

# Artix®-7 35T FPGA Arty Evaluation Kit



## GETTING STARTED

### Hardware Setup

- Plug a microUSB cable into the PC and the combination JTAG & UART port (J10) (this will also power the board). You should see the red POWER (LD11) and green DONE (LD8) LEDs illuminate.

### PC Setup

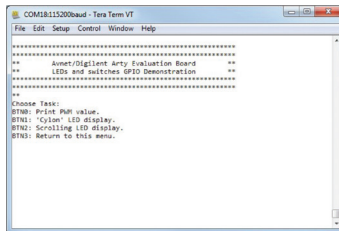
Installing the UART Driver and Virtual COM Port:

- The USB UART driver is built into the device driver for the JTAG interface and is included with the Xilinx Vivado tools installation. As long as the Vivado tools are installed, the USB UART will be recognized when the board is plugged into the host PC. Use the Windows Device Manager to identify the COM port used by the board and open a serial terminal (e.g. TeraTerm or PuTTY) set for 115,200 baud, no parity, 8 bits data, 1 stop bit (115,200,n,8,1). Press the PROG switch to reconfigure the FPGA and restart the GPIO demo.

### GPIO Demo

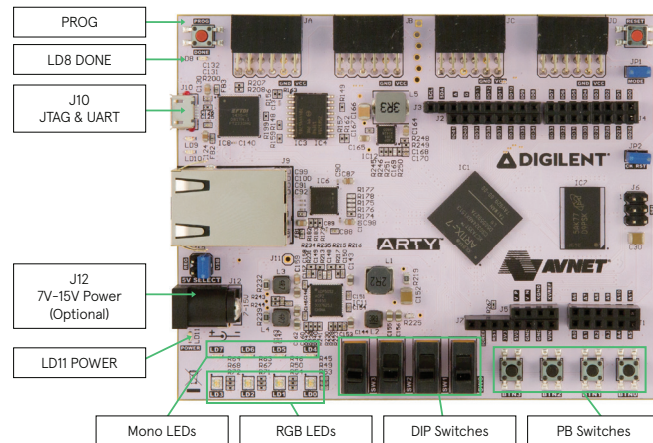
- The GPIO demo software application allows the user to interact with the pushbutton and DIP switches on the board to change the display on the LEDs.
- Use the pushbutton switches to select what to display on the mono and RGB LEDs. Use the DIP switches to change the PWM value used to control the brightness of the mono LEDs.

Please visit [avnet.com/us/artly](http://avnet.com/us/artly) for Support Files & Downloads and download the Arty Out-Of-Box GPIO Demo Design for detailed setup and demo instructions.



### Running the Demo

- Refer to the figure below when running the GPIO demo software application.
- Note the location of the pushbutton switches, DIP switches, and LEDs.



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