TLV320AIC12/13/14/15 Errata

DESCRIPTION

Texas Instruments (TI) has discovered the following issue with the TLV320AIC12/13/14/15 devices.

The device loses synchronization when the programming mode of the device is changed to any mode other than the I2C mode. The default programming mode of the device is I2C. The programming mode of the device is changed from the I2C mode when bits D1-D0 of control register 2 (i.e. the Host Port Control Bits), are set to '01', '10', or '11'. It has been found that setting these bits to anything other than the default value of '00' may cause the data bus to lose synchronization, resulting in incorrect data communication with the part.

WORK AROUNDS

There is no work around for this issue at the present time. The only solution is to NOT use the other three modes of the device (i.e. to always set the last two bits of control register 2 to 00).

CAUSE

This bug is due to logic in the S2C port on the device that may not be properly initialized upon reset. The uninitialized logic is invoked whenever bits D1–D0 are set to anything other than '00'.

FIX

We are working in earnest to fix this issue. We hope to have samples of fixed silicon in 1Q04 and in production by 2Q04. We apologize for the inconvenience placed upon customers due to this issue.

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