

AMD Kintex™ UltraScale+™ FPGA KCU116 Evaluation Kit

Part Number: EK-U1-KCU116-G

The AMD Kintex™ UltraScale+™ FPGA KCU116 Evaluation Kit is ideal for evaluating key Kintex UltraScale+ features most notably 28Gbps transceiver performance. The Kintex UltraScale+ family provides the best price/performance/watt balance in a FinFET node, delivering the most cost-effective solution for high-end applications.

Key Features & Benefits

- 4x zSFP+ cages to support 28Gbps GTY evaluation
- DDR4 up to 32-bits
- General purpose prototyping elements including FMC, HDMI, PMODs

- PCIe Gen3 x8 compliant
- PCIe Gen4 capable with 3rd party IP or custom IP

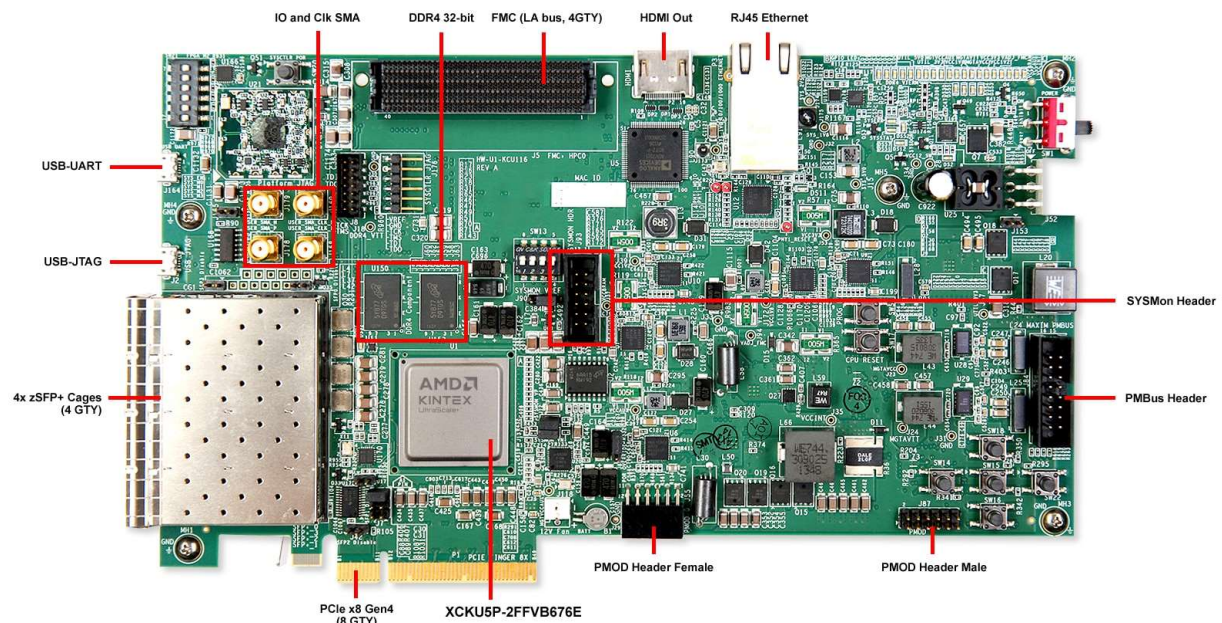
Featured AMD Devices

Featuring the Kintex UltraScale+ XCKU5P-2FFVB676E FPGA

System Logic Cells (K)	475
DSP Slices	1,824
Memory (Mb)	34.9
GTY 32.75 Gb/s Transceivers	16
I/O Pins	304

Board Features

Featuring the KCU116 Evaluation Board



Communication & Networking

- 4x zSFP+ Cages
- 4x SMAs

- UART To USB Bridge
- RJ45 Ethernet connector supporting SGMII Ethernet communications at 10, 100, or 1000 Mb/s
- PCIe Gen3x8 compliant and Gen4 capable

Clocking

- Dual Si570 Clock chips (User & GT)
- SI5328 Jitter attenuating precision clock
- 2x SMA MGT input clocks

Display

- HDMI video out
- 8x GPIO user LEDs

Expansion Connectors

- FMC-HPC (Partial Population) connector (4 GTY Transceiver, 46 single-ended or 23 differential (23 LA pairs: LA[00:22]) user defined signals)
- 2x PMOD headers (1 male and 1 female)

Configuration

- Onboard JTAG configuration circuitry to enable configuration over USB
- Dual Quad-SPI flash memory provides 2x1 Gb of non-volatile storage

Memory

- 1 GB 32-bit DDR4 component memory (two [256 Mb x 16] devices) at 1333MHz / 2666Mbpsps
- 64MB (512Mb) Quad SPI Flash
- Micro-SD Card Slot

Control & I/O

- 5X Directional Push Buttons
- 4X DIP Switches
- PMBUS & System Controller

Power

- 12V wall adapter or ATX