PathWave FPGA 2020 Update 0.1

PathWave FPGA 2020 Update 0.1 Release Notes



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Fixed Issues

- This update addresses a defect in the Power of 2 Decimator IP block. In some situations, the AXI-streaming handshake logic could deadlock and prevent any data transfers from occurring. This update fixes this defect.
- In addition, this update adds new functionality to the Power of 2 Decimator IP block. These new features are enabled by parameter settings.
- The IP block now allows processing either real only or complex data.
- The IP block also allows selection of an alternate filter shape. The existing filter, which is still the default filter, has a passband that is 60% of the Nyquist rate. The new IP block also allows selection of a new filter that is a half-band filter with a flatter, wider passband that is 80% of the Nyquist rate.

Installation Steps

To install this update, four files need to be copied into the PathWave FPGA 2020 install directory. Two of these files will replace existing files, and two of the files are new.

This will require admin privilege.

- 1. Copy Power2Decimator.1.0.xml into the C:\Program Files\Keysight\PathWave FPGA 2020\config\BASE IP\Dsp\DecimPow2\ directory, replacing the existing file.
- 2. Copy pow2decimTop.v, halfBandP2.v, and pow2decim.v into the C:\Program Files\Keysight\PathWave FPGA 2020\config\BASE IP\Dsp\DecimPow2\src\ directory. The pow2decimTop.v will replace the existing file, while the other two files are new files.