Parallel Cable IV Connects Faster and Better

This new high-speed download cable supports ultra-low voltages.

by Theresa Vu
Product Marketing Engineer
Xilinx, Inc.
vu@xilinx.com

The new Parallel Cable IV downloads data more than 10X faster than the previous JTAG/Parallel Cable III. Now, you can download to one XC2V8000 Virtex™-II FPGA in less than eight seconds.

The PCIV features ultra low-voltage support for all Xilinx FPGA, CPLD, System ACE™ MPM (multi-package module), and ISP (in-system programmable) PROM devices (see Table 1).

The PCIV connects to any desktop or laptop computer using the standard IEEE 1284-compliant parallel port and draws power directly from the computer (through the mouse/keyboard port) or an external power supply.

A robust ribbon cable ships with the PCIV, which gives you the flexibility to use either the JTAG (IEEE 1149.1) or Slave Serial download mode at the fastest speeds. The small profile of the ribbon cable connector minimizes the need for board space. The ribbon cable offers an error-free, quick connect target interface compared to cumbersome flying lead wires of Parallel Cable III.

The PCIV is backward compatible with the PC III and offers a connector for flying lead wires.

PCIV extends Xilinx leadership in pre-engineered configuration solutions by offering a fast, simple, low-cost download solution for all Xilinx FGPA, CPLD, System ACE MPM, and ISP PROM devices. The Parallel Cable IV will be available in late March through Xilinx distributors and the Xilinx e-commerce site for $95. For more information, see *www.xilinx.com/support/programr/cables.htm.*

	Parallel Cable IV	Parallel Cable III
Download Speed	up to 4 Mbps	up to 300 Kbps
I/O Voltage Support	1.5V, 1.8V, 2.5V, 3.3V, 5V	2.5V, 3.3V, 5V
Download Modes	JTAG (IEEE 1149.1) and Slave Serial	JTAG (IEEE 1149.1) and Slave Serial
Power Supply	PC or External Power Supply	Target System
Board Connections	Ribbon Cable and Flying Wires	Flying Wires
Software Support	iMPACT	iMPACT

Table 1 - Parallel Cable IV vs. Parallel Cable III

Parallel Cable IV connected to PC

Parallel Cable IV connected to external power supply

Parallel Cable IV with ribbon cable connector