logicBRICKS™

Designed by XYLON

XYLON
An Electronics Company

Xylon is an electronics company designing optimized IP cores for Xilinx FPGAs and providing design services to lower production costs and improve the efficiency of our customers. Our key focus is in the development of efficient graphic solutions based on an optimized logicBRICKS™ IP core library. That enables our customers to shorten development time and keep them ahead of the competition.

The logicBRICKS™ is optimized for Xilinx FPGA devices and all our IP cores are supplied with full documentation, simulation vectors, test-benches and reference designs. Xylon has designed and delivered more than 100 various Video and Communication Xilinx FPGA designs. Our expertise is recognized and valued by European, USA, and Asian customers from a number of markets. Xylon is ISO9001 certified company.
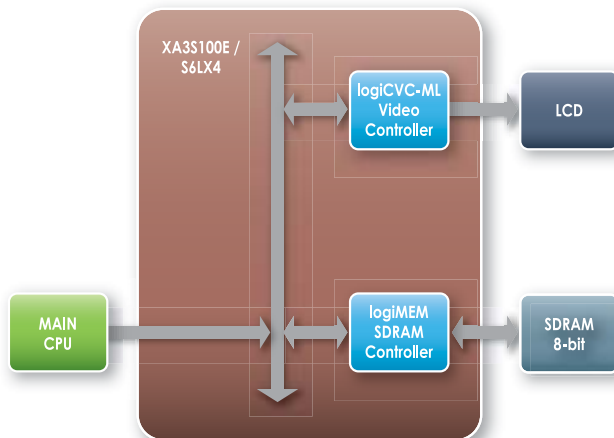
logicBRICKS™ LIBRARY

- logiCVC-ML Compact Multilayer Video Controller
- logiBITBLT Bit Block Transfer 2D Graphics Accelerator
- logiBMP Bitmap 2.5D Graphics Accelerator
- logiWIN Versatile Video Input

- logiBAYER Color Camera Sensor Bayer Decoder
- logiLENS Camera Lens Distortion Corrector
- logiAIR Audio Infrared Digital FM Modulator
- logiRC Remote Controller Receiver
- see *www.logicBRICKS.com* for more IP-Cores

Xylon logicBRICKS IP cores are designed to integrate seamlessly with Xilinx development tools and IP cores. Our IP cores are fully supported by the Xilinx Platform Studio and the EDK integrated software solution, and designers familiar with these tools can immediately start designing with the logicBRICKS. An easy-to-use EDK GUI interface enables user-friendly (IP drag and drop) design of complex embedded systems with no need for HDL coding. Additionally the EDK GUI allows IP tuning of slice consumptions and feature sets definitions.
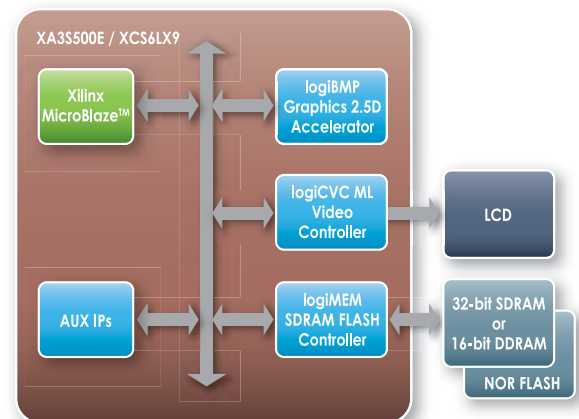
Entry - level

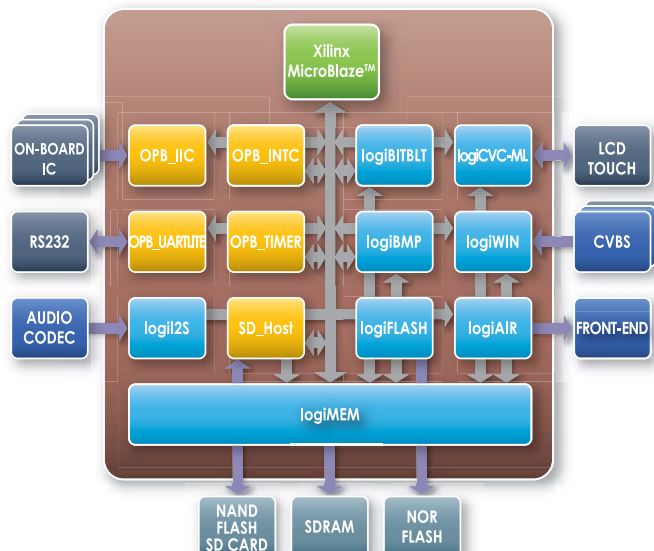**Example graphics solutions with Xylon logicBRICKS IP cores**

logiTAP
Xylon Platform for Embedded GUI Developments

The logiTAP is an excellent example of the powerful GUI embedded system utilizing very cost-sensitive hardware based on Xilinx Spartan-3E device. The kit comes preloaded with several GUI demo applications, which can be navigated and controlled by an integrated touch display. The logiTAP includes FPGA reference design based on the Xilinx MicroBlaze™ soft-CPU controlling all system functions and Xylon logicBRICKS IP cores controlling advanced system's graphics features. The logicBRICKS IP cores are provided as protected evaluation IP versions. Run-time limited Xylon evaluation IP cores are functionally equal to fully-licensed products and enables IP parametrization through the Xilinx EDK GUI, simulation and a full hardware implementation. The logiTAP installation CD contains: the reference design for the Xilinx EDK, evaluation IP cores, software source code, demos and full documentation.

logiTAP DEMO EXAMPLES

logiTAP KEY FEATURES

- A complete design framework for embedded GUI designers packed in a single Plexiglas casing
- Included 7" 800x480 LCD color touch display
- Full-featured system based on Xylon logiCRAFT3 board including the programmable low-cost Xilinx Spartan®-3E chip (XC3S1200E FT256-5)
- The kit enables evaluation of different GUI design flows including those based on third-party GUI Builder Tools
- A complete design framework for embedded GUI designers
- Comes preloaded with several illustrative demo applications
- Single reference FPGA design based on Xylon evaluation logicBRICKS and Xilinx LogiCORE IP cores
- Embedded processing based on the Xilinx MicroBlaze™
- 32 MB SDRAM, 8 MB NOR Flash, 2 GB SD Card
- 2 video inputs selectable from 4 CVBS or 2 S-Video inputs
- LVDS output channel from the FPGA
- 4 stereo line audio inputs and the microphone input
- Stereo audio line output
- 2 wire and 2 IR (wireless) headphone audio outputs