

ACHIEVING HIGH-PERFORMANCE CONNECTIVITY WITH A FULL-FEATURED, POWER-EFFICIENT 28NM KINTEX-7 FPGA

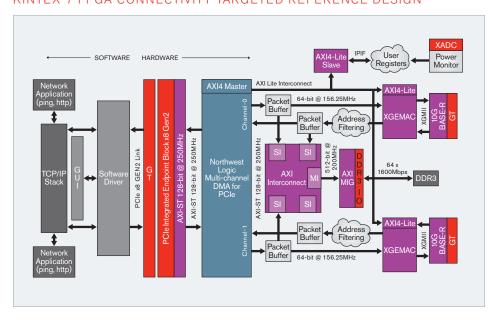
# KINTEX-7 FPGA CONNECTIVITY KIT: KEEPING UP WITH BANDWIDTH DEMAND AND DYNAMIC SERIAL PROTOCOL STANDARDS

#### **∑** Xilinx Connectivity Solutions

- Fast start up with out-of-box connectivity solution that combines silicon, design tools, and comprehensive reference design
- System performance up to 20Gbps, powered by a high-performance multichannel DMA and utilizing a 64-bit 1600Mbps DDR3 controller
- Exceptional throughput with x8 Gen2
   PCI Express (PCIe<sup>®</sup>) lanes and dual 10G
   Ethernet links
- High levels of integration in the targeted reference design (TRD) which features the main system building blocks of PCI Express, Ethernet, AXI4 Interconnect and memory
- Robust offering including graphical user interface (GUI) to support TRD evaluation and power monitoring, software driver source code, and support for high-speed protocols and interconnects
- Productivity enhancements: open standards, common design methodologies, development tools, and workflows that suit software and hardware designers

With silicon processing power constantly increasing, connectivity often represents the critical engineering challenge. Driving up overall system performance and throughput calls for the ability to rapidly transition to higher-speed serial connections while minimizing power, costs, and form factors. Xilinx connectivity platforms simplify and accelerate the development of best-in-class, high-speed serial designs. The Kintex<sup>TM</sup>-7 FPGA Connectivity Kit gives developers the convenience of an out-of-box development platform, complete with hardware, design tools, and reference design that enable efficient implementations and faster system deployments. State-of-theart serial connectivity features enable 20Gbps system performance to unlock the power of the 7 series transceivers. The breadth of high-performance connectivity capabilities accelerates applications in wired and wireless communications, broadcast, industrial, storage, aerospace and defense, and other markets.

## KINTEX-7 FPGA CONNECTIVITY TARGETED REFERENCE DESIGN





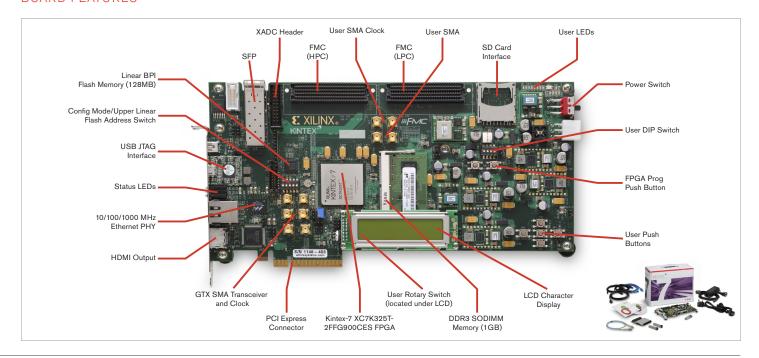
# What's Inside the Kintex-7 FPGA Connectivity Kit

- KC705 Evaluation Board featuring the Kintex-7 XC7K325T -2FFG900CES FPGA
- Full-seat ISE® Design Suite Embedded Edition, device-locked for the Kintex-7 325T FPGA
- Connectivity Targeted Reference Design:
  - x8 PCle Gen2
  - High-performance, multichannel DMA evaluation IP from Nortwest Logic
  - Dual 10GBASE-R PHY interface
  - 64-bit, 1600Mbps DDR3 memory controller
  - Software driver source code
  - Enhanced control and monitor GUI
  - Power and temperature monitoring engine

#### Additional Materials\*

- Board design files
- Documentation, including a step-by-step Getting Started Guide
- Abundant example designs\* and demos
- USB, Ethernet, and HDMI cables
- Universal power supply and power cables
- USB flash drive

### BOARD FEATURES



#### Take the NEXT STEP

For more information, support, documents, and reference designs, or to purchase, please visit www.xilinx.com/k7connkit

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<sup>\*</sup>Some designs, demonstrations, and documentation are delivered on the USB flash drive; others are available online.