

Featured White Papers

From high-volume consumer to automotive to global security, Xilinx white papers help you stay on top of technology applications.



“Solutions Without Compromise: How to Match Consumer Timelines with Automotive and Industrial Requirements and Reduce Risks of Obsolescence Using FPGAs and Intellectual Property”

www.logicbricks.com/pdf/Xilinx%20Electronic%20Displays%20Conference%202007.pdf

FPGAs are enabling a new automotive world, where compromises in (and between) flexibility, scalability, time to market, and system cost are no longer required. In a number of different automotive applications, these value propositions are key.

Multimedia and infotainment systems are always adapting to different types of displays. Graphic controllers have short lifetimes that do not fit automotive and industrial embedded requirements. Why not think about a solution in programmable logic that can drive any display, instead

of using different graphic controllers and changing them for different displays?

“Automotive FPGAs Offer Innovative Solutions to Automotive Displays Challenges”

www.techonline.com/showArticle.jhtml?articleID=193103236&queryText=Automotive+FPGAs+Offer+Innovative+Solutions+to+Automotive+Displays+Challenges

There is a continuing trend in the automotive industry to improve the comfort, safety, convenience, productivity, and entertainment experience for the driver. This trend is spurring increased use of a myriad of display technologies including TFT, LCD, and OLED.

Along with the benefits of these new technologies are unique challenges that traverse a wide spectrum of issues, including high-performance, low-EMI signaling;

complex timing control; high-performance image processing; and integration with a wide spectrum of automotive buses – all influenced by continuously evolving standards and degrees of adoption across the automotive industry. Although these challenges are significant, low-cost automotive FPGAs are taking a lead by providing comprehensive solutions and driving the use of a wide range of display technologies.

This white paper explores the various uses of automotive display technologies and associated challenges, highlighting the benefits and cost-effectiveness of FPGAs in addressing these challenges within the context of a rear-seat entertainment system.

“Security Solutions Using Spartan-3 Generation FPGAs”

www.xilinx.com/bvdocs/whitepapers/wp266.pdf

Whether boarding a plane, closing the front door, or beginning your next-generation circuit design, security has become a significant issue. In our homes, we try to build in the right amount of security to protect ourselves against theft. Security is rapidly becoming a necessity in the electronics industry as well.

It is important to understand why security issues have escalated to the forefront in electronics design. One reason is the alarming amount of counterfeited goods. These goods threaten the U.S. economy and have a significant effect worldwide in the consumer market, according to the Anti-Counterfeiting Coalition.

This white paper identifies the top design security threats, explores basic levels of security, and describes how new, low-cost Spartan™-3A, Spartan-3AN, and Spartan-3A DSP FPGAs from Xilinx can help protect your products and profits. ●●●