



Featured Connectivity Application Notes

Create a differentiated connectivity solution with product descriptions and associated design files.

Embedded Serial ATA Storage System

www.xilinx.com/bvdocs/appnotes/xapp716.pdf

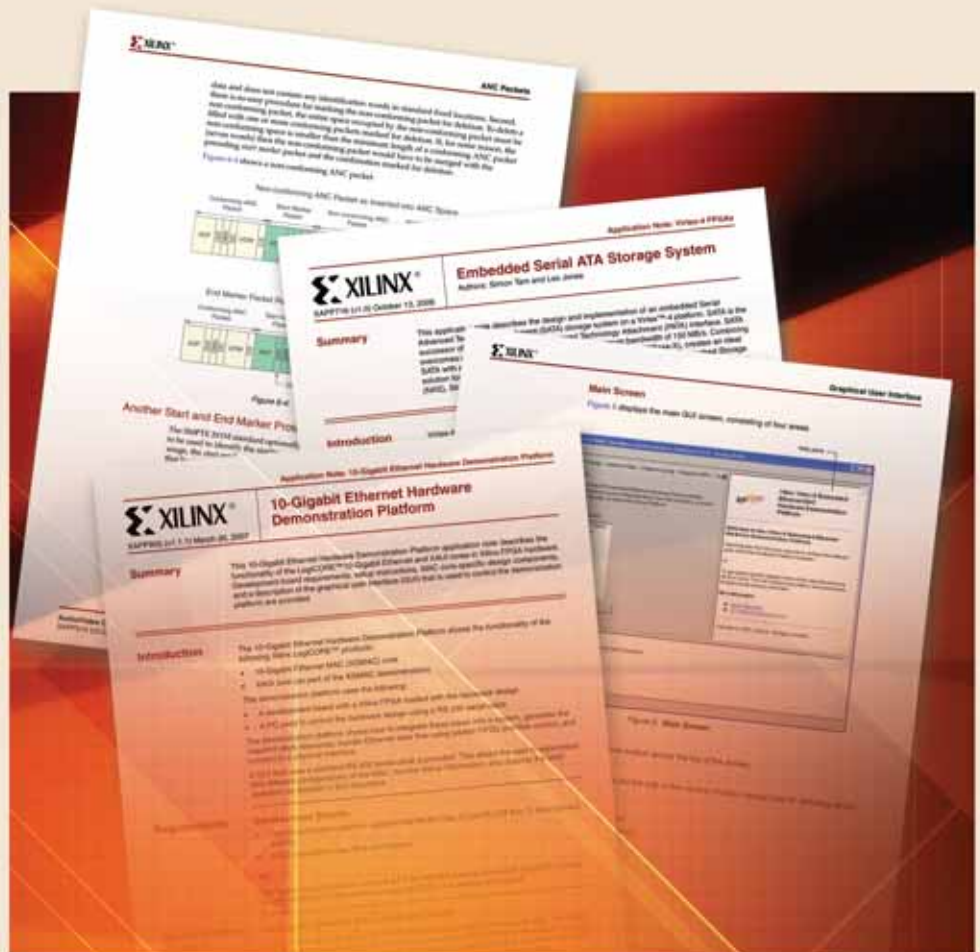
This application note describes the design and implementation of an embedded Serial Advanced Technology Attachment (SATA) storage system on a Xilinx® Virtex™-4 platform. SATA is the successor of the prevalent Parallel Advanced Technology Attachment (PATA) interface. SATA overcomes many limitations of PATA and offers a maximum bandwidth of 150 Mbps. Combining SATA with a high-speed network interface, Gigabit Ethernet (1000 Base-X) creates an ideal solution for many high-performance storage applications such as network attached storage (NAS), storage area network (SAN), and redundant array of independent disks (RAID).

Audio/Video Connectivity Solutions for the Broadcast Industry

www.xilinx.com/bvdocs/appnotes/xapp514.pdf

This comprehensive reference design describes how to use Xilinx FPGAs to implement serial digital video interfaces commonly used in the professional video broadcast industry. The serial video interfaces described in this document are:

- SD-SDI (SMPTE-259M), used to transport uncompressed standard-definition digital video
- HD-SDI (SMPTE-292M), used to transport uncompressed high-definition digital video
- DVB-ASI, used to transport compressed digital video
- AES, used to transport digital audio



Virtex-5 Embedded Tri-Mode Ethernet MAC Hardware Demonstration Platform

www.xilinx.com/bvdocs/appnotes/xapp957.pdf

This application note describes a system using the Virtex-5 embedded tri-mode Ethernet MAC (Ethernet MAC) wrapper core on an ML505 development board. The system provides an example of how to integrate the embedded tri-mode Ethernet MAC and embedded tri-mode Ethernet MAC wrapper, using a hardware design to target the development board and a PC-based GUI to control the demonstration platform.

10 Gigabit Ethernet Hardware Demonstration Platform

www.xilinx.com/bvdocs/appnotes/xapp955.pdf

This application note describes the functionality of the LogiCORE™ 10 Gigabit Ethernet and XAUI cores in Xilinx FPGA hardware. Development board requirements, setup instructions, MAC core-specific design components, and a description of the GUI used to control the demonstration platform are included. 🌈