

Overview

The purpose of this notification is to communicate some revisions to the Xilinx Automotive (XA) Spartan®-3A and Spartan-3A DSP data sheets describing parasitic leakage current that may occur when an input is below -0.2V. There is no change to the form, fit, or function.

Description

The XA Spartan-3A and XA Spartan-3A DSP data sheets and [UG331](#) user guide have been revised to describe parasitic leakage current that can occur when an input is below -0.2V but within the device Recommended Operating Conditions. The details of the key revisions are listed below to insure identification of information that has been added or changed. All the revisions are also listed within the Revision History sections of the listed data sheets and [UG331](#) user guide. There is no change to the form, fit, or function of these devices.

Key revisions in the XA Spartan-3A data sheets (listed in Table 1):

- Updated General Recommended Operating Conditions table for VIN input voltage. Specification is unchanged, but the description is split between single-ended pins and pins that support differential signaling. A footnote is added for the pins that support differential signaling, referring to a new Parasitic Leakage section in [UG331](#).

For single-ended pins that are placed on a differential-capable I/O, VIN of -0.2V to -0.5V is supported but can cause increased leakage between the two pins. See Parasitic Leakage in [UG331](#), Spartan-3 Generation FPGA User Guide.

Key revision in [UG331](#), Spartan-3 Generation FPGA User Guide, v1.7:

- Added section labeled “Parasitic Leakage” on pages 365-372.

Products Affected

This change affects all XA Spartan-3A and XA Spartan-3A DSP devices (I-Grade and Q-Grade) including all versions under specification control documentation (SCD) reference. Affected part numbers are included in the following table(s):

Table 1: Xilinx Automotive Spartan-3A FPGA Affected Devices

Density	Xilinx Part Number	Density	Xilinx Part Number
XA3S200A	XA3S200A-4FTG256I	XA3S700A	XA3S700A-4FGG400I
	XA3S200A-4FTG256Q		XA3S700A-4FGG400Q
XA3S400A	XA3S400A-4FTG256I		XA3S700A-4FGG484I
	XA3S400A-4FTG256Q	XA3S700A-4FGG484Q	
	XA3S400A-4FGG400I	XA3S1400A	XA3S1400A-4FGG484I
	XA3S400A-4FGG400Q		XA3S1400A-4FGG484Q

Table 2: Xilinx Automotive Spartan-3A DSP FPGA Affected Devices

Density	Xilinx Part Number	Density	Xilinx Part Number
XA3SD1800A	XA3SD1800A-4CSG484I	XA3SD3400A	XA3SD3400A-4CSG484I
	XA3SD1800A-4CSG484Q		XA3SD3400A-4FGG676I
	XA3SD1800A-4FGG676I		
	XA3SD1800A-4FGG676Q		

Key Dates and Ordering Information

1. Within 30 days after release of this change notification, the customer must acknowledge to Xilinx receipt of the document.
2. Additional requirements, if any, need to be identified to Xilinx within 60 days of this notification. Requirements requested after this date may not be supported.
3. Within one year after the release of this change notification, a customer approval is required.
4. Existing PPAP documentation will be revised by Xilinx and submitted to customers within 90 days of this notification.
5. PSW (Parts Submission Warrant) must be signed and returned to Xilinx upon approval of this change notice: devices will be standard orderable parts.

Traceability

There is no change to the form, fit, or function.

Recommendations

Please refer to the key dates and ordering section listed with this notification.

Response

A customer response is required: Please refer to the key dates and ordering section listed with this notification.

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Revision History

The following table shows the revision history for this document:

Date	Version	Description of Revisions
04/18/11	1.0	Initial release.

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