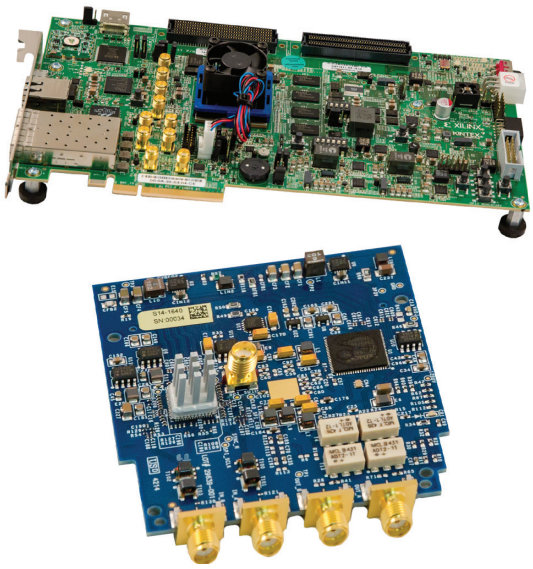
Xilinx Kintex® UltraScale™ FPGA DSP Development Kit with JESD204B High-Speed Analog

AVNET
Reach Further™

The Xilinx Kintex® UltraScale™ FPGA DSP Development Kit with JESD204B High-Speed Analog provides a comprehensive platform for rapid prototyping of high performance digital signal processing applications with wideband analog data acquisition. High-level design methodologies, IP, and verified reference designs are also included to accelerate development. The system combines the Xilinx KCU105 evaluation board featuring the Kintex UltraScale XCKU040 FPGA, with the Analog Devices AD-FMCDAQ2 high-speed analog FMC card, enabling wideband data acquisition over JESD204B high-speed serial connectivity through the GTH gigabit transceivers of the Kintex UltraScale FPGA. Data acquisition is managed under Ubuntu Linux running on a MicroBlaze soft processor within the FPGA, supporting fast data exchange over Ethernet to Analog Devices IIO Oscilloscope and MATLAB and Simulink. With a complete JESD204B wideband data acquisition system ready to use out of the box, you can focus your development efforts on adding differentiating features to your system.



FEATURES

- Xilinx Kintex UltraScale FPGA KCU105 Evaluation Board
- Analog Devices AD-FMCDAQ2-EBZ High-speed Analog FMC Module with JESD204B
- Xilinx LogiCORE™ IP JESD204B included

SOFTWARE TOOLS

- Xilinx Vivado® Design Suite: System Edition (device-locked to Kintex UltraScale XCKU040)
  - Includes Xilinx System Generator for DSP
- Xilinx LogiCORE™ IP JESD204B
- Analog Devices IIO System Object for data streaming to MATLAB & Simulink over Ethernet

To purchase this kit, visit avnet.com/us/kusdspkit

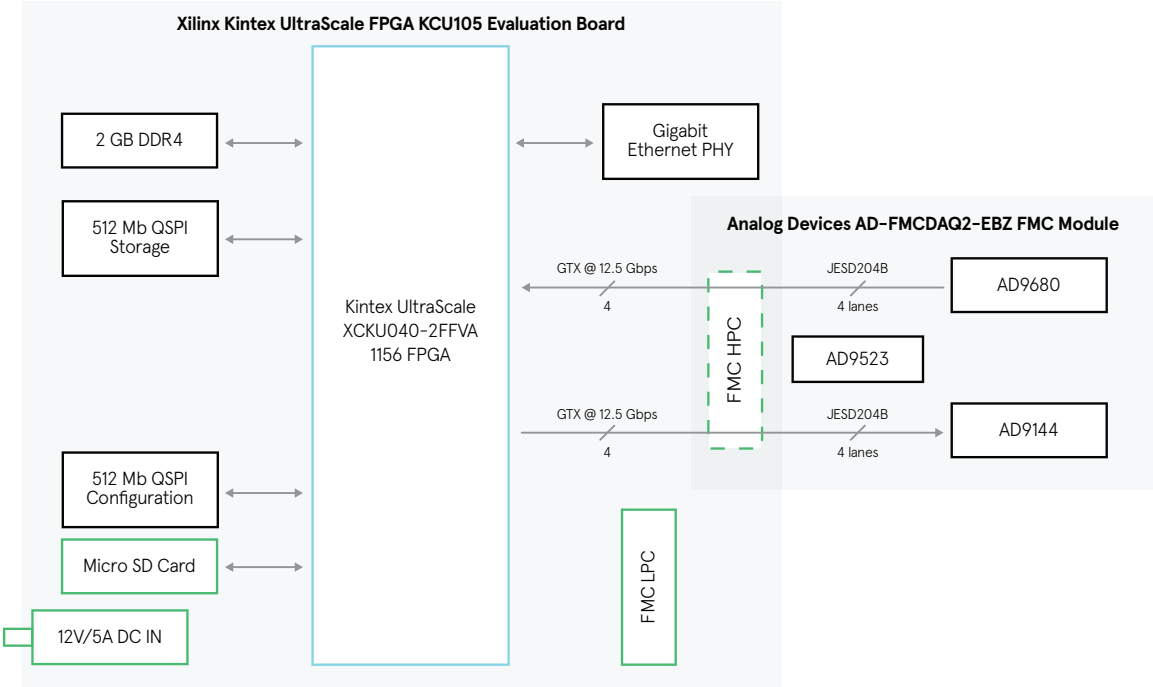
HARDWARE

- Xilinx Kintex UltraScale FPGA KCU105 Evaluation Board
  - Kintex XCKU040-2FFVA1156E Device
- Analog Devices AD-FMCDAQ2-EBZ FMC Module
  - AD9680 Dual 14-Bit, 1.0 GSPS, JESD204B A/D Converter
  - AD9144 Quad 16-Bit, 2.8 GSPS JESD204B Transmit D/A Converter
- 2 SMA RF coax cables
- USB A-to-micro-B Cables (2)
- Ethernet Cable
- 12 V power supply

TARGET APPLICATIONS

- Wideband data acquisition over JESD204B
- Test and measurement equipment
- Radar and advanced imaging
- CMTS and Cable Access
- Military / aerospace

BLOCK DIAGRAM



FEATURED MANUFACTURERS

XILINX ALL PROGRAMMABLE™ MathWorks®

PARTS

Part Number	Description	Resale
AES-KCU-JESD-G	Xilinx Kintex® UltraScale™ FPGA DSP Development Kit with JESD204B High-Speed Analog	$5,599 USD

RELATED PARTS

Part Number	Description	Resale
AD-FMCDAQ2-EBZ	AD9144 2.8 GSPS DAC and AD9680 1 GSPS ADC JESD204B FMC module	Call for quote

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