



Gowin Advanced FIR Filter IP

Release Note

RN543-2.0E, 11/17/2022

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Revision History

Date	Version	Description
3/12/2019	1.0E	Initial version published.
08/30/2019	1.1E	FIR structure updated and FIR three modes integrated.
11/17/2022	2.0E	FIR Filter structures added.

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1 About This Guide

This release includes Gowin Advanced FIR Filter IP User Guide and reference design.

Gowin Advanced FIR Filter IP User Guide and reference design are available at Gowin Website. Specific parameters have been configured in the reference design, which can be used for simulation and test after the synthesis, placement and routing.

2 Overview

Gowin Advanced FIR Filter IP can implement Finite Impulse Response (FIR) filter function. According to different types of FIR filters, it supports configurations in four modes, and supports multi-channel processing and time-division multiplexing processing.

Table 1 Gowin Advanced FIR Filter IP Overview

Gowin Advanced FIR Filter IP	
Delivered Doc.	
Design Files	Verilog (encrypted)
Reference Design	Verilog
TestBench	Verilog
Test and Design Flow	
Synthesis Software	GowinSynthesis
Application Software	Gowin Software (V1.9.8.09 and above)

Note!

For the devices supported, you can click [here](#) to get the information.

3 Documentation

The software release file contains Gowin Advanced FIR Filter IP documents, which are listed below:

Table 2 Gowin Advanced FIR Filter IP Documents

Documents	Description
IPUG543, Gowin Advanced FIR Filter IP User Guide	PDF
RN543, Gowin Advanced FIR Filter IP Release Note. pdf	PDF

4 IP Support

Since the requirements of user design and the maximum frequency are different, the reference design does not include FPGA specific location (.cst) and timing constraints (.sdc) documents, and you can determine the location and timing constraints on your own.

For the customized IP design and support, please contact Gowin sales and support line.

Email: support@gowinsemi.com

Website: www.gowinsemi.com

