CC32xx TFTP Client Application

Overview

Trivial File Transfer Protocol (TFTP) is a simple, lock-step, file transfer protocol which allows a client to get or put a file onto a remote host.

Application details

This application illustrates how a client application can read/write a file from/to the TFTP server running on the other end of network. This application reads an existing file from the server and write it to device's sFlash memory and on the second step application tries to write same file to server but with different file name. Default setting is defined as in following MACROs, which can be changed either in source code or at runtime.

```
'
#define SSID           "cc3200demo"
#define TFTP_IP        0xc0a80164  /* TFTP server IP */
#define FILE_SIZE_MAX     (20*1024)       /* Max File Size set to 20KB */ '
```

Source Files briefly explained

1. **main** - main file calls simplelink APIs to connect to the network and read/write file from/to the server by calling TFTP library APIs
2. **network_if** - Common network interface APIs
3. **pinmux** - pinmux file to mux the device to configure UART peripheral
4. **uart_if** - Common UART interface APIs
5. **udma_if** - common uDMA interface APIs
6. **startup_*** - interrupt vector table implementation for IAR/CCS IDEs.

TFPT client library is available under '<cc3200-sdk>\netapps\tftp\client' folder.

Usage

- Setup a serial communication application (HyperTerminal/TeraTerm). For detail info visit Terminal setup

On the host PC. The settings are:
  - **Port**: Enumerated COM port (CC3200LP Dual port)
  - **Baud rate**: 115200
  - **Data**: 8 bit
  - **Parity**: None
  - **Stop**: 1 bit
  - **Flow control**: None

- Connect a PC to same AP over which device has connected.
- Get the ip address of the PC and fill this value for TFTP_IP macro and build the application from IAR/CCS
- Run this application (tftp_client) from IAR/CCS or Flash the bin file to device.

Note:

- Make sure file with name 'readFromServer.txt' must be present at server root path and server has enable the write access to it's own file-system.
- Disable PC anti-virus while running TFTP server.

- Observe the execution flow to understand the working.

Article Sources and Contributors

CC32xx TFTP Client Application *Source*: http://processors.wiki.ti.com/index.php?oldid=185073 *Contributors*: Jitgupta