

This zip file contains a USB Bulk transfer example that can be used as a reference to demonstrate a simple driver for the ADSP-BF535. **It is provided for example purposes only.**

The folder "USB\_BF535\_VDSP" contains the VisualDSP++ 4.5 project which will run on the ADSP-BF535 processor

The folder "driver" contains the Windows 2000 drivers.

\*\* This project would only work in Windows 2000.

The folder "blk\_BF535" contains the drivers (they are copied to the "driver" folder for simplicity) and test application.

The test application "blk\_BF535\_test.exe" is found under ...\blk\_BF535\exe\Debug

The test application is a loopback program that sends random amounts of random data randomly to the ADSP-BF535, reads it back, and verifies the data. Near full speed data rates were observed when large amounts of data were being sent ( ~9 Mbits/sec OUT and ~8 Mbits/sec IN).

The data is written to the ADSP-BF535's L2 memory, specifically to **UsbDataBuffer**.

This test program needs to be invoked from a Command Prompt.

**To install the drivers:**

1. Run the VisualDSP code on the processor
2. Attach the USB cable
3. When Windows 2000 asks for the USB driver for the new found USB Device, point it to the folder "drivers"

At this point the driver has been installed.

**To run the test application:**

1. In VisualDSP++ 3.5 IDDE open a Blackfin memory window and right click on it to select "Go To" and select location labeled **UsbDataBuffer**
  - a. Select Run under Debug
2. While the code is running open a Command Prompt window
  - a. In the Command Prompt window go to the location "C:\..\BF535 USB BULK\blk\_BF535\exe\Debug" e.g., cd "C:\..\BF535 USB BULK\blk\_BF535\exe\Debug"
  - b. Type "**blk\_BF535\_test**". This will generate a random data pattern in the location **UsbDataBuffer**
    - i. You may choose to clear or fill this memory region (UsbDataBuffer) to see it change when running the above test application.

**Note: The included drivers are for Windows 2000 only.**