

USB Hub Evaluation Board

February 8, 1998



InventraTM

A Business Unit of Mentor Graphics 1001 Ridder Park Drive San Jose, CA 95134-2314 URL: www.mentorg.com/inventra

Features

- Controls four downstream ports
- · Supports full- and low-speed devices
- · Individual port power control
- · Individual over-current detection
- Microcontroller or hard-wired hub control support
- · Activity LEDs for upstream and four downstream ports
- Firmware for microcontrolled hub
- Reset switch
- Easy power connection
- Debug header pins

General Description

The USB Hub Evaluation Board can be used to evaluate or prototype a USB hub controller core from Inventra using a Xilinx XC4000 FPGA. Presently two flavors of hub controller core are available, one with Mitsubishi M37690 micro-

Product Specification

controller support and one hard-wired without a microcontroller interface.

Downstream ports support full/low speed control, power switching, over-current detection and activity LED. Activity LED turns on when port is first enabled and from then on it toggles after every transaction from the port. Upstream port also has one LED to indicate host activity to help in debug.

Available Support Products

Inventra supplies a complete line of hardware and software products for USB system development. Contact Inventra for additional information.

- USB Simulation Models
- · USB Cores for host, hub and function controllers

Ordering Information

This product is available from the AllianceCORE partner listed on this page. Please contact the partner for pricing and additional information.

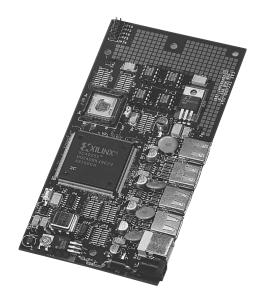


Figure 1: USB Hub Evaluation Board

Related Information

Xilinx Programmable Logic

For information on Xilinx programmable logic or development system software, contact your local Xilinx sales office, or:

Xilinx, Inc.
2100 Logic Drive
San Jose, CA 95124
Phone: +1 408-559-7778
Fax: +1 408-559-7114
URL: www.xilinx.com

For general Xilinx literature, contact:

Phone: +1 800-231-3386 (inside the US)

+1 408-879-5017 (outside the US)

E-mail: literature@xilinx.com

For Alliance $\mathsf{CORE}^{\mathsf{TM}}$ specific information, contact:

Phone: +1 408-879-5381

E-mail: alliancecore@xilinx.com

URL: www.xilinx.com/products/logicore/alliance/

tblpart.htm