Spartan-3A/-3AN/-3A DSP Chip-Select Controlled SelectMAP and ICAP Data Loading

Overview

The purpose of this Quality Alert is to communicate that the Non-continuous Slave Parallel (SelectMAP) or ICAP_SPARTAN3A data loading via de-asserting CSI_B does not function as expected, and is not a supported feature of these devices.

Description

When using Slave Parallel (SelectMAP) mode configuration (M[2:0] = <1:1:0>), an external host, such as a microprocessor or microcontroller, writes byte-wide configuration data into the FPGA using a typical peripheral interface. The ICAP_SPARTAN3A primitive works similar to the Slave Parallel (SelectMAP) configuration interface, except that it is available to the FPGA application using internal routing connections.

Non-continuous data loading is used in applications where the processor or controller cannot provide an uninterrupted stream of configuration data. This may occur, for example, if the controller pauses configuration while it fetches additional data, switches to another task, or services an interrupt.

There are two methods to throttle or pause the configuration data throughput. The first method of controlling data via the CSI_B (SelectMAP) or CE (ICAP) pin is not supported in the Spartan™-3A family of devices. To obtain equal functionality, the Pausing CCLK method of controlling data will need to be used. This is further described in the *Spartan-3 Generation Configuration User Guide* (UG332).

Products Affected

Table 1: **Devices Affected**

Device Family	Devices
Spartan-3A	All date codes for all part/packages and speed/temperature grades.
Spartan-3AN	All date codes for all part/packages and speed/temperature grades.
Spartan-3A DSP	All date codes for all part/packages and speed/temperature grades.

Note: No other Xilinx device families are affected, including all Spartan-3 and Spartan-3E devices.

Documentation

Revision 1.3 and later documents that this feature is unsupported. The *Spartan-3 Generation Configuration User Guide* (document UG332) revision 1.2 and earlier versions show support for this feature.

Recommendations

To obtain equal functionality the Pausing CCLK method of controlling data must be used. This is further described in the Non-Continuous SelectMAP Data Loading section in the Slave Parallel (SelectMAP) Mode chapter of the *Spartan-3 Generation Configuration User Guide* (UG332).

Revision History

The following table shows the revision history for this document.

Date	Version	Revision
11/26/07	1.0	Initial Xilinx release.