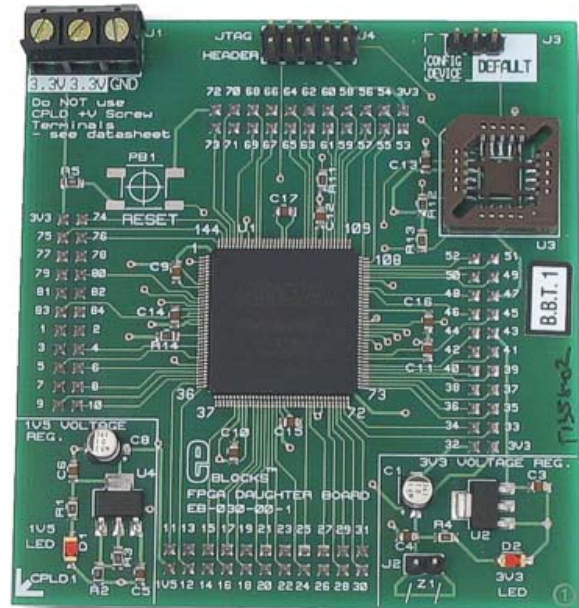


## Great for teaching FPGA design

- Designed for educational use
- Free programming and simulation software – you can use block diagrams, VHDL or Verilog
- Full ‘getting started’ manual
- Large range of existing IPR – including microprocessor cores

## Great for developing FPGA projects

- Can be interfaced to over 30 E-blocks boards
- Can be used as a component in projects



This FPGA daughter board sits on top of the existing E-blocks CPLD programming board (EB020) to provide 7 full E-blocks ports which can interface to other E-blocks: from simple LED and switch boards through to more complex boards like internet interfaces, IrDA communication systems, internet and Bluetooth boards. The FPGA device used is Altera’s EP1C3 FPGA which contains 3000 logic elements. An alternative 6KLogic Element device is also available.

The FPGA is programmed using Altera’s Quartus II web edition software and full course notes are available.

The FPGA daughter board itself can be removed from the CPLD board to provide a leaded component that can be used in your own projects (serial memory programmer required). This solves the difficult issue of handling FPGA packages which are difficult to solder.

Available from January 2005.



The FPGA board fits on top of the CPLD programming board – like this:



## FPGA solution

A solution based on the FPGA board (EB940) is also available. This collection of E-blocks allows rapid development of FPGA projects and is designed to support students as they learn about FPGA programming. The solution includes LED boards, switch boards, serial D/A board, infrared board, LCD, keypad and prototype board. This solution is suitable for learning about advanced digital electronics, VHDL, Verilog, embedded processor technology (NIOS) and many other disciplines.

Available January 2005.



The FPGA solution

The EB940 solution includes:

Case	HPCASE
Power supply	HPPSU2
Backplane - A3 Hardware	BPA3
E-block USB Lite programmer (inc USB cable)	EB010
E-blocks switch board	EB007
E-Blocks Prototype Board	EB016
E-Blocks LED board	EB004
E-blocks CPLD development board	EB320
25 way D-type to D-type cable	HPCABLE
E-blocks dual 7-seg display board	EB008
CPLD programming CD ROM	ELPLD
FPGA daughter board	EB030
LCD board	EB005
Keypad	EB014
Screw terminal board	EB002
SPI and memory board	EB013
E-blocks IrDA board	EB012

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