



The Connectivity Curriculum Path

Xilinx Education Services is ready to help you use PCI Express, Gigabit Ethernet, or Rapid IO protocols in your next design.

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By learning advanced programmable logic design techniques and methodologies, you can take full advantage of today's advanced FPGA capabilities, including high-speed serial I/O. Equipped with this knowledge, you can better innovate when developing products for your market, reduce R&D costs through improved process efficiency, and lower production costs by using smaller devices in a slower speed grade.

The Xilinx® Connectivity Curriculum Path offers a variety of classes to help you quickly understand how to build the most optimal system using one of the many high-speed serial I/O protocols that Xilinx supports. The curriculum path also includes courses on the use of Xilinx RocketIO™ GTP serial transceivers, signal integrity, leading-edge programmable logic technology, and Xilinx design flows.

Designing with Multi-Gigabit Serial I/O

The “Designing with Multi-Gigabit Serial I/O” course will teach you how to employ RocketIO transceivers in your Virtex™-5 LXT FPGA designs.

After completing this comprehensive training, you will have the skills to:

- Describe and utilize the ports and attributes of the RocketIO multi-gigabit transceiver in the Virtex-5 LXT FPGA
- Effectively use such features as:
 - Comma detection, CRC, clock correction, and channel bonding
 - 8B/10B encoding/decoding, programmable termination, and pre-emphasis

- GTP primitive instantiation in a design using the GTP wizard
- Reference material for board design issues
- Power supply, oscillators, and trace design

Designing a LogiCORE PCI Express System

The “Designing a LogiCORE™ PCI Express System” course focuses on the key PCI Express protocol subjects and targets hard and soft PCI Express cores in the Virtex-5 FPGA.

This course is ideal for:

- Hardware designers creating applications using Xilinx IP cores for PCI Express
- Software engineers creating APIs, GUIs, and driver software development
- System architects leveraging Xilinx performance, latency, and bandwidth

After completing this training, you will have the necessary skills to:

- Use Xilinx PCI Express cores in your own design environments
- Select the appropriate PCIe solution for a specific application
- Identify how PCI Express specifications apply to Xilinx PCI Express cores

Designing with Ethernet MAC Controllers

The “Designing with Ethernet MAC Controllers” course teaches the basics of the Ethernet standard, protocol, and OSI model and related Xilinx solutions.

This course is ideal for:

- Engineers using Xilinx Ethernet connectivity solutions

After completing this training, you will have the necessary skills to:

- Use various Ethernet cores alone or as a peripheral in processor-based designs
- Select the appropriate core for a specific design
- Develop software to drive the core and achieve desired functionality

Conclusion

Xilinx programs provide targeted, high-quality education products and services that are designed by experts in programmable logic design and delivered by Xilinx-qualified trainers. We offer classes at all expertise levels and create an engaging learning environment by blending lectures, hands-on labs, interactive discussions, tips, and best practices.

Xilinx delivers training when and where you want it by leveraging our global network of authorized training providers (ATPs) and online learning systems. 🌟

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