

Xylon d.o.o.

Fallerovo setaliste 22
10000 Zagreb, Croatia
Phone: +385 1 368 00 26
Fax: +385 1 365 51 67
E-mail: info@logicbricks.com
URL: www.logicbricks.com

Features

- Offers a complete design framework for embedded GUI designers
- Full-featured system on programmable low-cost Xilinx Spartan®-3E chip
- The kit enables evaluation of different GUI design flows including those based on third-party GUI Builder Tools
- Comes preloaded with several illustrative demo applications – currently 12 demos
- Single reference FPGA design based on Xylon evaluation logicBRICKS™ and Xilinx LogiCORE IP cores
- Embedded processing based on the Xilinx MicroBlaze™
- System packed in a single Plexiglas casing
- Development platform based on Xylon logiCRAFT3 platform
- Xilinx Spartan-3E XC3S1200E device
- 7" 800x480 LCD color touch display
- 32 MB SDRAM memory
- 8 MB NOR Flash memory
- 2 GB SD-Card Flash memory
- 2 video inputs selectable from 4 CVBS or 2 S-Video inputs
- LVDS output channel from the FPGA (LCD interface)
- 4 stereo line audio inputs
- Microphone input
- Stereo audio line output
- 2 headphone and 2 IR (wireless) headphone audio outputs
- RS232 interface



Figure 1: Xylon logiTAP Platform

Applications

The logiTAP provides and presents programmable silicon coupled with pre-verified, customizable hardware and software modules suitable for all types of embedded GUI applications. The targeted GUIs include automotive graphics and video systems, household consumer products, as well as industrial automation equipment, medical monitors and defense electronics.

General Description

Xylon logiTAP Development Kit based on Xilinx Spartan-3E offers a complete design framework for embedded designers developing GUI applications. The kit combines the low-cost Xilinx FPGA device and the Xilinx Embedded Development Kit (EDK) integrated software for designing embedded systems with the Xylon logiCRAFT3 display development platform and the Xylon logicBRICKS™ IP cores library. Provided reference FPGA design combines Xylon and Xilinx IP cores, and have been controlled by Xilinx MicroBlaze™ soft-CPU.

The kit works with a broad offer of third-party graphic software development tools allowing for a full set of graphics rendering features. Currently Xylon provides high-level software drivers enabling the requested software compatibility with the following GUI development software tools:

- emWIN – Graphic Software and GUI from Segger Microcontroller GmbH
- Altia Design and DeepScreen – GUI Builder and Graphics code generator from Altia, Inc.
- TAT Motion Lab, TAT Cascades and TAT Kastor – GUI rendering platform from TAT The Astonishing Tribe AB

The logiTAP comes preloaded with several GUI application demos that showcase versatility and maturity of the supplied hardware and software produced by Xylon and Xilinx. The logiTAP users can evaluate every detail of the system: FPGA design, software drivers, demo applications, and the PCB design. Moreover, the platform can be customized in different ways to fulfill various users' requirements.

logiTAP Demo Applications

The preloaded logiTAP GUI applications can be evaluated and changed by the user. The applications have been developed by different GUI development software tools.

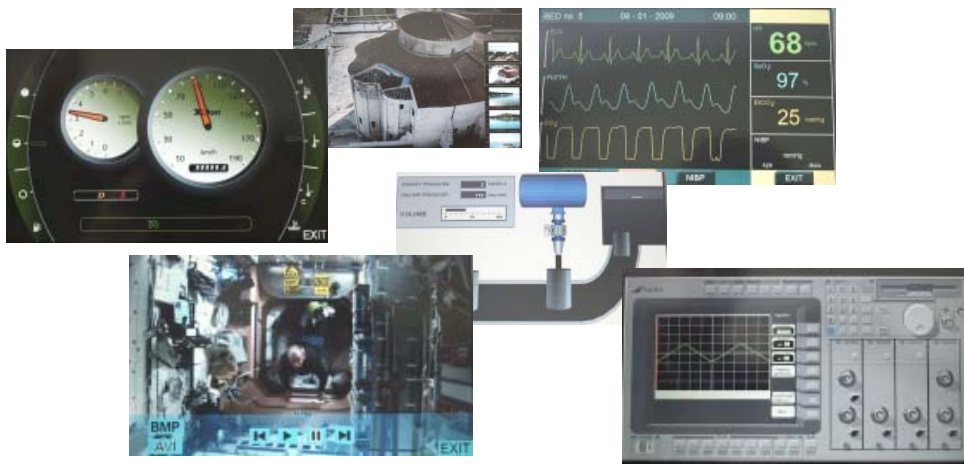


Figure 2: Screenshots of some logiTAP Demos

Package Content

- Xylon logiCRAFT3 Spartan-3E based board
- Xylon CRFT03 daughter card for the logiCRAFT3
- Debugging serial cable
- SD-Card Flash Reader
- 12 VDC power supply
- The logiTAP installation CD image available for FTP. The CD includes the reference FPGA with evaluation logicBRICKS™ IP cores, low-level drivers, documentation, schematics, etc.

The logiCRAFT3 and the CRFT03 PCB boards are packed in the logiTAP Plexiglas casing.

Recommended Design Experience

The user should have experience in the following areas:

- Xilinx design tools
- C programming
- Good HW/SW designing practices
- ModelSim

The logicBRICKS™ IP cores are fully supported by the Xilinx Platform Studio and the EDK, and their use does not require any particular skills beyond general Xilinx tools knowledge.

Related Xylon Products

Xylon logicBRICKS™ IP cores can be evaluated on Xylon logiTAP platform, which is designed especially for developers working in the fields of multimedia and infotainment. The logiTAP demonstrates modularity on all levels: software, board, FPGA, and IP cores.

To learn more about the logiTAP and other Xylon development platforms, contact Xylon or visit the web:

Email: info@logicbricks.com

URL: www.logicbricks.com/html/evaluation_boards.htm

Ordering Information

This product is available directly from Xylon. Please contact Xylon for pricing and additional information about this product using the contact information on the front page of this datasheet.

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Related Information

Xilinx Programmable Logic

For information on Xilinx programmable logic or development system software, contact your local Xilinx sales office, or:

Xilinx, Inc.
2100 Logic Drive
San Jose, CA 95124
Phone: +1 408-559-7778
Fax: +1 408-559-7114
URL: www.xilinx.com

Revision History

Version	Date	Note
1.01.	03.04.2009	Initial Xylon release - new doc template