

Intel® Xeon® Processor E5-1600/E5-2400/E5-2600/E5-4600 Product Families Boundary Scan Initialization Readme v2.0, May 2012

Issue: Full function Boundary-scan operation requires a continuous running BCLK[1:0]

Solution: Enable Partial Boundary-scan functionality

If continuous BCLK[1:0] cannot be supplied, BSCAN functionality can still be enabled with the exception of the DDR pins. To enable this mode, an initialization sequence must be applied prior to any BSCAN operation. 1000 BCLK cycles must be applied from assertion of PWRGOOD.

Intel® Xeon Processor E5-1600/E5-2600/E5-4600 Product Families:

- XeonE5-1600-2600-4600_BSCAN_INIT_RO_rev2.0.txt is the initialization sequence needed to enable partial BSCAN operation.
- XeonE5-1600-2600-4600_Partial_rev2.0.bsd is the respective BSD files with shortened boundary-scan chain due to the excluded DDR pins.

Intel® Xeon Processor E5-2400 Product Families:

- XeonE5-2400_BSCAN_INIT_RO_rev2.0.txt is the initialization sequence needed to enable partial BSCAN operation.
- XeonE5-2400_Partial_rev2.0.bsd1 is the respective BSD1 files with shortened boundary-scan chain due to the excluded DDR pins.

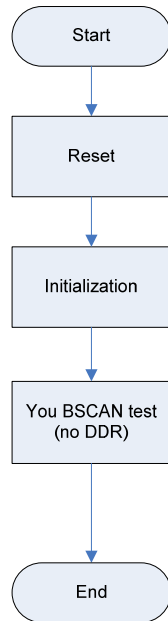
Initialization details:

- Load 9 bit IR with 0x054.
- Load 146 bit DR with 0x000800000000000000000000000000000000

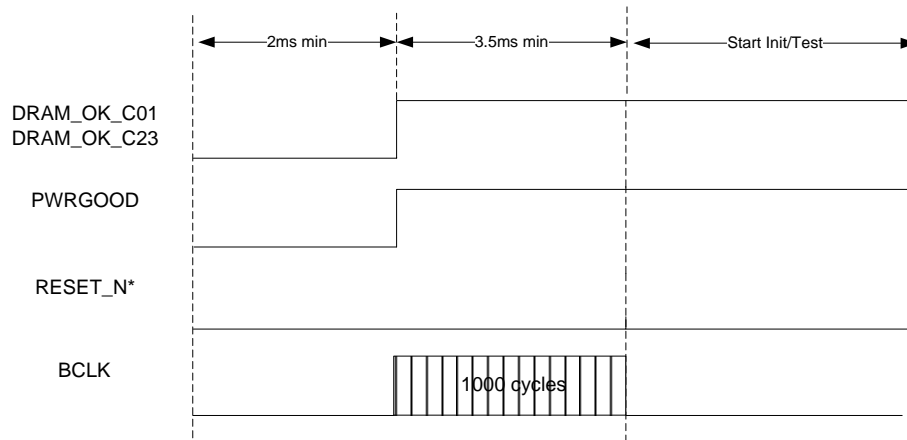
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See below for example test flow:

Example Test Flow with Partial BSCAN Initialization



Reset Sequence



***Note:** RESET_N should be held low for the duration of testing.