

OP8665 Board Setup

The following section explains how to use the **loadti** application in order to flash the TI module.

Before proceeding, make sure you have:

- Installed Version of Code Composer Studio from TI (ccsv4, ccsv5 or ccsv6)
- JTAG XDS100v2 hardware and cables
- OP8665 setup with power supply
- Target configuration file (.ccxml) and binary file to be flashed (.out)
 - Target configuration file: TMS320F28335_v2.ccxml
 - Binary file: openloop_can.out

Programming Sequence

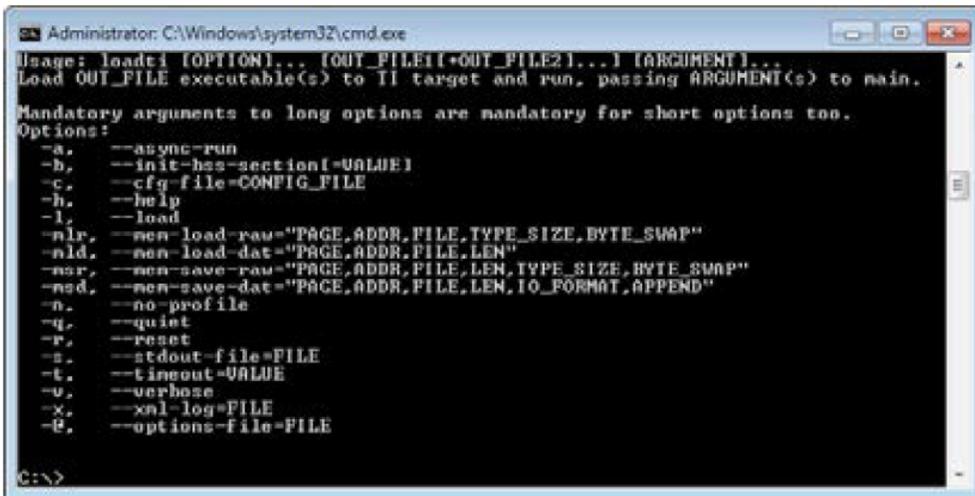
- On the Windows computer where Code Composer Studio is installed, open the Command Prompt window by clicking the Start button, clicking All Programs, clicking Accessories, and then clicking Command Prompt.
- Type one of the following lines, depending on the version of Code Composer Studio installed on your computer, to run **loadti** from any location:

```
CCSV4: set PATH=%PATH%;"<INSTALL PATH>\ccsv4\scripting\examples\loadti"
```

```
CCSV5: set PATH=%PATH%;"<INSTALL PATH>\ccsv5\ccs_base\scripting\examples\loadti";
```

```
CCSV6: set PATH=%PATH%;"<INSTALL PATH>\ccsv6\ccs_base\scripting\examples\loadti";
```

- Once the location of **loadti** is added to the system PATH, it can be called from any folder. To validate that the path is properly set, type **loadti** in the command prompt window. The following options will appear:

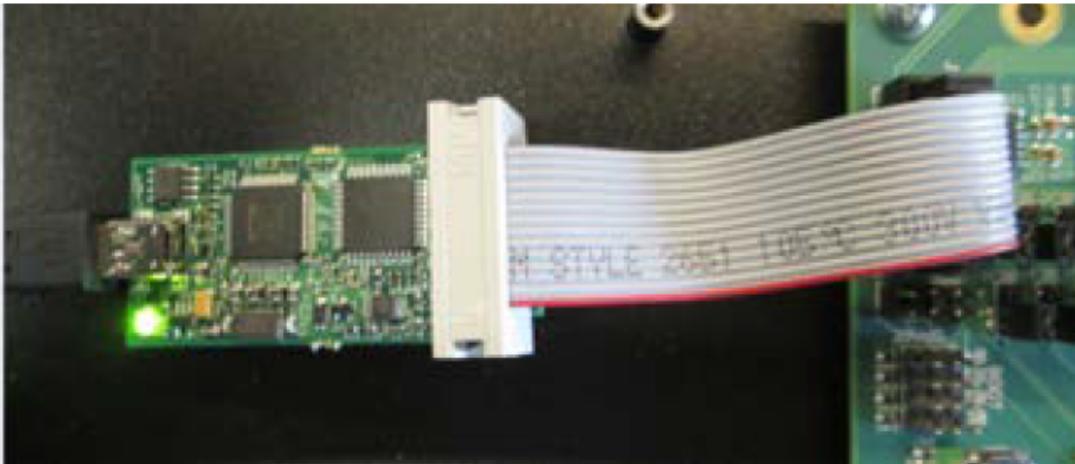


```
Administrator: C:\Windows\system32\cmd.exe
Usage: loadti [OPTION]... [OUT_FILE1+OUT_FILE2]... [ARGUMENT]...
Load OUT_FILE executable(s) to TI target and run, passing ARGUMENT(s) to main.
Mandatory arguments to long options are mandatory for short options too.
Options:
-a, --async-run
-b, --init-hss-section[=VALUE]
-c, --cfg-file=CONFIG_FILE
-h, --help
-l, --load
-nlr, --non-load-raw="PAGE,ADDR,FILE,TYPE_SIZE,BYTE_SWAP"
-nld, --non-load-dat="PAGE,ADDR,FILE,LEN"
-nsr, --non-save-raw="PAGE,ADDR,FILE,LEN,TYPE_SIZE,BYTE_SWAP"
-nsd, --non-save-dat="PAGE,ADDR,FILE,LEN,IO_FORMAT,APPEND"
-n, --no-profile
-q, --quiet
-r, --reset
-s, --stdout-file=FILE
-t, --timeout=VALUE
-u, --verbose
-x, --xml-log=FILE
-B, --options-file=FILE

C:\>
```

You are now ready to flash the program to the TI module.

- Connect the XDS100v2 TI 14 pin JTAG Emulator to the **JTAG connector (G) of the OP8665 Controller Board**.
- Connect the USB-A end of the cable provided to a free USB port on the PC being used. Connect the other end (mini-A) to J1 connector on the JTAG Emulator. The DS1 indicator will turn on.



- Connect the power supply of the OP8665 to the **power input (C)** of the controller interface board, and make sure the TI module LD1 LED is ON.
- Flash the program to the TI Module by typing the following command:

```
loadti -c C:\<location of saved files>\TMS320F28335_v2.ccxml C:\<location of saved files>\ openloop_can.out
```

The output on the command prompt window should look like this:

```
Administrator: C:\Windows\system32\cmd.exe - loadti -c C:\ti\ccsv5\TMS320F28335_v2.ccxml C:\ti...
n package 5.1.73.8)
SEVERE: emulation failure occurred
SEVERE: Error connecting to the target: emulation failure occurred
Error code #4001, could not connect to target!
Aborting!

END: 12:11:58 GMT-0500 (EST)

C:\>loadti -c C:\ti\ccsv5\TMS320F28335_v2.ccxml C:\ti\ccsv5\openloop_can.out

***** DSS Generic Loader *****

START: 12:12:12 GMT-0500 (EST)

Configuring Debug Server for specified target...
Done
TARGET: Texas Instruments XDS100v2 USB Emulator_0
Connecting to target...
testEnv.outFiles: C:\ti\ccsv5\openloop_can.out
Loading C:\ti\ccsv5\openloop_can.out
Done
Target running...
Interrupt to abort . . .
```

- Once the module is programmed, the LED indicator D6 blinks every two seconds.

When the loading is complete, the batch file can be interrupted by typing CTRL-C. You are now ready to use the TI module.