The Zynq® UltraScale+™ RFSoC ZCU111 Evaluation Kit enables designers to jumpstart RF-class analog designs and applications that benefit from the RF-Analog integration and reduced power & footprint of Zynq UltraScale+ RFSoCs.

The platform includes an evaluation board, cables, filters, documentation, verified reference design, and includes the XM500 RFMC balun transformer add-on card to support loopback evaluation and signal analysis.

Part Number: EK-U1-ZCU111-G

Target Applications

- Remote Radio for M-MIMO
- 5G Baseband
- Cable Access DOCSIS 3.1 Remote-PHY
- Wireless Backhaul
- Phased Array EW/Radar
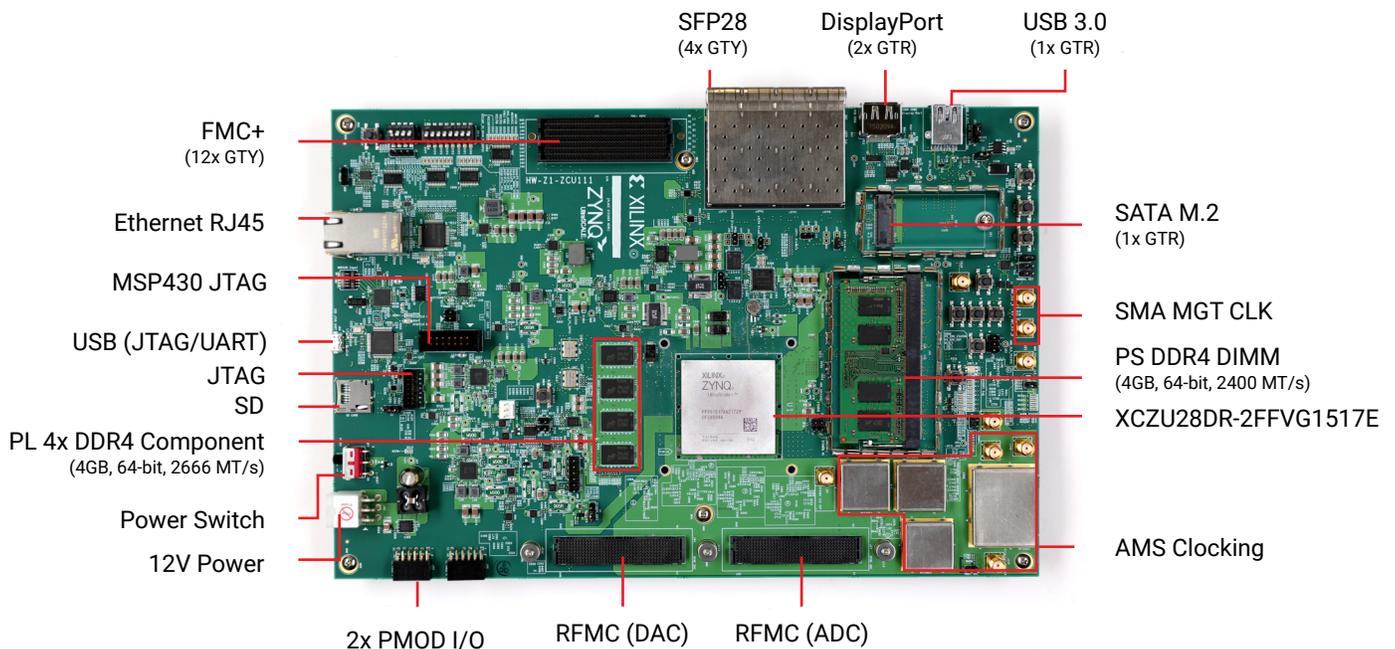- Other-High Performance RF Applications

Key Features

- XCZU28DR-2FFVG1517E RFSoC integrated with 8x4GSPS 12-bit ADCs, 8x 6.5GSPS 14-bit DACs, and 8 SD-FECs
- DDR4 Component – 4GB, 64-bit, 2666 MT/s, attached to Programmable Logic (PL)
- DDR4 SODIMM – 4GB, 64-bit, 2400 MT/s, attached to Processor Subsystem (PS)
- Ganged SFP28 cage to support up to 4 SFP/SFP+/zSFP+/SFP28 modules
- 10/100/1000 based Ethernet support over RGMII PHY to RJ-45 connector
- USB3, DisplayPort, and SATA
- 2x PMOD connectors
- FMC+ connector
- RFMC ADC and DAC connectors

Kit Includes

- Zynq UltraScale+ RFSoC ZCU111 Evaluation Board
- XM500 RFMC balun transformer add-on card
- 6 filters (two 2500 MHz low pass, two 1300 MHz low pass, two 3000-4300 MHz bandpass)
- Cables (6 SMAs, USB, Ethernet, Power)
- Xilinx Vivado Design Suite Node/Device-Locked License with 1 year of updates
- Access to Analog-Mixed Signal (AMS) Reference Design
- Additional hardware (MicroSD, tools)
- Quick Start Guide

ZCU111 Evaluation Board

SFP28 (4x GTY)
DisplayPort (2x GTR)
USB 3.0 (1x GTR)
FMC+ (12x GTY)
Ethernet RJ45
MSP430 JTAG
USB (JTAG/UART)
JTAG
SD
PL 4x DDR4 Component (4GB, 64-bit, 2666 MT/s)
Power Switch
12V Power
SATA M.2 (1x GTR)
SMA MGT CLK
PS DDR4 DIMM (4GB, 64-bit, 2400 MT/s)
XCZU28DR-2FFVG1517E
AMS Clocking
2x PMOD I/O
RFMC (DAC)
RFMC (ADC)

Part Number: EK-U1-ZCU111-G

For more information, support, documents, and reference designs, or to purchase, please visit: **www.xilinx.com/zcu111**