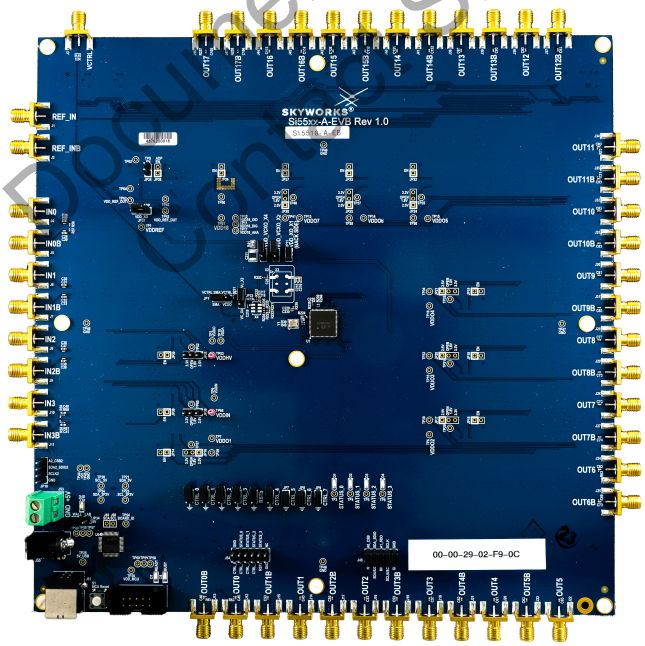
UG444: Si55xx Evaluation Board User's Guide

The Si55xx-EB is used for evaluating Si5518, Si5512, Si5510 and Si5508 Low Phase Noise Jitter Attenuating Clocks, which can be used for 5G/eCPRI/SyncE/IEEE 1588 applications. The Si5518 combines a high-performance JESD204B/C compatible RF clock jitter attenuator and two fifth-generation DSPLLs supporting SyncE/IEEE 1588 network synchronization. All the Si55xx devices support up to six inputs. The Si5518/10/08 all have 18 differential outputs while the Si5512 has 12 differential outputs. The Si55xx-A-EB should be used in conjunction with Skyworks' ClockBuilder™ Pro software.

This document is intended for all Si55xx-A-EVB product variants which includes Si5518, Si5512, Si5510 and Si5508. The exact device and revision is distinguished by a white 1 x 0.187 inch label underneath the board's silkscreen name. The Si5518 device is installed on the evaluation board and will be used for evaluation purposes of any of the product variants. ClockBuilder Pro software is used to select the specific product variant to be evaluated (Si5518/10/08). The "Si5518-A-EB" label indicates that the evaluation board has been assembled with an Si5518 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

- Si55xx-A-EVB used with ClockBuilder Pro software to evaluate Si5518, Si5512, Si5510, Si5508
- Powered from USB port and an external power supply, via either a screw terminal connector or a compatible wall-mounted ac adapter
- Onboard 54 MHz low phase noise XO and a 54 MHz crystal
- Layout provisions for select VCXO and XTAL components
- 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 Si55xx device
- SMA connectors for input clocks, output clocks, optional external reference, and optional VCNTRL
- EVB board modifications for Low-Power Mode

Document Available Under NDA Contact Skyworks for Access

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ClockBuilder Pro

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

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