

USB-to-Parallel Adapter Board for ADF4xxx PLL Synthesizers

FEATURES

USB-to-parallel adapter board for PCs/laptops without parallel port

Direct hook-up to PC USB port

Powered from USB port

GENERAL DESCRIPTION

The EVAL-ADF4XXXZ-USB board allows evaluation boards that were designed for programming by a PC parallel port to be programmed via the PC USB port. The adapter board connects to the PC USB port and the 25-way parallel port connector of the evaluation board. For information regarding the evaluation board and operation of software, consult the relevant evaluation board documentation.

EVAL-ADF4XXXZ-USB ADAPTER BOARD



Figure 1.

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REVISION HISTORY

4/12—Revision 0: Initial Version

QUICK START INSTRUCTIONS

Figure 2 shows how the USB adapter board interfaces from the PC to the ADF4xxx evaluation board. The adapter board is supplied with a USB cable to connect to the PC USB port. The ADF4xxx evaluation board comes with the necessary parallel to D-type cable.

The latest evaluation software should be downloaded from the Analog Devices, Inc., website at www.analog.com. The software must be installed before connecting the USB adapter board to the PC to ensure that the adapter board is correctly recognized by the PC.

1. After installing the latest version of software, connect the USB adapter board to the PC using the USB cable provided.
2. The board is detected, and the drivers install automatically.
3. Connect the ADF4xxx evaluation board to the USB adapter board with the 9-pin to 25-pin parallel port cable.
4. Run the evaluation software associated with the part you are evaluating. On the front panel of the software, choose **USB adapter board** (green) and click **Connect**.
5. Follow the directions in the history log of the evaluation software.

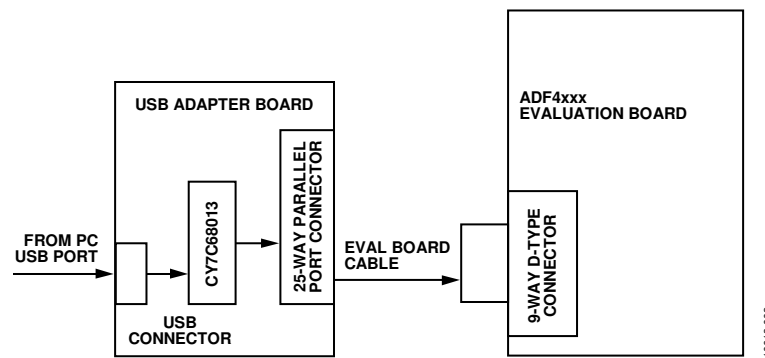


Figure 2. USB Adapter Board Setup

EVALUATION BOARD SCHEMATIC

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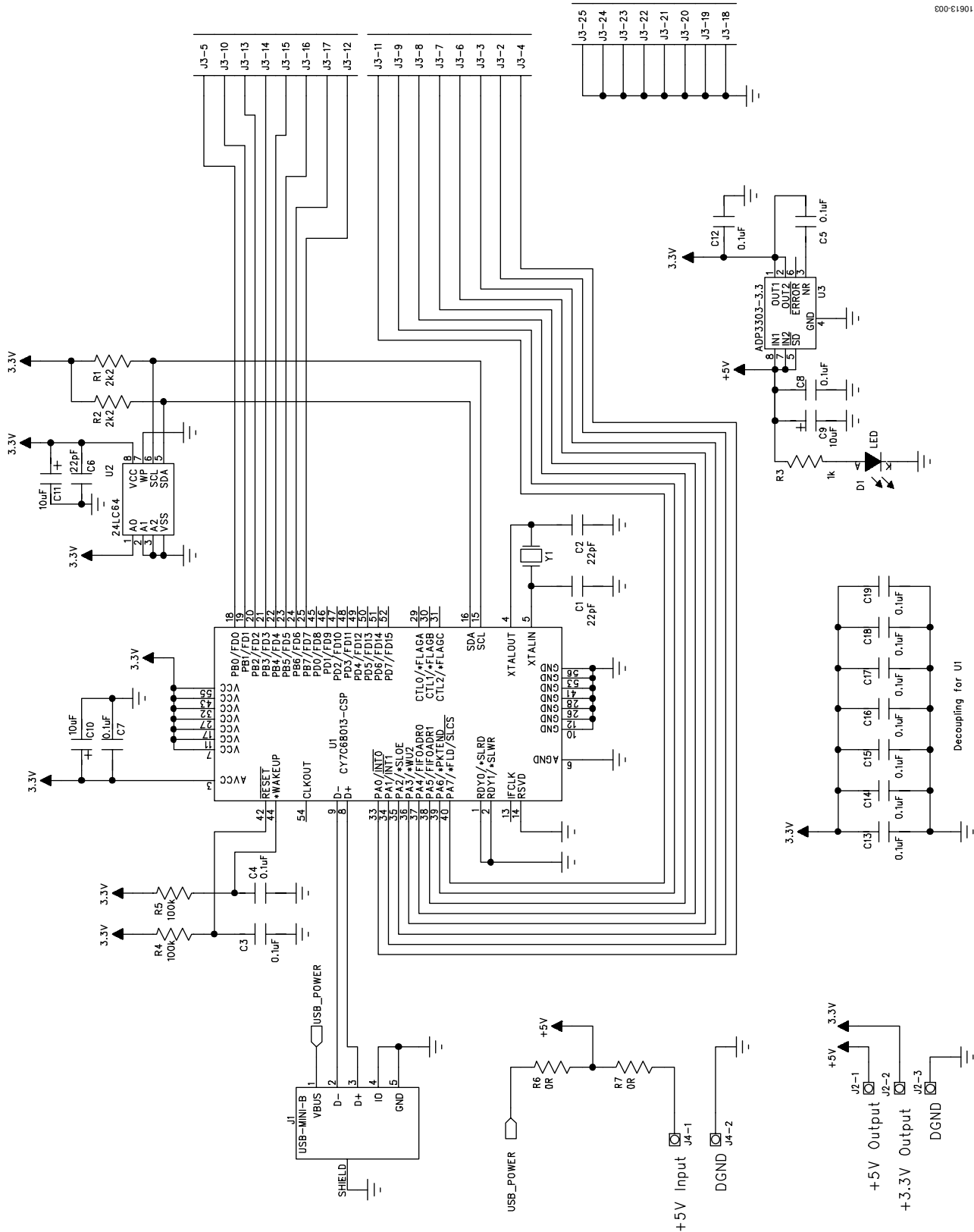


Figure 3. Evaluation Board Schematic

ORDERING INFORMATION**BILL OF MATERIALS**

Table 1.

Qty	Reference Designator	Description	Supplier/Number
3	C1, C2, C6	Capacitor, 0603 22 pF 50 V	FEC 9406107
13	C3 to C5, C7, C8, C12 to C19	Capacitor, 0603 0.1 μ F 16 V	FEC 9406140
3	C9 to C11	Capacitor, Case A 10 μ F 10 V	FEC 9751041
1	D1	LED, green SMD	FEC 1021304
1	J1	Socket, USB MINI-B SMT	FEC 1021304
1	J4	Socket, D PCB R/A T&D 25-way	FEC 1075270
2	R1, R2	Resistor, 0603 2.2 k Ω	FEC 9330810
1	R3	Resistor, 0603 1 k Ω	FEC 9330380
2	R4, R5	Resistor, 0603 100 k Ω	FEC 9330402
1	U1	CY7C68013-CSP	Digi-Key 428-1680-ND
1	U2	24LC64	FEC 9758070
1	U3	ADP3303-3.3	ADP3303ARZ-3.3
1	Y1	XTAL-CM309S	FEC 9509658

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**ESD Caution**

ESD (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

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