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The Future of Logic Design...

Within the next five years, programmable logic will be the key technology for developing next generation products; within the next ten years, programmable logic devices (PLDs) will be used in virtually every electronic product on the market. These industry predictions are based on a number of recent developments that have forever changed the way electronic systems are designed.

The old advantages of custom ASICs are quickly being overcome by the new advantages of programmable logic. Here are some of the reasons why:

Very High Density, System-level Devices - We now produce high performance FPGAs with advanced features and up to 3.2 million system gates. Plus, we have just announced our next generation 10-million gate architecture. With devices this powerful and this dense you are limited only by your imagination.

Very Low Power, Low-cost Devices - Many new designs require battery operation and low cost. Our Fast Zero Power™ CPLDs are perfect for cell phones, PDAs and other power sensitive applications. Our Spartan FPGAs already give you 100K gates for less than \$10.00, and higher density, lower cost FPGAs are on the way. Power and price are no longer an issue with PLDs.

Intellectual Property - The fastest and surest way to get your PLD-based product to market is to use proven

designs, either those created in-house or by third party suppliers. There is already a wealth of IP, and many new designs are being introduced every day. IP significantly reduces your development time and your risk.

Highly Efficient Development Tools - Speed is critical. Not only do you want the fastest design you can create, but you want to complete that design with the least possible risk and effort. The currently available development tools from Xilinx allow you to quickly develop your designs in many different ways, with multiple developers located in different places. These tools are fast, efficient, and easy to use; and they are constantly improving.

Field Upgradeability - With the current Xilinx device and software technologies you can create designs that are easily changed, in the field, over any network, right at your customers' premises. The possibilities are enormous, and the advantages are overwhelming; this cannot be duplicated with any other technology. Now, just like software, your hardware can easily change to meet the demands of the marketplace.

With programmable logic you not only get the fastest and easiest way to create next-generation systems, you also get significant advantages that cannot be offered by fixed logic ASICs; there is no better way to create value. ❧