Intel FPGA and SoC > Products > ... > PCI Development Kit, Cyclone II Edition

# PCI Development Kit, Cyclone II Edition

### from Intel® (Formerly Altera)

The PCI Development Kit, Cyclone® II Edition provides a flexible, low-cost FPGA development platform in a PCI short card form factor. With a universal (3.3-V and 5-V) PCI edge connector, the PCI Development Kit, Cyclone II Edition plugs into any standard PCI or PCI-X slot. The kit includes both a hardware reference design and Windows software drivers to accelerate development. Users can perform transactions between the PCI interface and DDR2 memory within minutes of opening the box. The kit can be used as a development platform for 32-bit and 64-bit PCI, PCI-X, DDR2 SDRAM, and Design Solutions Network (DSN) intellectual property (IP) cores.

- Ordering Information
- Development Kit Contents

## Ordering Information

## Table 1. PCI Development Kit, Cyclone II Edition Ordering Code & Dricing Information

Ordering Code	Price	Ordering Information
DK-PCI-2C35N	Buy Now ▶	In North America, call 1-888-800-0631; for international sales, contact your local distributor.

#### Notes:

Buyer represents that it is a product developer, software developer or system integrator and acknowledges that this product is an evaluation kit that is not FCC authorized, is made available solely for evaluation and software development, and may not be resold.

## **Development Kit Contents**

The PCI Development Kit, Cyclone II Edition features:

- Cyclone II PCI Development Board (see Figure 1)
  - Cyclone II EP2C35F672 FPGA
  - Short-form universal PCI (3.3 or 5.0 V) card
    - 32-bit or 64-bit PCI per the PCI Local Bus Specification Revision 2.3 at 33 or 66 MHz
    - 100 MHz PCI-X Revision 2.0 mode 1
  - Memory
    - Two 64 Mbyte DDR2 SDRAM devices
  - FPGA device configuration
    - Switch-selectable on power-up, choose one of two serial configuration devices (EPCS64 devices). One device contains the pre-loaded factory default design, and the other device is for user-programming. Configuration data is downloaded via the USB-Blaster™ download cable.
  - Flexible clocking options
    - Socketed 100-MHz high-speed clock oscillator
    - SMA connector clock input
    - PCI edge connector clock input
  - Switches and indicators
    - Four user-definable push-button switches
    - Eight-position user-definable dual in-line package (DIP) switch
    - Eight user-definable LEDs
  - Flexible power options
    - PCI connector
    - External power supply
- PCI Development Kit, Cyclone II Edition CD-ROM
  - PCI-to-DDR2 Reference Design
  - Cyclone II PCI Development Kit Application & Drivers
- PLD Applications PCI-X CORE CD-ROM

- PLD Applications PCI-X function for OpenCore® evaluation
- Reference designs&applications targeted to the Cyclone II PCI development board
- Quartus® Prime design software, including the SOPC Builder system development tool
  - o One-year license
  - Windows platform only
- Jungo WinDriver Development Toolkit
- Cables & accessories
  - USB Blaster download cable
  - o Power cable
- Complete documentation



Figure 1. Cyclone II PCI Development Board

## Software Development Tools

The Quartus Prime design software allows designers to process multi-million-gate designs, streamline development flows, and decrease time-to-market. The PCI Development Kit, Cyclone II Edition includes the Quartus Prime design software with a one-year license. Altera recommends that designers purchase a full Intel® FPGA design software subscription.

The kit also includes the Intel® FPGA IP Library CD containing all released Intel® FPGA intellectual property (IP), optimized for Intel® FPGA devices, including:

- PCI Compiler 32-Bit PCI Master/Target
- PCI Compiler 32-Bit PCI Target
- PCI Compiler 64-Bit Master/Target
- PCI Compiler 64-Bit Target
- DDR&DDR2 SDRAM Memory Controller Compiler

## Hardware Development Tools

The PCI Development Kit, Cyclone II Edition includes VHDL and Verilog reference designs, example projects, and complete documentation.

