Dear Sir or Madam,

in order to reduce the variants of HW modules, we have decided to merge some different components populations for OEM in one single IP Audio Module version of IPAM300.

The new HW revision (1.6) is functionally compatible with the one currently purchased by your Organisation i.e. IPAM300 package p/n 2012.9130, as long as the OEM Firmware running on the final product does not use the I2C bus or alternatively makes usage of the latest SW drivers. That product number is discontinued in favour of IPAM300 OEM package p/n 2012.9122

Barix has updated, and will provide free of charge, the Firmware modules and packages for the new HW revision. Higher level applications (in ABCL) and API, UI etc of the devices do not change. The new Firmware will be backwards compatible, supporting both the legacy as well as the new HW revision.

The IPAM300 device has been validated both hardware and software-wise in order to ensure the maximum transparency for customers and functional backwards compatibility. It is advised that Customers confirm full functionality on receiving device shipments.

Please find the Product Change Notification (PCN ID 20140731DG2) attached, which indicates all the changes as mentioned above.

If you have any questions, please do not hesitate to contact our team as listed on the PCN.

Thanks for your understanding and cooperation.

Kindest regards,

Domenico Gambino
VP Sales
# Product Change Notification

**Notification Date:** 31/07/2014  
**PCN:** 20140731DG2

## Type of Change
New Hardware Revision

## Affected Products
- IPAM300 Board p/n 2006.0045
- IPAM300 OEM Package p/n 2012.9122
- IPAM300 Package p/n 2012.9130 - discontinued

## Reason of Change
In order to reduce the variants of HW modules, we have decided to merge some different components populations for OEM in one single IP Audio Module version of IPAM300.

## Description of Change
The IP Audio Module IPAM300 Rev 1.6 includes the specific assembly option for OEM related to the I2C usage (see Addendum on net page) plus the changes operated on the standard audio module IPAM300 as used on Barix standard products (e.g. ESD circuits).

New HW revision number is visible on board data-plate and/or box stickers.

## Effect of Change
After Q2 2014 the IPAM300 will be produced as Revision 1.6 (or higher). Board part number is not changed. Package part number 2012.9130 is discontinued and only 2012.9122 is maintained as OEM package.

## Impact of Change
There is no functional difference as compared to HW revision 1.4 actually available as long as the specific OEM product does not use the I2C. In such a case the OEM Firmware has to be rebuilt using the latest SW driver (BCL_IO) or package provided by Barix.

For all standard products based on IPAM300 Barix will make available upgraded Firmware packages.

## Contact Information
For any question regarding this PCN please contact Technical Sales and Support at: support@barix.com Phone: +41 43 433 22 11
Description of Change – ADDENDUM

Engineering Change Notification history details for IPAM300 Board p/n 2006.0045

ECN 2012_0022, Version 1.4 to 1.5

- Bare PCB (p/n 2008.1050) layout version has changed to 1.40
- Introduce single gate buffer (Ref. U8, 74LVC1G125DCK) to allow sharing of general purpose I/O with second UART
- I²C bus is decoupled from internal I²C bus by using dedicated I/O lines, external bus features on-board pull-up resistors (Ref. R10, R24, 2.4k)

ECN 2014_0017, Version 1.5 to 1.6

- Bare PCB (p/n 2008.1050) layout version has changed to 1.50
- Introduce low capacity transient protection (Ref. D1, USBLC6-2P6) to ensure improved ESD and transient tolerance on the Ethernet PHY
- Provide additional bypass capacitor (Ref. C38, 100nF/25V)