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The [Previously approved version](#) (08 Jan 2021 11:12) is available.

ADS8-V3EBZ HIGH SPEED CARRIER CARD

Preface

The [ADS8-V3](#) Carrier Card was developed to support the evaluation of Analog Devices High Speed Data Converters with serial line rates up to 16Gbps. This Wiki site provides a high level overview of the platform. The ADS8-V3 is intended to be used only with specified Analog Devices Evaluation Boards. The ADS8-V3 is not intended to be used as a general purpose development platform, and no support is available for standalone operation. The ADS8-V3 may contain hardware features not fully productized or supported by our default customer evaluation configurations. Please refer to Xilinx and its approved distributors for general purpose FPGA Development Kits.

ADS8-V3EBZ Features

1. Xilinx Kintex Ultrascale XCKU040-3FFVA1156E FPGA.
2. One (1) FMC+ connector.
3. Twenty (20) 16Gbps transceivers supported by one (1) FMC+ connector.
4. DDR4 SDRAM.
5. Simple [USB 3.0](#) port interface.

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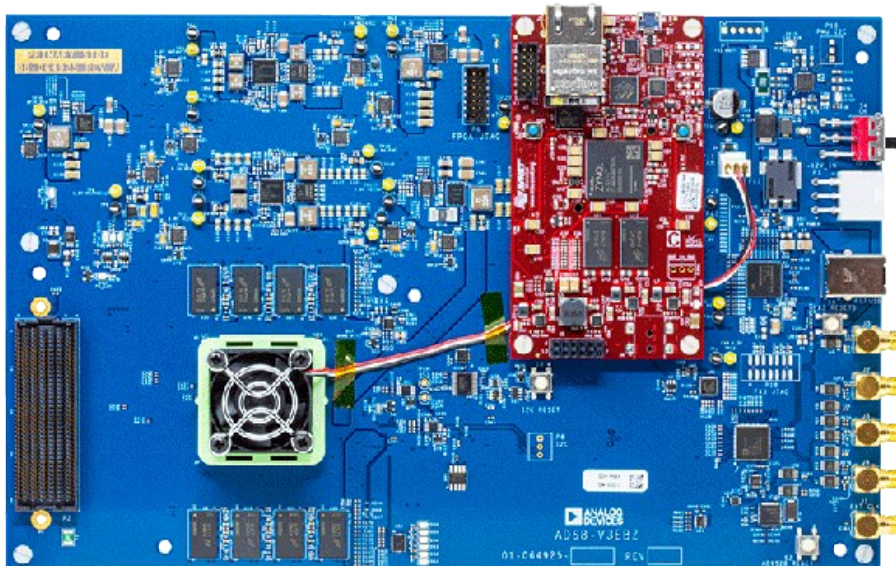


Figure 1. ADS8-V3EBZ High Speed Carrier Card (Top)

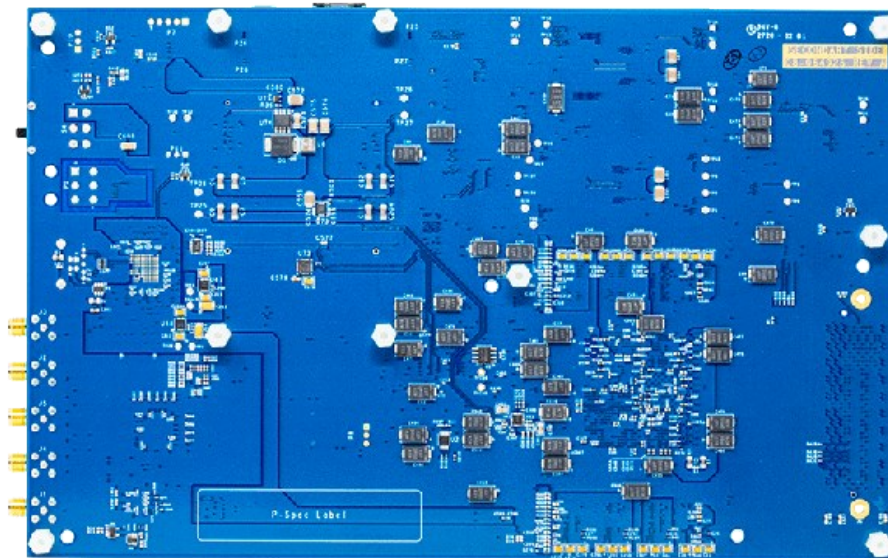


Figure 2. ADS8-V3EBZ High Speed Carrier Card (Bottom)

Using the ADS8-V3EBZ to evaluate High Speed Converters

Overview

When connected to a specified Analog Devices high speed converter evaluation board, the ADS8-V3EBZ works as a data generation and acquisition board. Designed to support the highest speed JESD204B converters, the FPGA on the ADS8-V3EBZ acts as the data and control interface. A typical test setup is shown below.

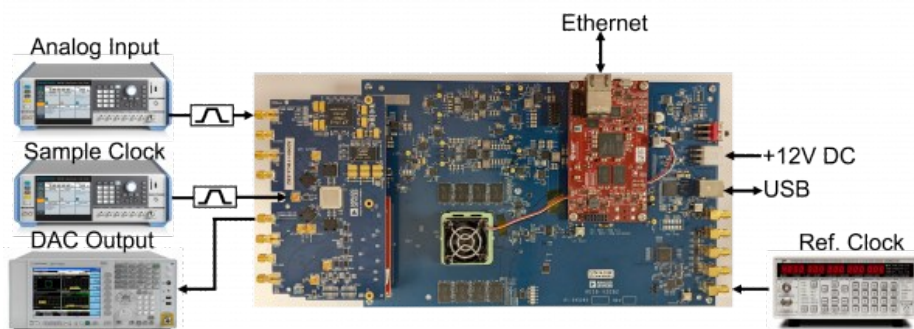


Figure 3. ADS8-V3EBZ connected to High Speed Converter Evaluation Board

Helpful Documents

- ▶ [AN-878 Application Note, High Speed ADC SPI Control Software](#)
- ▶ [AN-877 Application Note, Interfacing to High Speed ADCs via SPI](#)
- ▶ [AN-835 Application Note, Understanding ADC Testing and Evaluation](#)

Software Download Links

- High Speed Converter SPI Control Software, ▶ [en/design-center/advanced-selection-and-design-tools/interactive-design-tools/spicontroller.html](#)
- Analysis | Control | Evaluation (ACE) Software, ▶ [en/design-center/evaluation-hardware-and-software/ace-software.html](#)

Design and Integration Files

- Artwork Archive: [09-064925-01a.zip](#)
- Assembly Archive: [01-064925-01a.zip](#)

- BRD Archive:  [08_064925a.zip](#)
- Schematic Archive:  [02-064925-01-a.zip](#)

Data sheets and user guides provide additional product specific information and should be consulted when using high speed converter evaluation boards. All documents and software tools are available at  [High Speed Converter Eval Boards](#). For additional information or questions, visit our High-Speed ADC and DAC Ezone Support Portal at  [Data Converters EngineerZone](#) or call 1-800-ANALOGD.

ADS8-V3EBZ Supported Evaluation Boards

Refer to the Analog Devices High Speed Converter evaluation board product page at  [High Speed Converter Eval Boards](#) for a table of ADS8-V3EBZ compatible evaluation boards.

resources/eval/ads8-v3ebz.txt · Last modified: 09 Jan 2021 00:32 by  [Robin Getz](#)