# **Engineer-to-Engineer Note**



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## Updating the ADSP-TS101S TigerSHARC® EZ-KIT Lite<sup>TM</sup> Firmware

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#### Introduction

This EE-Note applies only to versions of VisualDSP++<sup>TM</sup> 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<sup>™</sup> 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 The firmware for the USB may be out of date.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).

WmTS101SEz		
♪	The current firmware version is: 1.0. Firmware version 1.1 is required. Please verify that the USB Monitor LED is on before starting VisualDSP. If the problem persists, first try recycling power to the board after closing VisualDSP. If you are still having problems, try running the TS101S_Update utility from a command prompt. This utility is located in the Utilities folder where you installed the EZ-KIT software. Using the -h switch will provide help on this utility.	
	<u>OK</u>	

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).
- 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.

🖾 Command Prompt	
C:\Program Files\Analog Devices\VisualDSP\Ts\EZ-KITs\ADSP-TS101\Utilities>TS10 _Update.exe -h	91S <b>^</b>
TS101S_Update [-E *file_name*] [-F] [-R] [-H]	
<ul> <li>E - Download to EEProm. Needs a file name.</li> <li>F - Download new firmware image.</li> <li>R - Restores Registry Settings. If you are having trouble bringing up VisualDSP++, then try this.</li> <li>H - Display Help on the Update utility.</li> </ul>	
Utility Version : 1.00.1 Image Version : 1.00.1	
Copyright <c>2002 Analog Devices Inc., All Rights Reserved</c>	
C:\Program Files\Analog Devices\VisualDSP\Ts\EZ-KITs\ADSP-TS101\Utilities>	
	-

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.
- 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.

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Command Prompt - TS1015_Update.exe -F
                                                                        _ 🗆 🗙
C:\Program Files\Analog Devices\VisualDSP\Ts\EZ-KITs\ADSP-TS101\Utilities>TS101S
_Update.exe -R
Registry restored successfully!!!
C:\Program Files\Analog Devices\VisualDSP\Ts\EZ-KITs\ADSP-TS101\Utilities>TS101S
_Update.exe -F
    Please unplug power to the EZ-KIT and plug it back in.
                                                          ж×
κж
                                                          ж×
....
    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.
                                                          жж
                                                          ××
    Then hit RETURN.
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                                                          **
```

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**

Version	Description
December 02, 2003 by Tadahiro Shimoda	Initial Release