# The perfect tool for
PC-based USB I/O experimentation.

- Full Speed USB device

- USB or externally powered

- Fully software compatible with the Adept Runtime System

- C/C++/C#/VB callable API set in Adept Runtime DLLs

- UART Interface

- 1 hardware SPI master port & 3 software SPI master ports

- I2C master port

- 16 discrete LEDs

- 8 slide switches, 4 push button switches, 4 position dip switch, 2 rotary encoders with integral push buttons

- 8 servo drive outputs

- 2 ten-bit A/D inputs with input filters

- 4 twelve-bit D/A outputs with output filters

- 8 ten-bit A/D inputs shared with servo connectors

- Integrated speaker / buzzer

powered by
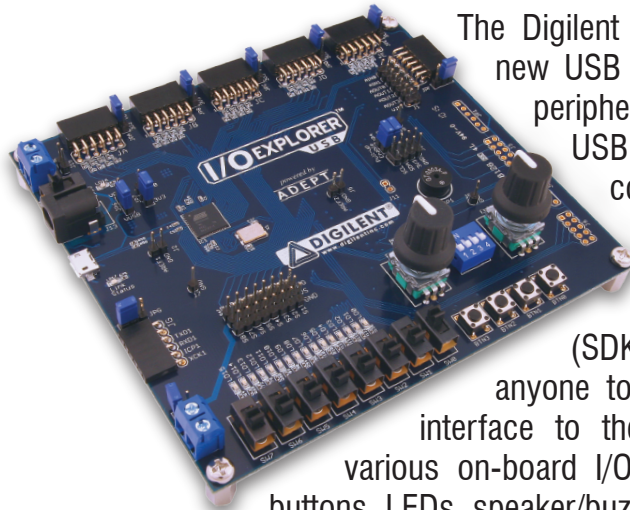
ADEPT™

The Digilent I/O Explorer is an innovative new USB based input/output expansion peripheral for PC computers. It is a USB 2 full-speed device that can be connected to any PC.

Using the free Digilent Adept Software Developer Kit (SDK), the I/O Explorer allows anyone to easily write PC software to interface to the outside world. It provides various on-board I/O devices, such as switches, buttons, LEDs, speaker/buzzer, rotary encoders and has a number of connectors providing up to 52 I/O pins for interfacing to off-board devices. It also provides serial communications interfaces (I2C, SPI, UART) so that the I/O Explorer can be used as a communications bridge to other devices.
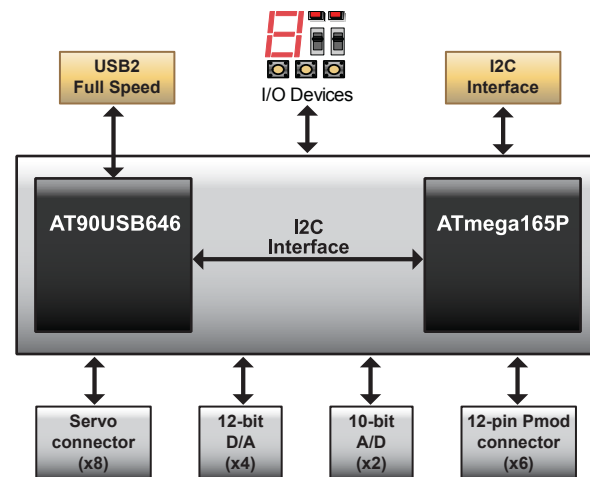
The I/O Explorer has five 12-pin and one 6-pin Digilent Pmod peripheral connectors, 8 connectors for controlling RC servos, two 10-bit A/D inputs supporting continuous sampling, eight 10-bit A/D inputs and four 12-bit D/A outputs. Digilent Pmods include H-bridges, analog-to-digital and digital-to-analog converters, speaker/headphone amplifier, switches, buttons, LEDs, as well as converters for easy connection to RS232, screw terminals, BNC jacks, servo motors, and more.