

Product:

USB-4750

Topic:

USB-4750 Throughput Rate Details

Description:

This document will let the customer know the throughput rate of USB-4750.

Solution:

In order to measure the timing of the cowork in between the DLL and Hardware, we do some test below.

1. Windows CMD for Module IO Response

Continuously send the signal from Digital Output 0,1,0,1(USB control transfer), and measure the signal by oscilloscope.

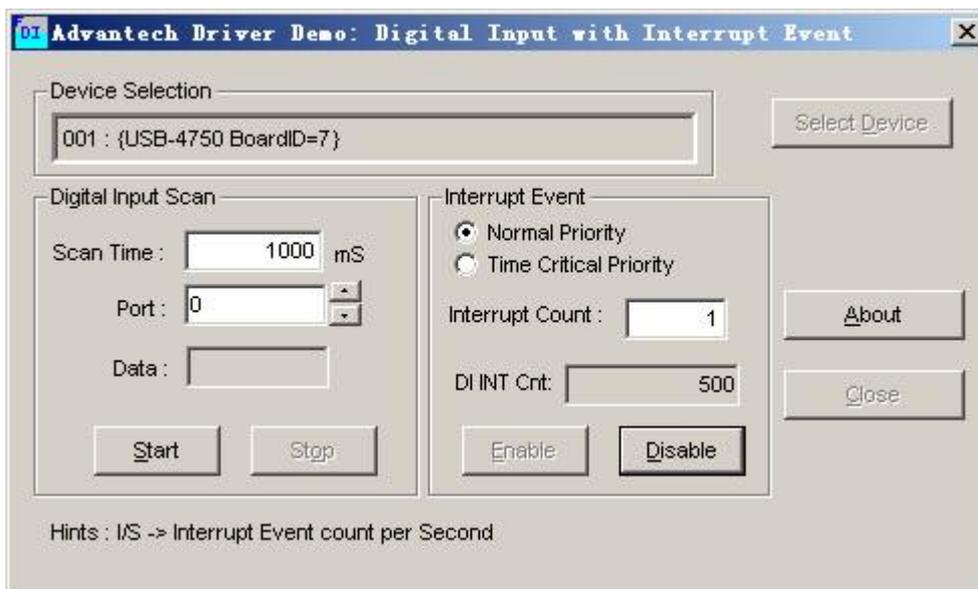
The frequency is 62.5Hz, which means it needs 8 ms to control DO high or low.

2. IO Change for Windows Data Change

Use the modified DI_INT example to let it could show the DI status. DI0 connects to a function generator. And use Burst mode to trigger 500 pulses at once.

Change the frequency range from 500Hz to 5kHz.

When it is Normal Priority Mode, It only could be detected under 600Hz which is shown below.



When it is Time Critical Priority Mode, it could be detected under 4KHz shown below.

