

UG300: Si5332-8EX-EVB User's Guide

The Si5332-8EX-EVB is used for evaluating the Si5332 Low Jitter Any-Frequency Clock Generator. The Si5332 uses the patented Multisynth™ technology to generate up to twelve independent clock frequencies each with 0 ppm synthesis error. The Si5332-8EX-EVB has three independent input clocks. The Si5332-8EX-EVB can be controlled and configured using the Clock Builder Pro™ (CB Pro™) software tool.

EVB FEATURES

- Powered from USB port or external power supply.
- Onboard 25 MHz XTAL allows free-run mode of operation on the Si5332 or up to 2 input clocks for synchronous clocking.
- CBPro™ GUI programmable VDD supply allows device to operate from 3.3, 2.5, or 1.8 V.
- CBPro GUI programmable VDDO supplies allow each of the 10 outputs to have its own power supply voltage selectable from 3.3, 2.5, or 1.8 V.
- CBPro GUI-controlled voltage, current, and power measurements of VDD and all VDDO supplies.
- SMA connectors for input and output clocks.



Table of Contents

- 1. Functional Block Diagram 3
- 2. Si5332 CBPro™ 4
- 3. Si5332-8EX-EVB Schematics 5
- 4. Si5332 CBPro™ EVB GUI 6
- 5. Installing ClockBuilderPro (CBPro) Desktop Software 7

1. Functional Block Diagram

Below is a functional block diagram of the Si5332-8EX-EVB. This EVB can be connected to a PC via the main USB connector for programming, control and monitoring. See section "2. Quick start" or section "7. Installing CBPro Desktop Software" for more information.

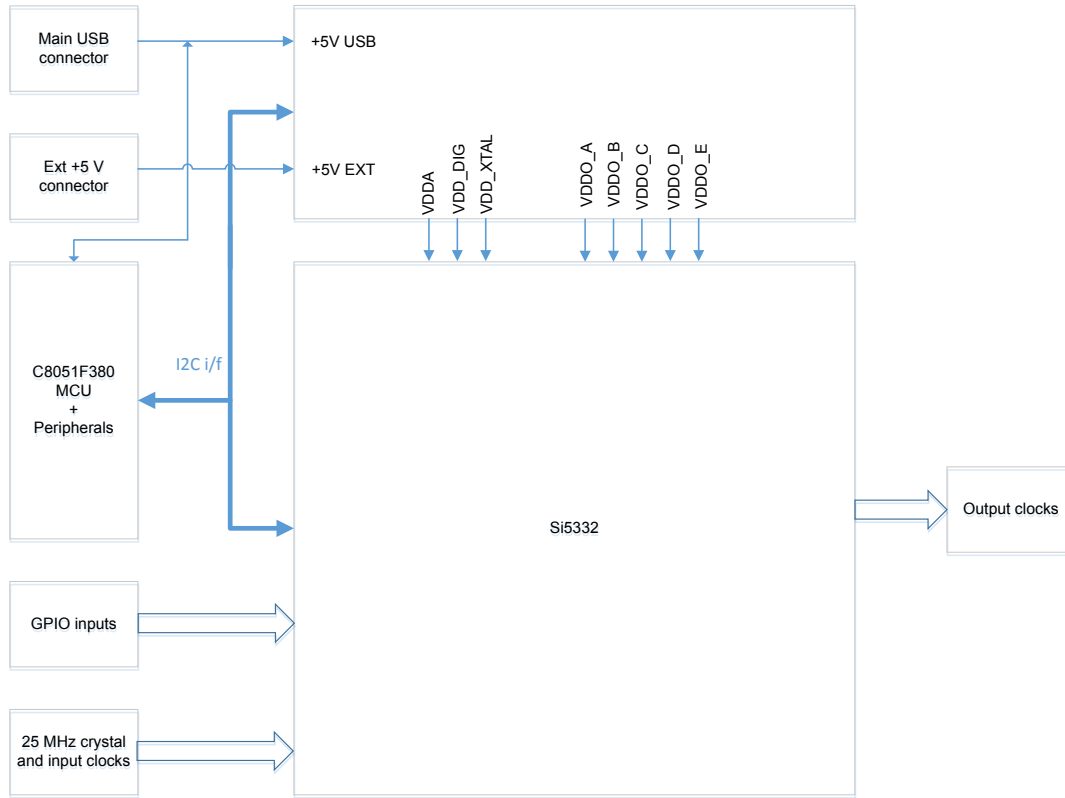


Figure 1.1. Si5332-8EX-EVB Functional Block Diagram

2. Si5332 CBPro™

The Si5332 is intended to be part of the CBPro software and this initial software release “showcases” that trait. This software contains:

1. An EVB GUI that communicates and controls the EVB by allowing the user to set VDD supplies
2. The ability to modify frequency plan (from the starting point CBPro file provided with this limited release) from an existing CBPro file.



Figure 2.1. CBPro Start Screen

3. Si5332-8EX-EVB Schematics

The schematic and layout files are provided in the here: [schematics and layouts](#).

Please review the files, especially the DUT page in order to get familiar with using the EVB through CBPro™.

4. Si5332 CBPro™ EVB GUI

The EVB GUI can be used to communicate the part for register access:

The first page shows the board's identity.

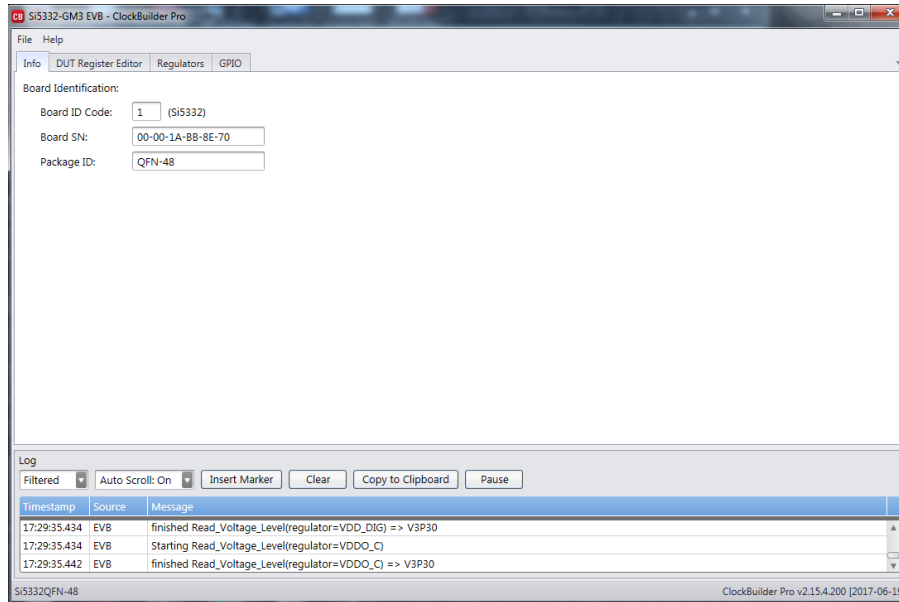


Figure 4.1. Board ID Page

The other pages for for register access, VDD control, and GPIO control.

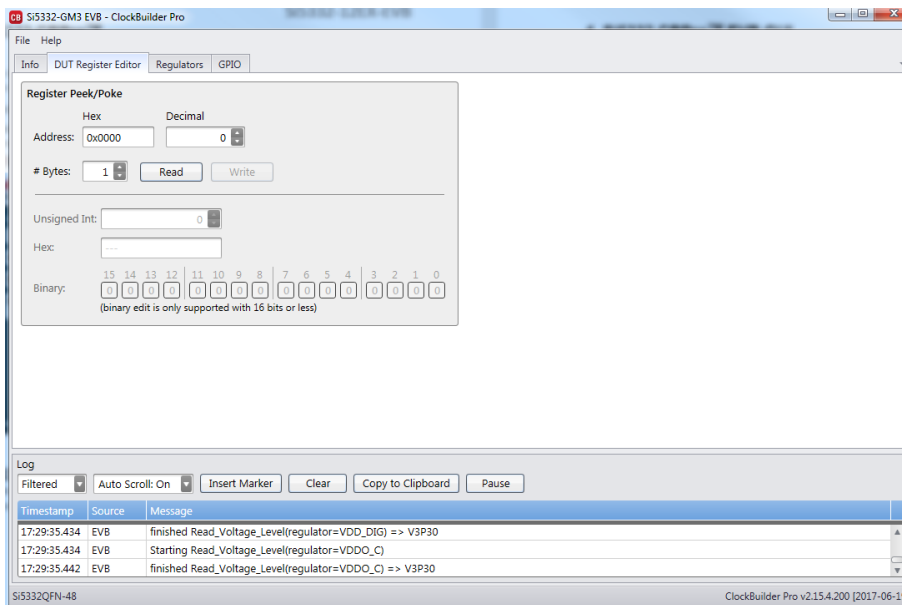


Figure 4.2. Register Access

5. Installing ClockBuilderPro (CBPro) Desktop Software

To install the CBPro software on any **Windows 7** (or above) PC:

Go to <https://www.silabs.com/products/development-tools/software/clockbuilder-pro-software> and download ClockBuilderPro software. Both installation instructions and User's Guide for ClockBuilderPro can be found at this link. Please follow the instructions as indicated.



SKYWORKS®

ClockBuilder Pro

Customize Skyworks clock generators, jitter attenuators and network synchronizers with a single tool. With CBPro you can control evaluation boards, access documentation, request a custom part number, export for in-system programming and more!

www.skyworksinc.com/CBPro



Portfolio

www.skyworksinc.com/ia/timing



SW/HW

www.skyworksinc.com/CBPro



Quality

www.skyworksinc.com/quality



Support & Resources

www.skyworksinc.com/support

Copyright © 2021 Skyworks Solutions, Inc. All Rights Reserved.

Information in this document is provided in connection with Skyworks Solutions, Inc. ("Skyworks") products or services. These materials, including the information contained herein, are provided by Skyworks as a service to its customers and may be used for informational purposes only by the customer. Skyworks assumes no responsibility for errors or omissions in these materials or the information contained herein. Skyworks may change its documentation, products, services, specifications or product descriptions at any time, without notice. Skyworks makes no commitment to update the materials or information and shall have no responsibility whatsoever for conflicts, incompatibilities, or other difficulties arising from any future changes.

No license, whether express, implied, by estoppel or otherwise, is granted to any intellectual property rights by this document. Skyworks assumes no liability for any materials, products or information provided hereunder, including the sale, distribution, reproduction or use of Skyworks products, information or materials, except as may be provided in Skyworks' Terms and Conditions of Sale.

THE MATERIALS, PRODUCTS AND INFORMATION ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, PERFORMANCE, QUALITY OR NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT; ALL SUCH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED. SKYWORKS DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. SKYWORKS SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING BUT NOT LIMITED TO ANY SPECIAL, INDIRECT, INCIDENTAL, STATUTORY, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS THAT MAY RESULT FROM THE USE OF THE MATERIALS OR INFORMATION, WHETHER OR NOT THE RECIPIENT OF MATERIALS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Skyworks products are not intended for use in medical, lifesaving or life-sustaining applications, or other equipment in which the failure of the Skyworks products could lead to personal injury, death, physical or environmental damage. Skyworks customers using or selling Skyworks products for use in such applications do so at their own risk and agree to fully indemnify Skyworks for any damages resulting from such improper use or sale.

Customers are responsible for their products and applications using Skyworks products, which may deviate from published specifications as a result of design defects, errors, or operation of products outside of published parameters or design specifications. Customers should include design and operating safeguards to minimize these and other risks. Skyworks assumes no liability for applications assistance, customer product design, or damage to any equipment resulting from the use of Skyworks products outside of Skyworks' published specifications or parameters.

Skyworks, the Skyworks symbol, Sky5®, SkyOne®, SkyBlue™, Skyworks Green™, Clockbuilder®, DSPLL®, ISOModem®, ProSLIC®, and SiPHY® are trademarks or registered trademarks of Skyworks Solutions, Inc. or its subsidiaries in the United States and other countries. Third-party brands and names are for identification purposes only and are the property of their respective owners. Additional information, including relevant terms and conditions, posted at www.skyworksinc.com, are incorporated by reference.

Skyworks Solutions, Inc. | Nasdaq: SWKS | sales@skyworksinc.com | www.skyworksinc.com

USA: 781-376-3000 | Asia: 886-2-2735 0399 | Europe: 33 (0)1 43548540 | [in](#) [f](#) [t](#) [v](#)

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Clock & Timer Development Tools](#) category:

Click to view products by [Silicon Labs](#) manufacturer:

Other Similar products are found below :

[AD9517-0A/PCBZ](#) [AD9517-2A/PCBZ](#) [AD9522-4/PCBZ](#) [AD9520-5PCBZ](#) [AD9553/PCBZ](#) [ADCLK914PCBZ](#) [LMH2180SDEVAL](#) [DSC400-0333Q0032KE1-EVB](#) [TDGL013](#) [MAX2880EVKIT#](#) [MAX2750EVKIT](#) [MAX2752EVKIT](#) [ADCLK946PCBZ](#) [ADCLK946/PCBZ](#) [MAX2622EVKIT](#) [EKIT01-HMC1032LP6G](#) [Si5332-8IX-EVB](#) [RV-2251-C3-EVALUATION-BOARD](#) [Si5332-12IX-EVB](#) [RV-3029-C2-EVALUATION-BOARD-OPTION-B](#) [Si5332-6IX-EVB](#) [SKY72310-11-EVB](#) [EV1HMC8364LP6G](#) [RV-8263-C7-EVALUATION-BOARD](#) [EVK9FGV1002](#) [EVK9FGV1008](#) [EV1HMC6832ALP5L](#) [EVAL01-HMC830LP6GE](#) [EVAL01-HMC911LC4B](#) [EVAL01-HMC988LP3E](#) [TS3002DB](#) [125605-HMC702LP6CE](#) [LMX2487E-EVM](#) [MIKROE-2481](#) [2045](#) [EKIT01-HMC835LP6G](#) [EKIT01-HMC834LP6GE](#) [TS3006DB](#) [DSC-TIMEFLASH2-KIT1](#) [110227-HMC510LP5](#) [110227-HMC513LP5](#) [AD9515/PCBZ](#) [ADCLK948/PCBZ](#) [ADCLK954/PCBZ](#) [112261-HMC739LP4](#) [ADCLK925/PCBZ](#) [AD9522-0/PCBZ](#) [AD9520-4/PCBZ](#) [AC164147](#) [DFR0469](#)