Zynq UltraScale+ RFSoC ZCU208 Evaluation Kit

Part Number: EK-U1-ZCU208-V1-G

Product Description

The Zynq® UltraScale+™ RFSoC ZCU208 Evaluation Kit is the ideal RF test platform for both out-of-box evaluation and cutting-edge application development. This kit features a Zynq UltraScale+ RFSoC ZU48DR, which integrates eight 14-bit 5GSPS ADCs, eight 14-bit 10GSPS DACs, and eight soft-decision forward error correction

(SD-FEC) cores designed to jumpstart RF class applications. The combination of Arm® Cortex®-A53 and Cortex-R5 subsystems, UltraScale+ programmable logic, and the highest signal processing bandwidth in a Zynq UltraScale+ device, makes the ZCU208 evaluation kit the most comprehensive RF Analog-to-Digital signal chain prototyping platform.

Target Applications:

- Remote PHY for Cable Access
- Early Warning Phased Array Radar / Digital Array Radar
- Satellite Communications
- 5G Wireless
- Test & Measurement
- All High Performance RF Applications

Key Features

Industry's only single-chip adaptable radio platform

- Zynq UltraScale+ RFSoC XCZU48DR-2FSVG1517E silicon featured on the ZCU208 Evaluation board
- Integrated 8x 5GSPS ADC, 8x 10GSPS DAC, 8x SD-FEC design example
- Lidless package for improved thermal dissipation

Comes equipped with all board-level features needed for design development

- DDR4 Component – 4GB, 64-bit, 2666MT/s, attached to programmable logic (PL)
- DDR4 SODIMM – 4GB 64-bit, 2400MT/s, attached to the processing subsystem (PS)
- FPGA Mezzanine Card (FMC+) interface for I/O expansion, including 12x 33Gb/s GTY transceivers and 34 user-defined differential I/O signals
- Quad zSFP/zSFP+ cage assembly

- 8 user-I/O, single-color LEDs

Includes reference design mezzanine cards to reduce development time

- CLK104 RF clock add-on card, showcasing internal reference clocking and external sampling clocking
- XM650 N79 band loopback add-on card allows simple out-of-box loopback and example reference layout for baluns
- XM655 breakout add-on card allows in-depth lab-based measurements including multi-tile synchronization (MTS)