## **FLEX 10K Device**

The UP2 Education Board provides the following resources for the FLEX 10K device. The pins from the FLEX 10K device are pre-assigned to switches and LEDs on the board.

- JTAG chain connection for the ByteBlaster II cable
- Socket for an EPC1 configuration device
- Two momentary push button switches
- One octal DIP switch
- Dual-digit seven-segment display
- On-board oscillator (25.175 MHz)
- VGA port
- Mouse port
- Three expansion ports, each with 42 I/O pins and seven global pins

## FLEX\_PB1 & FLEX\_PB2 Push Buttons

FLEX\_PB1 and FLEX\_PB2 are two push buttons that provide active-low signals to two general-purpose I/O pins on the FLEX 10K device. FLEX\_PB1 connects to pin 28, and FLEX\_PB2 connects to pin 29. Each push button is pulled-up through a 10-K $\Omega$  resistor.

## FLEX\_SW1 Switches

FLEX\_SW1 contains eight switches that provide logic-level signals to eight general-purpose I/O pins on the FLEX 10K device. An input pin is set to logic 1 when the switch is open and set to logic 0 when the switch is closed. Table 6 lists the pin assignment for each switch.

Table 6. FLEX_SW1 Pin Assignments	
Switch	FLEX 10K Pin
FLEX_SWITCH-1	41
FLEX_SWITCH-2	40
FLEX_SWITCH-3	39
FLEX_SWITCH-4	38
FLEX_SWITCH-5	36
FLEX_SWITCH-6	35
FLEX_SWITCH-7	34
FLEX_SWITCH-8	33

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