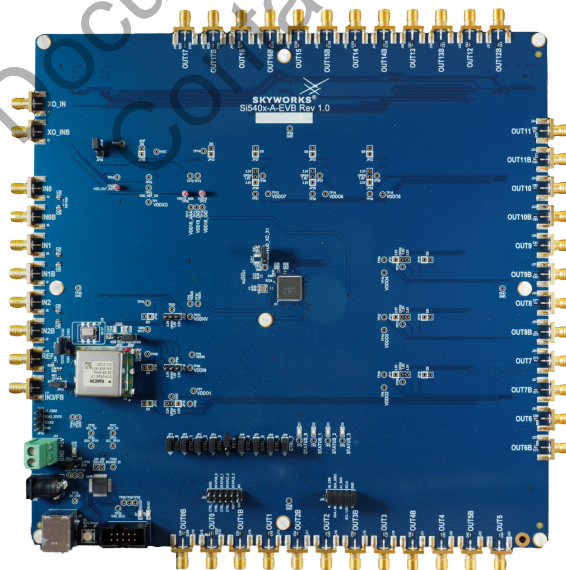


UG501: Si540x NetSync™ Evaluation Board User's Guide

The Si540x evaluation kit is used to evaluate the Si5401, Si5402, and Si5403 NetSync network synchronizer devices, which are designed for use in Synchronous Ethernet (SyncE) and IEEE 1588-2008 applications, such as 5G fronthaul and backhaul networks, core, metro, and access switches and routers and data center equipment. The Si540x family combines the low-bandwidth operation and digitally-controlled oscillator functionality needed for ITU-T G.8262/G.8262.1 SyncE and IEEE 1588 support with ultra-low jitter outputs to allow clocking of 56 Gbps+ SERDES without a separate jitter attenuator part. The Si5401 and Si5402 are variants of the Si5403, which has the highest number of outputs. Refer to the device data sheet for details. The Si540x-EB should be used in conjunction with Skyworks' ClockBuilder Pro™ software.

This document is intended for all Si540x-A-EVB product variants including the Si5403, Si5402, and Si5401. The exact device and revision is distinguished by a white 1 x 0.187 inch label underneath the board's silkscreen name. The Si5403 device is installed on the evaluation board and is used to evaluate any of the product variants. ClockBuilder Pro software is used to select the specific product variant to be evaluated. The "Si5403-A-EB" label indicates that the evaluation board has been assembled with an Si5403 device, Revision A, installed. Strictly for ordering purposes, the terms "EB" and "EVB" refer to the board and kit, respectively. In this document, the terms are synonymous.



KEY FEATURES

- Si540x-A-EVB used with ClockBuilder Pro software to evaluate Si5403, Si5402, and Si5401
- Powered from USB port and an external power supply, via either a terminal block or a compatible wall-mounted ac adapter
- Onboard 48 MHz crystal and a 48 MHz low phase noise XO
- Onboard 38.88 MHz OCXO and 19.44 MHz TCXO for REF
- ClockBuilder Pro GUI-programmable VDD supply supports device core voltages of 3.3 V and 1.8 V
- ClockBuilder Pro GUI-programmable VDDO supplies allow each of the outputs to have its own power supply voltage selectable from 3.3 V, 2.5 V, or 1.8 V
- ClockBuilder Pro GUI-controlled voltage, current, and power measurements of VDD and all VDDO supplies
- Status LEDs for power supplies and control/ status signals of the Si540x device
- SMA connectors for input clocks, output clocks, optional external reference
- Low-Power Mode EVB adjustments



ClockBuilder Pro

One-click access to Timing tools, documentation, software, source code libraries & more. Available for Windows and iOS (CBGo only).

skyworksinc.com/CBPro



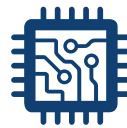
Portfolio

skyworksinc.com



SW/HW

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Quality

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Support & Resources

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