

USB 2.0 On-The-Go Eval Kit



INTRODUCTION

To demonstrate the capabilities of our USB 2.0 OTG IP Core, and it's interoperability with a variety of PHYs (FS only transceivers, UTMI L2+, ULPI, etc.), we have developed an evaluation platform to illustrate the operation of a complete USB 2.0 OTG solution.

FEATURES

The evaluation platform consists of an FPGA development board with a Xilinx Virtex 2 FPGA and a daughter card holding various OTG compliant physical interface chips.

The third generation PHY daughter card from ASICS.ws provide a choice of a variety of different PHYs. A bit-stream file is included which can be directly downloaded into the evaluation board.

The evaluation system consists of a Xilinx MicroBlaze based SoC, and the ASICS.ws USB 2.0 OTG IP Core.

The evaluation platform connects to an RS232 terminal interface via a serial cable, and provides a USB OTG AB plug for demonstration of the OTG IP Core.

The demonstration consist of two parts:

- 1) When the USB 2.0 OTG IP Core is plugged into an USB host, it will operate as a standard Storage Class Device. This device is automatically recognized by most operating systems and will become operational immediately.
- 2) When another device is plugged into the USB 2.0 OTG IP Core, it will read out it's device and configuration descriptors and display them on the terminal attached to the serial port.

REQUIREMENTS

To use the USB 2.0 OTG Eval Kit, the following items are required:

- Memec/Insight Xilinx Virtex 2 1000 development board (P/N DS-V2LC) (or any other LC or P160 interface based development board)
- ASICS.ws OTG PHY Eval board
- Xilinx parallel download cable (JTAG)
- Xilinx download software (available in the free "WebPack" from Xilinx)
- Power supply, 5VDC, 3A
- Serial cable with an DB 9 connector

The FPGA development board can be obtained directly from Memec/Insight. The PHY Eval board can be purchased directly from ASICS.ws. The purchase price of the PHY Eval board will be fully credited towards the purchase of the USB 2.0 OTG IP Core.

For more information or to order the PHY daughter card, please contact ASICS World Services at: info@asics.ws

