Updating the ADSP-TS101S TigerSHARC® EZ-KIT Lite™ Firmware

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Introduction

This EE-Note applies only to versions of VisualDSP++™ earlier than version 3.5. If VisualDSP++ 3.5 is installed on your computer, do not perform the procedure described in this document.

One USB cable is included with the ADSP-TS101S TigerSHARC® EZ-KIT Lite™ board. The firmware for the USB may be out of date. This EE-Note describes how to update the EZ-KIT Lite firmware.

Error Message

After installing ADSP-TS101S EZ-KIT Lite and VisualDSP++ 3.0 SP1 software and plugging in the included USB cable, the following error message may appear (Figure 1).

Figure 1: Error Message

This message indicates that the firmware must be updated. Perform the following procedure to update the EZ-KIT Lite firmware.

Updating the Firmware

1) Open a Command Prompt window (via the Windows Start button or any other way).

2) From within the Command Prompt window, navigate to the following directory:
   C:\Program Files\Analog Devices\VisualDSP\TS\EZ-KITs\ADSP-TS101\Utilities
   Note: The path shown is for a default installation. Your path may differ if you used another folder.

3) From the Utilities directory, type:
TS101S_Update.exe –h
The help text (man page) shown in Figure 2 appears.
Notice that the "R" option is used to restore registry settings.

```
C:\Program Files\Analog Devices\VisualDSP\TecEZ-KITs\ADSP-TS101\Utilities>TS101S_Update.exe -h
TS101S_Update [-E file_name] [-F] [-R] [-H]
E       - Download to EEPROM. Needs a file name.
F       - Download new firmware image.
R       - Restores Registry Settings. If you are having
        trouble bringing up VisualDSP++, then try this.
H       - Display Help on the Update utility.
```

Figure 2 : Command Prompt Window 1

4) Type: TS101S_Update.exe –R
The following message appears.
Registry restored successfully!!!

5) Type: TS101S_Update.exe –F
The following messages appear:
Please unplug power to the EZ-KIT and plug it back in.
Hit RETURN when the amber monitor LED is lit.

6) Unplug the EZ-KIT Lite power cord and re-plug the cord.
7) Press the keyboard's Enter key.
8) Observe that the USB amber LED is lit.
The following messages will appear. (Figure 3)
Starting to write to flash…
Verifying flash contents…
Flash contents were verified successfully.
Done writing to flash!!!
Then following message will appear.

Please unplug power to the EZ-KIT and plug it back in.
Then hit RETURN.

9) Unplug the power cord again, and plug it back in.
10) Press the keyboard's Enter key.
11) Observe that the USB amber LED is lit.

```
C:\Program Files\Analog Devices\VisualDSP\Ts\EZ-KIT\ADSP-TS101\Utilities\TS101S_Update.exe -f
Registry restored successfully!!!
C:\Program Files\Analog Devices\VisualDSP\Ts\EZ-KIT\ADSP-TS101\Utilities\TS101S_Update.exe -f
******************************************************************************
** Please unplug power to the EZ-KIT and plug it back in. **
** Hit RETURN when the amber monitor LED is lit. **
******************************************************************************

Starting to write to flash...
Verifying flash contents...
Flash contents were verified successfully.
Done writing to flash!!!
******************************************************************************
** Please unplug power to the EZ-KIT and plug it back in. **
** Then hit RETURN. **
******************************************************************************
```

Figure 3 : Command Prompt Window 2

The flash firmware is now updated.

12) Restart the PC.

The error message (Figure 1) should no longer appear.

**Document History**

<table>
<thead>
<tr>
<th>Version</th>
<th>Description</th>
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<tbody>
<tr>
<td>December 02, 2003 by Tadahiro Shimoda</td>
<td>Initial Release</td>
</tr>
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