

Xylon d.o.o.

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Features

- Offers a complete design framework for embedded GUI designers
- Full-featured system on low-cost Xilinx® Spartan®-6 XC6SLX45T FGG484 chip
- Enables different GUI design flows including designing by third-party GUI Builder Tools
- Comes preloaded with several illustrative demo applications for various markets
- Single reference FPGA design based on Xylon evaluation logicBRICKS™ IP cores
- Embedded processing based on the Xilinx MicroBlaze™ soft-CPU
- System packed in a single Plexiglas casing
- Hardware platform based on Xylon logiCRAFT6
- 7" 800x480 LCD color touch display
- 2 x 128MB/16-bit DDR2 SDRAM memory
- 2 x 8MB SPI Multi I/O QSPI Flash memory
- Micro SD Card connector (2 GB Card included)
- 2 video inputs selectable from 4 CVBS or 2 S-Video inputs
- LVDS differential pairs directly connected to the FPGA
- 2x high-speed (Gbit/sec) MGTs equipped by Rosenberger connectors
- Configurable DVI or VGA video output
- Parallel RGB or LVDS display interface driven by the FPGA
- 4x LVDS camera interface
- Supportable communication interfaces: SATA, Parallel IO, CAN, LIN, RS232, JTAG, Bluetooth, iPod
- 2 stereo audio inputs and 2 stereo IR headphones audio outputs
- Reference FPGA design and a set of reference applications



Figure 1: The logiTAP Platform

Applications

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

General Description

New Spartan-6 based logiTAP Development Kit replaces Xylon's older Spartan-3 based kit and introduces new valuable features. Xylon logiTAP offers a complete design framework for embedded designers developing GUI applications. The kit combines Xylon's logiCRAFT6 (<http://www.logicbricks.com/Products/logiCRAFT6.aspx>) display development board, an integrated touch screen LCD panel, and logicBRICKS IP core library. Xylon provides the reference design, built by Xylon logicBRICKS IP cores, along with the Xilinx EDK integrated software. The Xilinx MicroBlaze soft-CPU controls all of the system functions.

The kit can be used with several 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 The Astonishing Tribe AB

For more information about the support for third-party graphic software development tools, please contact Xylon at support@logicbricks.com.

The logiTAP comes preloaded with several GUI application demos (Figure 2) that showcase versatility and maturity of the supplied hardware and software produced by Xylon. 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 user. The applications have been developed by different GUI development software tools.

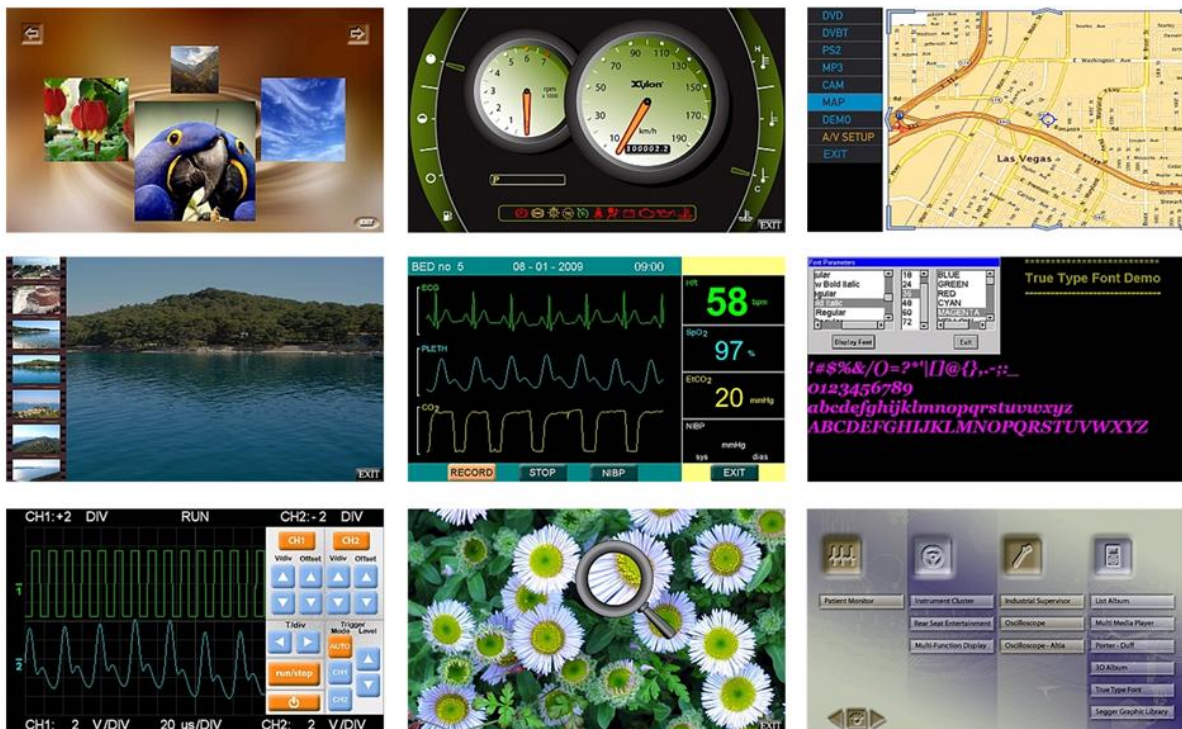


Figure 2: logiTAP Demo Applications

Package Content

- Xylon logiCRAFT6 Spartan-6 based board
- Debugging serial cable
- SD-Card Flash (2 GB)
- 12 VDC power supply
- The logiTAP installation CD image available via FTP. The CD includes the reference FPGA with evaluation logicBRICKS IP cores, low-level drivers, documentation, schematics, etc.

Recommended Design Experience

The user should have experience in the following areas:

- Xilinx design tools
- C programming

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: support@logicbricks.com

URL: <http://www.logicbricks.com/Products/logiTAP.aspx>

To learn more about the logiCRAFT6 platform used within the logiTAP:

URL: <http://www.logicbricks.com/Products/logiCRAFT6.aspx>

To learn more about Xylon's logicBRICKS IP Library:

URL: <http://www.logicbricks.com/logicBRICKS-IP-Library.aspx>, and

URL: <http://www.logicbricks.com/Products/IP-Cores.aspx>

Ordering Information

This product is available directly from Xylon. Please visit our web shop or contact Xylon for pricing and additional information:

Email: sales@logicbricks.com

URL: www.logicbricks.com

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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:

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Revision History

Version	Date	Note
1.01.	03.04.2009	Initial Xylon's release.
2.00.	20.12.2010	New logiTAP version based on the logiCRAFT6 platform (Xilinx Spartan-6 chip). Old logiTAP with the logiCRAFT3 abandoned.