

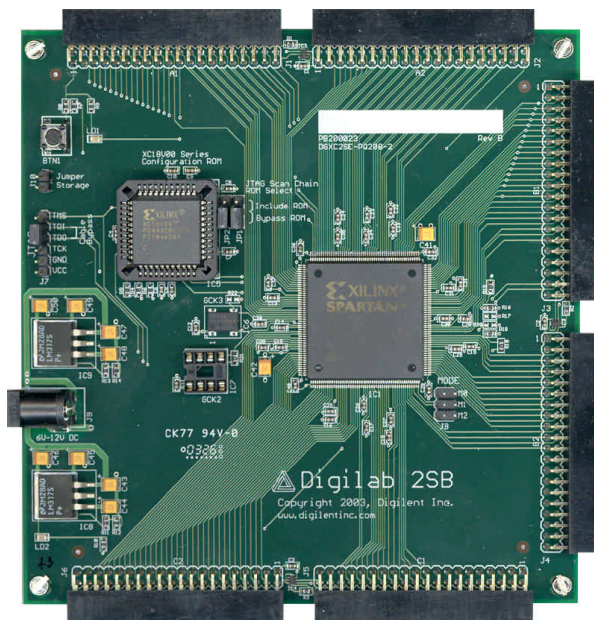
Digilent D2-SB System Board

Featuring the Xilinx Spartan 2E 200K-gate FPGA



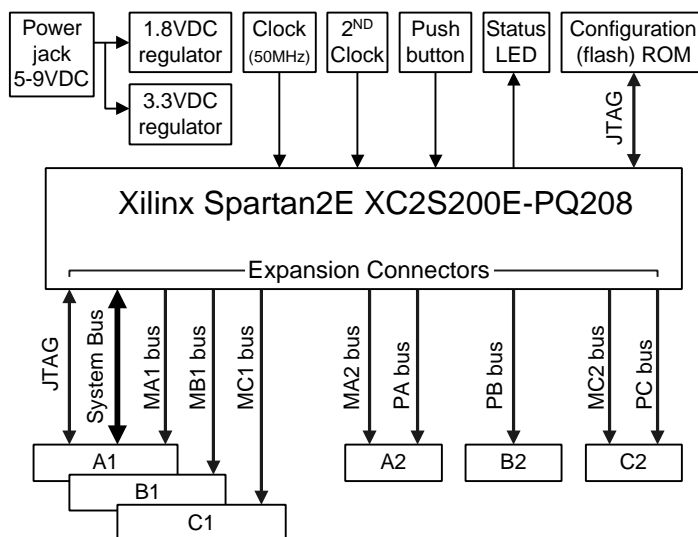
www.digilentinc.com

The Digilent D2SB FPGA-based development board provides a very low cost and expandable platform on which to design and implement digital circuits of all kinds. The D2SB features a Xilinx Spartan 2E-200 FPGA in a PQ208 package - enough gates and I/O's to implement a wide range of digital circuits. The D2SB provides an ideal platform for developing controllers or other general-purpose circuits with minimum effort. When combined with our other peripheral boards, complex systems can be readily constructed. The D2SB is fully compatible with the free WebPack software from Xilinx, and it ships with a power supply and programming cable so designs can be implemented immediately without any further costs.



FEATURES AND BENEFITS

- A Xilinx XC2S200E-200 FPGA with 200,000 gates and 200+MHz operation
- All 143 available user I/O's routed to six 40-pin expansion connectors
- A socket for a JTAG-programmable 18V02 Flash ROM
- Dual on-board 1.5A power regulators (1.8V core and 3.3V I/O)
- A surface-mount 50MHz oscillator and a socket for a second oscillator
- A JTAG programming port and programming cable
- A status LED and pushbutton for basic I/O



APPLICATIONS

- General logic and sequential circuits of all kinds
- Embedded-core processor design (e.g., Xilinx MicroBlaze)
- General digital systems and controllers
- Application specific DSP solutions

Digilent DIO5 System Board

Ready-made I/O for Digilent boards featuring the Xilinx CoolRunner CPLD



www.digilentinc.com

The DIO5 Digital I/O board provides a ready-made source for many of the most common I/O devices and ports found in digital systems. It can be used with the D2SB or D2FT boards to create a platform that can host a wide range of projects. Because it contains a large CPLD to coordinate the various on-board I/O devices, it can also be used to partition designs across the CPLD and an FPGA on an attached system board. Using the DIO5, designs such as a full-function calculator, a complete computer, a simple video game controller, or countless other systems can readily be created.

FEATURES AND BENEFITS

- An XCR3128 CPLD for I/O device and system bus control (the CPLD is automatically inserted in the JTAG scan chain when the DIO5 is attached to any system board)
- A 16x2 character LCD
- A 4-digit seven segment display
- 16 individual LEDs in three different colors
- A 16 button keypad
- 8 slide switches
- 3-bit VGA port
- PS/2 mouse or keyboard port

APPLICATIONS

- I/O devices can be used to create a complete computer system around MicroBlaze
- Any circuit where general-purpose I/O devices are needed
- Can be used with a system board to partition designs across two programmable devices

