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DATE: 13<sup>th</sup> January, 2012

PCN #: 2072

PCN Title: Conversion to Copper Bond Wire on Selected Analog Products

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



**PRODUCT CHANGE NOTICE**

**PCN-2072 REV 00**

<b>Notification Date:</b>	<b>Implementation Date:</b>	<b>Product Family:</b>	<b>Change Type:</b>	<b>PCN #:</b>
13 <sup>th</sup> January, 2012	12 <sup>th</sup> April, 2012	Analog Semiconductors	Bond Wire Material	<b>2072</b>
<b>TITLE</b>				
Conversion to Copper Bond Wire on Selected Analog Products				
<b>DESCRIPTION OF CHANGE</b>				
<p>This PCN is being issued to notify customers that Diodes is in the process of qualifying Copper bond wire for the part numbers listed in this PCN. In order to accommodate the Copper bond wire, the top metal thickness in the die on selected devices has been increased. Part numbers with increased top metal thickness are identified in Table 1 with the following criteria:</p> <ul style="list-style-type: none"><li>* Top metal thickness is increased from 0.8µm to 1.8µm.</li><li>** Top metal thickness is increased from 1.5µm to 3.0µm.</li><li>*** Top metal thickness is increased from 0.8µm to 2.0µm.</li></ul> <p>Full electrical characterization and high reliability testing will be completed using representative devices built with Copper bond wire and the increased top metal thickness (if applicable) to ensure there is no change to device functionality or data sheet electrical specifications.</p> <p>There will be no change to the Form, Fit, or Function of affected products.</p>				
<b>IMPACT</b>				
<p>There is no change in datasheet parameters and product performance.</p> <p>Compared to Gold, Copper wire has quality and reliability advantages:</p> <ul style="list-style-type: none"><li>- Copper is more resistant to wire sweep during molding.</li><li>- Copper has lower electrical resistivity and higher thermal conductivity.</li><li>- Copper has higher current carrying capacity.</li><li>- Copper has slower intermetallic growth which improves temperature dependent reliability.</li></ul>				
<b>PRODUCTS AFFECTED</b>				
See Table 1 below.				
<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 - Affected Part Numbers**

AH180-FJG-7 *	AP1539SDPG-13 **	AP2161DSG-13	AP2181MPG-13	AP431ARL-7 **
AH180-SNG-7 *	AP2141DFMG-7	AP2161DWG-7	AP2181SG-13	AP431ASAG-7 **
AH180-WG-7 *	AP2141DM8G-13	AP2161FMG-7	AP2181WG-7	AP431ASAG-7 **
AH180-WG-7-P *	AP2141DMPG-13	AP2161M8G-13	AP2182AFGEG-7	AP431ASAL-7 **
AP1084D15G-13 **	AP2141DSG-13	AP2161MPG-13	AP2182AMPG-13	AP431ASAL-7 **
AP1084D18G-13 **	AP2141DWG-7	AP2161SG-13	AP2182ASG-13	AP431ASRG-7 **
AP1084D25G-13 **	AP2141FMG-7	AP2161WG-7	AP2182MPG-13	AP431ASRG-7 **
AP1084D33G-13 **	AP2141M8G-13	AP2162AFGEG-7	AP2182SG-13	AP431AWG-7 **
AP1084D50G-13 **	AP2141MPG-13	AP2162AMPG-13	AP2186MPG-13	AP431AWG-7 **
AP1084DG-13 **	AP2141SG-13	AP2162ASG-13	AP2186SG-13	AP431AWL-7 **
AP1084K15G-13 **	AP2141WG-7	AP2162MPG-13	AP2191DFMG-7	AP431AWL-7 **
AP1084K18G-13 **	AP2142AFGEG-7	AP2162SG-13	AP2191DM8G-13	AP431AYG-13 **
AP1084K25G-13 **	AP2142AMPG-13	AP2166MPG-13	AP2191DMPG-13	AP431AYG-13 **
AP1084K33G-13 **	AP2142ASG-13	AP2166SG-13	AP2191DSG-13	AP431G-13 **
AP1084K50G-13 **	AP2142MPG-13	AP2171DFMG-7	AP2191DWG-7	AP431G-13 **
AP1084KG-13 **	AP2142SG-13	AP2171DM8G-13	AP2191FMG-7	AP431QG-7 **
AP1084T15G-U **	AP2146MPG-13	AP2171DMPG-13	AP2191M8G-13	AP431QG-7 **
AP1084T18G-U **	AP2146SG-13	AP2171DSG-13	AP2191MPG-13	AP431QL-7 **
AP1084T25G-U **	AP2151DFMG-7	AP2171DWG-7	AP2191SG-13	AP431QL-7 **
AP1084T33G-U **	AP2151DM8G-13	AP2171FMG-7	AP2191WG-7	AP431RG-7 **
AP1084T50G-U **	AP2151DMPG-13	AP2171M8G-13	AP2192AFGEG-7	AP431RG-7 **
AP1084TG-U **	AP2151DSG-13	AP2171MPG-13	AP2192AMPG-13	AP431RL-7 **
AP1501-12T5G-U **	AP2151DWG-7	AP2171SG-13	AP2192ASG-13	AP431RL-7 **
AP1501-12T5RG-U **	AP2151FMG-7	AP2171WG-7	AP2192MPG-13	AP431SAG-7 **
AP1501-33T5G-U **	AP2151M8G-13	AP2172AFGEG-7	AP2192SG-13	AP431SAG-7 **
AP1501-33T5RG-U **	AP2151MPG-13	AP2172AMPG-13	AP2196MPG-13	AP431SAL-7 **
AP1501-50T5G-U **	AP2151SG-13	AP2172ASG-13	AP2196SG-13	AP431SAL-7 **
AP1501-50T5RG-U **	AP2151WG-7	AP2172MPG-13	AP358NG-U	AP431SRG-7 **
AP1501-T5G-U **	AP2152AFGEG-7	AP2172SG-13	AP358SG-13	AP431SRG-7 **
AP1501-T5RG-U **	AP2152AMPG-13	AP2176MPG-13	AP431AG-13 **	AP431WG-7 **
AP1510SG-13 **	AP2152ASG-13	AP2176SG-13	AP431AG-13 **	AP431WG-7 **
AP1513SG-13 **	AP2152MPG-13	AP2181DFMG-7	AP431AQG-7 **	AP431WL-7 **
AP1520SG-13 **	AP2152SG-13	AP2181DM8G-13	AP431AQG-7 **	AP431WL-7 **
AP1530SG-13 **	AP2156MPG-13	AP2181DMPG-13	AP431AQL-7 **	AP431YG-13 **
AP1533SG-13 **	AP2156SG-13	AP2181DSG-13	AP431AQL-7 **	AP431YG-13 **
AP1534SG-13 **	AP2161DFMG-7	AP2181DWG-7	AP431ARG-7 **	AP7173FNG-7
AP1538SDPG-13 **	AP2161DM8G-13	AP2181FMG-7	AP431ARG-7 **	AP7173SPG-13
AP1538SG-13 **	AP2161DMPG-13	AP2181M8G-13	AP431ARL-7 **	AP7217-33SG-13 ***

\* Top metal thickness is increased from 0.8µm to 1.8µm.

\*\* Top metal thickness is increased from 1.5µm to 3.0µm.

\*\*\* Top metal thickness is increased from 0.8µm to 2.0µm.