representative is contacted in writing within 30 days of the posting of this notice, all changes described in this announcement are considered approved.</b>				

**Table 1 - Additional Qualified BOM**

**Addition of Cu wire, die attach and mold compound**

AH173-WG-7-A	AH173-WG-7-B	AH175-WG-7-A	AH175-WG-7-B	AL8808WT-7	TL431ASA-7
TL431BSA-7	TL432ASA-7	TL432BSA-7	TLV431AFTA	TLV431BFTA	TLV431TFTA
ZTL431AFTA	ZTL431BFTA	ZTL432AF-7	ZTL432AFTA	ZTL432BFTA	ZXRE250ASA-7
ZXRE250BSA-7	ZXRE252ASA-7	ZXRE252BSA-7			

**Table 2 - Additional Qualified BOM**

**Addition of Cu wire, die attach, mold compound and die shrink**

**74LVC1GXXW5-7 has no BOM Changes**

74LVC1G00W5-7	74LVC1G02W5-7	74LVC1G04W5-7	74LVC1G06W5-7	74LVC1G07W5-7	74LVC1G08W5-7
74LVC1G125W5-7	74LVC1G126W5-7	74LVC1G32W5-7	74LVC1G86W5-7	AP7361-10FGE-7	AP7361-12FGE-7
AP7361-15FGE-7	AP7361-18FGE-7	AP7361-25FGE-7	AP7361-28FGE-7	AP7361-33FGE-7	AP7361-FGE-7

**Table 3 - Additional Qualified BOM and Die Design Improvements**

**Addition of Cu wire, die attach and die design**

**See Data Sheet Change Table 4. Below**

AL9910AS-13	AL9910ASP-13	AL9910ASP-13-01			
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**Data Sheet Change Table 4.**

**Old Data Sheet Limits for AL9910A**

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VDD	Internally Regulated Voltage	VIN = VIN(MIN) ~500V, (Note 8) IDD(ext) = 0, Gate pin open	9.5	10	11	V
UVLO	VDD Under Voltage Lockout Threshold	VDD rising	8.4	9	9.8	V
Vcs(h)	Current Sense Threshold Voltage	Full ambient temperature range	225	255	275	mV

**New Data Sheet Limits for AL9910A**

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VDD	Internally Regulated Voltage	VIN = VIN(MIN) ~500V, (Note 8) IDD(ext) = 0, Gate pin open	9	10	11	V
UVLO	VDD Under Voltage Lockout Threshold	VDD rising	8	9	10	V
Vcs(h)	Current Sense Threshold Voltage	Full ambient temperature range	230	255	280	mV