



March 30, 2012

CN Number: 1204

CN Change Level: Minor

Subject: Axcelerator Datasheet Update

Dear Customer,

This notice is to inform you that the Axcelerator[®] datasheet has been updated. The updated datasheet can be downloaded from the Microsemi SoC Products Group website: http://www.microsemi.com/soc/documents/AX_DS.pdf.

The following key corrections have been made to this datasheet:

Change #1: Table 2-1, Absolute Maximum Ratings, was updated to correct the maximum DC core supply voltage (VCCA) from 1.6 V to 1.7 V. The maximum input voltage (VI) was corrected from 3.75 V to 4.1 V.

Stresses beyond the absolute maximum ratings may cause permanent damage to the device. Exposure to absolute maximum rated conditions for extended periods may affect device reliability. Devices should not be operated outside the recommendations.

Change #2: EQ 3 for 5 V tolerance was corrected to change Vdiode from 0.8 V to 0.7 V. 3.3 V PCI and 3.3 V PCI-X are the only I/O standards that directly allow 5 V tolerance. To implement this, an internal clamp diode between the input pad and the VCCI pad is enabled so that the voltage at the input pin is clamped as shown in EQ 3: $V_{input} = V_{CCI} + V_{diode} = 3.3 \text{ V} + 0.7 \text{ V} = 4.0 \text{ V}$.

In the previous version of the datasheet, $V_{diode} = 0.8 \text{ V}$ was used in EQ 3.

Change #3: The minimum VIL for 1.5 V LVCMOS and 3.3 V PCI was corrected from -0.5 to -0.3 in Table 2-29 • DC Input and Output Levels and Table 2-33 • DC Input and Output Levels

Logic input level low, VIL for 1.5 V LVCMOS and 3.3 V PCI had an incorrect value of -0.5 V. It has been corrected to -0.3 V. VOL (logic output level low) of the device that is driving the Axcelerator input pin should not go below -0.3 V.



Several other minor updates have also been made to the Axcelerator datasheet. Please refer to the List of Changes on page 4-1 for those updates.

If you have any questions, please contact Microsemi SoC Products Group Technical Support at soc_tech@microsemi.com.

Regards,

Microsemi Corporation