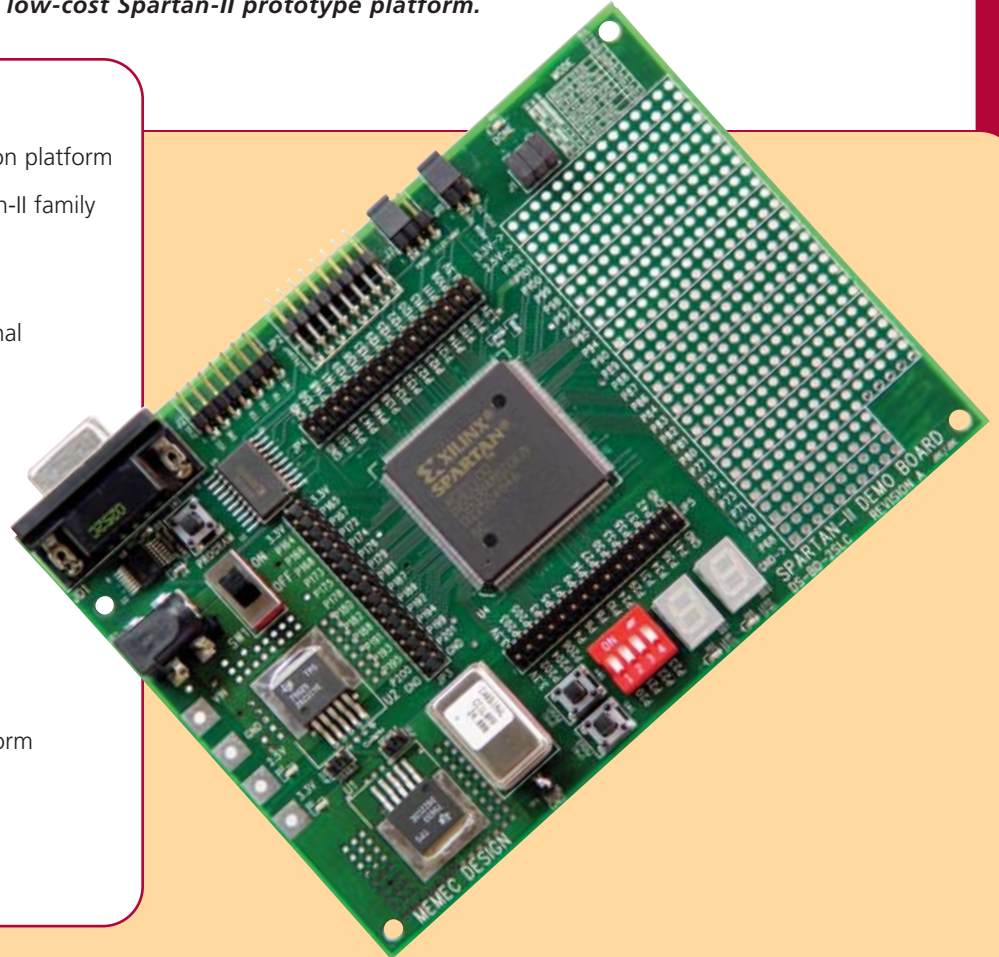# Memec Design

Spartan™-II LC

Product Brief

The Memec Design Spartan-II LC Development Kit is the perfect solution for FPGA designers who need an easy-to-use, flexible, low-cost Spartan-II prototype platform.

Features

- Easy-to-use Spartan-II demonstration platform
- Based on the 100,000-gate Spartan-II family
- User I/O headers provide access to 78 user I/O signals
- Prototype area includes 27 additional user I/O signals
- RS-232 port, two seven-segment LED displays, LEDs, switches
- Configuration support for JTAG, Slave Serial, SelectMAP, ISP Prom, or Platform Flash
- Low cost and flexible

Applications

- General-purpose prototyping platform
- Interface validation
- Simple MicroBlaze™ based designs
- IP development

Product Description

The Spartan-II LC Development Kit provides an easy-to-use, low-cost evaluation platform for developing designs and applications based on the Xilinx Spartan-II FPGA family. The kit bundles a versatile Spartan-II demonstration board with a power supply, user guide, and reference designs. A WebPACK version of the kit adds the Memec Design JTAG programming cable and the Xilinx ISE WebPACK software CD.

The Spartan-II LC demonstration board utilizes the 100,000-gate Xilinx Spartan-II device (XC2S100-5PQ208C)

in the 208-pin quad flat-pack package. The XC2S100 FPGA provides designers with an assortment of system-level features, including block RAM, DLLs, and 2,700 logic cells. This mix of resources even allows implementation of simple MicroBlaze™ based designs. The demonstration board includes the 2.5 V core voltage supply and a fixed 3.3 V I/O voltage supply. Both power supplies can be disabled for external power connection. Seventy-eight user I/O signals from the FPGA are connected to user headers that surround the FPGA, and an additional 27 user I/O signals are brought to the prototype area on the board.
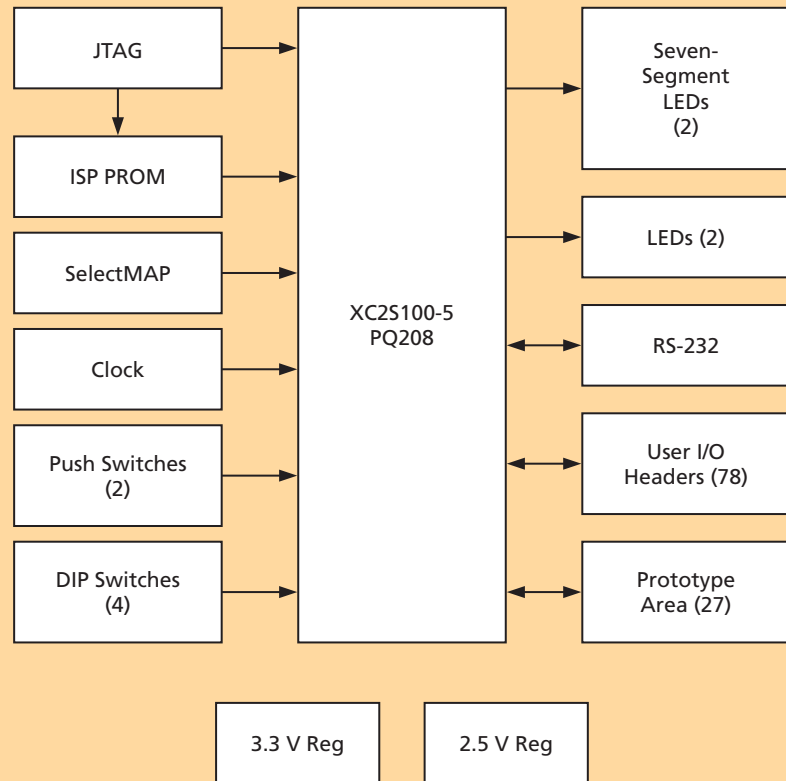
The Spartan-II board includes the 18V01 ISP configuration prom, an optional footprint for the new Xilinx Platform Flash™, a JTAG header, and a SelectMAP connector. An on-board, socketed clock oscillator, RS-232 serial port, two seven-segment LEDs, user LEDs, switches, and additional user support circuits complete the board design.

The Spartan-II FPGA family has the advanced features needed to fit the most demanding, high volume applications. The Memec Design Spartan-II LC Development Kit provides an excellent platform to explore these features so that designers can quickly and effectively meet time-to-market requirements.

Spartan™-II LC

Spartan-II LC Development Kit Includes:

- Spartan-II LC 100 Demonstration Board
  - 100,000-gate Spartan-II FPGA device (XC2S100-5PQ208C)
  - 3.3 V and 2.5 V regulators
  - .1" headers provide access to 78 user I/Os
  - Prototype area provides access to 27 user I/Os
  - RS-232 serial port
  - Two seven-segment LED displays
  - User LEDs and switches
  - On-board clock oscillator
  - JTAG and SelectMAP configuration ports
  - XC18V01 ISP PROM for configuration
  - Footprint for XCF01 Platform Flash ISP PROM
- AC/DC power supply adapter (Americas only)
- Complete reference designs with source code (VHDL and/or Verilog HDL)
- Bundled software options

Block diagram:

JTAG → XC2S100-5 PQ208
ISP PROM → XC2S100-5 PQ208
SelectMAP → XC2S100-5 PQ208
Clock → XC2S100-5 PQ208
Push Switches (2) → XC2S100-5 PQ208
DIP Switches (4) → XC2S100-5 PQ208

XC2S100-5 PQ208 → Seven-Segment LEDs (2)
XC2S100-5 PQ208 → LEDs (2)
XC2S100-5 PQ208 ↔ RS-232
XC2S100-5 PQ208 ↔ User I/O Headers (78)
XC2S100-5 PQ208 ↔ Prototype Area (27)

3.3 V Reg   2.5 V Reg

Ordering Information

Spartan-II LC Development Kit	Americas Part#	International Part#
Spartan-II LC Development Kit	DS-KIT-2SLC100	DS-KIT-2SLC100-EURO
With JTAG Cable and WebPACK CD	DS-KIT-2SLC100-PAK	DS-KIT-2SLC100-PAK-EURO
With JTAG Cable and ISE BaseX	DS-KIT-2SLC100-ISE-BAS	

Spartan™-II LC