

White Papers by Product

White Papers

 **Configuration Solutions**

Listed below are the Configuration Solutions White Papers listed by the most recent paper. Click on the White Paper title to review the document in PDF format.

WP151  **System Ace: Configuration Solution for Xilinx FPGAs (v1.0) 09/25/01 (58 KB)** Configuration Solutions
 Design techniques for electronic systems are constantly changing. In industries at the heart of the digital revolution — telecommunications, networking, and wireless communications — this change is especially acute. Functional integration, dramatic increases in complexity, new standards and protocols, and increased time-to-market pressures have bolstered both the design challenges and the opportunities in architecting modern electronic “boxes.” One trend driving these changes is the increased integration of core logic with previously discrete functions to achieve higher performance and more compact board designs. Traditionally, ASICs have been the vehicle for such integration but now, with their advanced system capabilities, programmable logic devices (PLDs), especially field programmable gate arrays (FPGAs), have begun to take on this role in system design.

WP152  **Xilinx FPGA Configuration Data Compression and Decompression (v1.0) 09/25/01 (32 KB)** Configuration Solutions
 This document provides a brief description of the Xilinx bitstream compression algorithm based on the LZ77 scheme. FPGA configuration files can be compressed by Xilinx-developed software to reduce memory storage requirements. Compressed configuration files can be stored in a high-density System ACE™ MPM FPGA configuration controller. The System ACE MPM controller decompresses the files and shifts the original configuration data to the target FPGAs.
