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# Analog Devices Wiki

This version (16 Dec 2021 11:39) was [approved](#) by Liviu Adace [<https://ez.analog.com/members/Ceshu>].  
 The [Previously approved version](https://resources.eval/user-guides/ad-fmcdaq2-ebz?rev=1639136330) ([/resources/eval/user-guides/ad-fmcdaq2-ebz?rev=1639136330](https://resources.eval/user-guides/ad-fmcdaq2-ebz?rev=1639136330)) (10 Dec 2021 12:38) is available.

## AD-FMCDAQ2-EBZ User Guide

The AD-FMCDAQ2-EBZ [<https://www.analog.com/AD-FMCDAQ2-EBZ>] is an FMC board for the high speed AD9144 [<https://www.analog.com/AD9144>] DAC and AD9680 [<https://www.analog.com/AD9680>] ADC. While the complete chip level design package can be found on the ADI (Analog Devices, Inc.) product pages of these converters, information on the card, and how to use it, the design package that surrounds it, and the software which can make it work, can be found here.

The purpose of the AD-FMCDAQ2-EBZ [<https://www.analog.com/AD-FMCDAQ2-EBZ>] is a data acquisition platform that connects the analog world using FMC to the FPGA.

([/\\_detail/resources/eval/user-guides/dac2\\_top.jpg?](#)  
[id=resources%3Aeval%3Auser-guides%3Aad-fmcdaq2-ebz](#))

1. Introduction ([/resources/eval/user-guides/ad-fmcdaq2-ebz/introduction](#))
2. Quick Start Guides ([/resources/eval/user-guides/ad-fmcdaq2-ebz/quickstart](#))
  - a. Linux on ZC706 ([/resources/eval/user-guides/ad-fmcdaq2-ebz/quickstart/zynq](#))
  - b. Linux on ZCU102 ([/resources/eval/user-guides/ad-fmcdaq2-ebz/quickstart/zcu102](#))
  - c. Linux on KCU105, KC705, VC707 ([/resources/eval/user-guides/ad-fmcdaq2-ebz/quickstart/microblaze](#))
  - d. Linux on Arria10 SoC Development Kit ([/resources/eval/user-guides/ad-fmcdaq2-ebz/quickstart/a10soc](#))
  - e. Linux on Arria10 GX FPGA Development Kit ([/resources/eval/user-guides/ad-fmcdaq2-ebz/quickstart/a10gx](#))
3. Hardware ([/resources/eval/user-guides/ad-fmcdaq2-ebz/hardware](#)) (including schematics ([/resources/eval/user-guides/ad-fmcdaq2-ebz/hardware#downloads](#)))
  - a. Functional Overview & Specifications ([/resources/eval/user-guides/ad-fmcdaq2-ebz/hardware/functional\\_overview](#))
  - b. Characteristics & Performance ([/resources/eval/user-guides/ad-fmcdaq2-ebz/hardware/card\\_specification](#))
4. Reference HDL Design ([/resources/eval/user-guides/ad-fmcdaq2-ebz/reference\\_hdl](#))
5. Software ([/resources/eval/user-guides/ad-fmcdaq2-ebz/software](#))
  - a. High Speed Converter Toolbox for MATLAB and Simulink ([/resources/tools-software/hsx-toolbox](#))
  - b. No-OS drivers ([/resources/eval/user-guides/ad-fmcdaq2-ebz/software/baremetal](#))
  - c. Linux ([/resources/eval/user-guides/ad-fmcdaq2-ebz/software/linux"\)
 
    - I. ZC706, ... \(\[/resources/eval/user-guides/ad-fmcdaq2-ebz/software/linux/zynq\]\(#\)\)
    - II. KCU105, KC705, VC707 \(Microblaze\) \(\[/resources/eval/user-guides/ad-fmcdaq2-ebz/software/linux/microblaze\]\(#\)\)
    - III. A10GX \(Nios2\) \(\[/resources/tools-software/linux-drivers/platforms/nios2\]\(#\)\)
    - IV. Applications \(\[/resources/eval/user-guides/ad-fmcdaq2-ebz/software/linux/applications\]\(#\)\)
      - A. IIO Scope \(\[/resources/tools-software/linux-software/iio\\\_oscilloscope\]\(#\)\)
      - B. FMCDAQ2 Control IIO Scope Plugin \(\[/resources/tools-software/linux-software/fmcdaq2\\\_plugin\]\(#\)\)](#)
  6. Clocking Tree ([/resources/eval/user-guides/ad-fmcdaq2-ebz/clocking](#)) (including samplerate reconfiguration)
  7. Production Testing Process ([/resources/eval/user-guides/ad-fmcdaq2-ebz/testing](#))
  8. Help and Support ([/resources/eval/user-guides/ad-fmcdaq2-ebz/help\\_and\\_support](#))



## Videos



(/ \_detail/resources/fpga/xilinx/fmc/ad-fmcjesdadc1-ebz/esd\_warning.png?id=resources%3Aeval%3Auser-guides%3Aad-fmcdaq2-ebz) All the products described on this page include ESD (electrostatic discharge) (electrostatic discharge) sensitive devices. Electrostatic charges as high as  $4000V$  readily accumulate on the human body or test equipment and can discharge without detection.

Although the boards feature ESD (electrostatic discharge) protection circuitry, permanent damage may occur on devices subjected to high-energy electrostatic discharges. Therefore, proper ESD (electrostatic discharge) precautions are recommended to avoid performance degradation or loss of functionality. This includes removing static charge on external equipment, cables, or antennas before connecting to the device.

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