Summit-ICE Emulator Hardware and Software Installation Guide

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Analog Devices, Inc. Digital Signal Processing Division One Technology Way Norwood, MA 02062-9106



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1 Introduction

Thank you for purchasing Analog Devices Summit-ICE PCI-based JTAG emulator. The Summit-ICE is used in conjunction with the VisualDSP++ development environment to create, test and debug advanced DSP application software on all of Analog devices fixed and floating-point JTAG based DSPs.

The Summit-ICE system provides state-of-the-art support for JTAG-compliant Analog Devices DSPs. Key features of the Summit-ICE include:

- Plug-n-Play PCI card
- Windows® 98, Windows NT, Windows® 2000, or Windows XP operation
- Emulation for the industry standard Analog Devices JTAG families of DSPs
- Rugged high-speed JTAG emulation pod

1.1 For More Information About Analog Devices Products

Analog Devices can be accessed on the Internet at http://www.analog.com. You can directly access the DSP Web pages at http://www.analog.com/dsp. This page provides access to DSP specific technical information and documentation, product overviews, and product announcements. specific information about For DSP tools. go to http://www.analog.com/dsp/tools.

You may also obtain additional information about Analog Devices and its products in any of the following ways:

- FAX questions or requests for information to (781) 461-3010.
- Access the Computer Products Division File Transfer Protocol (FTP) site at <u>ftp://ftp.analogdevices.com/</u> or <u>ftp://137.71.25.69</u> or <u>ftp://ftp.analog.com</u>.

1.2 For Technical or Customer Support

You can reach our Customer Support group in the following ways:

- E-mail DSP Tools questions to: <u>dsptools.support@analog.com</u>
- DSP Tools Tech Support Form: <u>http://www.analog.com/industry/dsp/tools/form_techsupport.html</u>
- E-mail general DSP questions to: <u>dsp.support@analog.com</u>

dsp.europe@analog.com (European customer support)

- Call: (800) ANALOGD
- Contact your local Analog Devices sales office or an authorized Analog Devices distributor.

1.3 Purpose of This Manual

The *Summit-ICE Hardware and Software Installation Guide* provides directions for installing the hardware and software for the Summit-ICE on your PC. This manual also provides a description of the use and configuration of the components on the Summit-ICE PCI-based emulator.

1.4 Intended Audience

This manual is an installation guide for the Summit-ICE PCI-based emulator. This manual is intended to help the customer quickly install the Summit-ICE so that they can begin using VisualDSP++.

1.5 Manual Contents

This manual contains the following information:

• Chapter 1 — Introduction

Provides manual information and Analog Devices contact information.

• Chapter 2— Getting Started

Provides software and hardware installation procedures, PC system requirements, and basic board information.

- Chapter 3 Support Provides Technical Support Contact information.
- Chapter 4 References

Provides information on different resources available in developing an ADI DSP application.

1.6 On-line Help

Your software installation kit includes online Help as part of the Windows[®] interface. These Help files provide information about VisualDSP++ and the Summit-ICE.

To view the VisualDSP++'s Help, click on the **Help** menu item or go to the Windows task bar and select Start\Programs\VisualDSP\VisualDSP++ Help.

The documents in the following two tables can be found through online help or in the Docs folder of your VisualDSP++ installation.

For more documentation, please go to http://www.analog.com/dsp/tech_doc.

2 Getting Started

2.1 Overview

This chapter provides the information you need to begin using the Summit-ICE system. Install your software and hardware in the order presented in section 2.4 for correct operation. This chapter has the following sections:

- Contents of your Summit-ICE Package (Section 2.2) Provides a list of the components that are shipped with this Summit-ICE PCIbased Emulator.
- PC Configuration (Section 2.3) Describes the minimal requirement for the PC to work with the Summit-ICE PCI-based Emulator.
- Installation Tasks (Section 2.4) Describes the step-by-step procedure for setting up the hardware and software.

2.2 Contents of your Summit-ICE Package

Your Summit-ICE PCI-based emulator package contains the following items:

- Summit-ICE JTAG daughter card
- Summit-ICE pod assembly
- CD containing emulation driver software
- Registration card please fill out and return

The Summit-ICE PCI-based emulator contains ESD (electrostatic discharge) sensitive devices. Electrostatic charges readily accumulate on the human body and equipment and can discharge without detection. Permanent damage may occur on devices subjected to high-energy discharges. Proper ESD precautions are recommended to avoid performance degradation or loss of functionality. Store used Summit-ICE in the protective-shipping package.



2.3 PC Configuration

For correct operation of the Summit-ICE PCI-based emulator, your computer must have the minimal configuration shown in Table 2-1.

Table 2-1: Minimum PC Configuration

Windows® 98, Windows NT, Windows® 2000, or Windows XP
Intel (or compatible) 166 MHz processor
VGA monitor and color video card
2-button mouse
50 MB free on hard drive
32 MB RAM
One available PCI slot
CD-ROM drive

2.4 Installation Tasks

The following tasks are provided for the safe and effective use of the Summit-ICE PCI-based emulator. Follow these instructions in the order presented to ensure correct operation of your software and hardware.

- 1. Install the Summit-ICE hardware
- 2. Install the Summit-ICE driver
- 3. Verify driver installation.

2.4.1 Install the Summit-ICE Hardware

This section provides all of the information required to install the Summit-ICE card and pod into your PC.

The Summit-ICE PCI-based emulator contains ESD (electrostatic discharge) sensitive devices. Electrostatic charges readily accumulate on the human body and equipment and can discharge without detection. Permanent damage may occur on devices subjected to high-energy discharges. Proper ESD precautions are recommended to avoid performance degradation or loss of functionality. Store used Summit-ICE in the protective-shipping package.



2.4.1.1 Unpacking the Emulator

Remove the Summit-ICE board and pod from the package. Care should be taken when handling these boards to avoid discharge of static electricity, which may damage some components. Put the pod aside. The Summit-ICE board must first be installed in your computer.

2.4.1.2 Installing the Summit-ICE Board in your Computer

For specific instructions on installing a PCI card into your computer consult the documentation that is provided by the manufacturer of your computer.

Upon installing your Summit-ICE you will need to install the driver before you can use it for the first time. Refer to section 2.7 for instructions on how to install the appropriate driver.

2.4.1.3 Configuring the Summit-ICE Pod

The Summit-ICE pod contains four internal jumpers. These jumpers are accessed by removing the four screws on the bottom of the plastic enclosure and removing the top of the enclosure. The jumpers are shown in Figure 2-1. The Summit-ICE pod also contains two status LEDs. The LED on the left is for voltage status (3V/5V) and the LED on the right is for emulator status. The LEDs are shown in Figure 2-2. Periodic LED activity on the emulator status LED indicates communication between the target DSPs and emulator.



Figure 2-1 Jumpers



Figure 2-2 LEDs

2.4.1.3.1 Connecting to a 5V Target

Jumper J1 is used to differentiate between a 3V or 5V target. This is the only jumper that most users will need to change. When the jumper is installed the JTAG signals are configured to connect to a 5V target. When the jumper is installed the LED on the left side is not illuminated.

2.4.1.3.2 Connecting to a 3V Target

When the jumper is not installed the JTAG signals are configured to connect to a 3V target. When the jumper is not installed the LED on the left is illuminated indicating a 3V target. This is the default setting.

2.4.1.3.3 Reducing Noise Issues on the JTAG Signals

There are three jumpers provided to help reduce problems that may arise because of ringing and reflections on the JTAG signals on the target board. The default is that these jumpers are not installed. The three jumpers are J2, J3, and J4.

Jumpers J2 and J3 are used for adding a parallel terminator on the TDO and CLKIN signals. When the jumper is installed a parallel terminator of 120Ω and 91Ω is connected to the TDO and CLKIN signals. Figure 2-3 shows how the terminator is connected to the JTAG signals. It is important to note that the target MUST be able to drive a 51Ω load before these jumpers are installed. The DSP cannot drive this load directly; a driver should be inserted between the JTAG signals on the DSP and the JTAG signals on the header.



Figure 2-3 Terminators connected to the JTAG Signals

Jumper J4 is provided to allow the board level test pins on the JTAG connector (BTMS, BTCK, BTRST, and BTDI) to be used as ground pins to allow for greater shielding on the JTAG cable connecting the pod to the target. These pins should only be used as ground pins if they are not used on your target.

2.5 Connecting the Pod to the Summit-ICE Board

The pod connects to the Summit-ICE board through a shielded flat ribbon cable and a 25-pin connector. Connect the pod to the Summit-ICE before applying power to the PC. The JTAG header attached to the pod can be connected/disconnected without damaging the pod system as long as the target system is powered down.

Important! Connect/disconnect the remote pod to/from the emulator card *only* with the power turned off. Failure to follow this precaution may result in damage to the pod or board.

2.6 Connecting the Pod to your Target System

The pod connects to the target processor through the JTAG interface. The target board must be built with an appropriate JTAG connector. Please note the position of the key pin. The key pin should be used as a guide to connect the pod to the target. Included with the Summit-ICE system are two extender connectors. These extenders are used to connect the Summit-ICE system to a target, which was designed for use with the ADI ICEPACTM. These extenders allow connection to the JTAG pins on the ICEPAC header.

2.7 Installing the Summit-ICE PCI Driver

The Summit-ICE can be installed on Windows 98, Windows NT, Windows 2000, and Windows XP and requires one available PCI slot. Section 2.7.1 describes the installation on Windows 98. Section 2.7.2 describes the installation on Windows NT. Section 2.7.3 describes the installation on Windows 2000. Section 2.7.4 describes the installation on Windows XP.

2.7.1 Windows 98 PCI Driver Installation

Before using the Summit-ICE for the first time, the Windows 98 PCI driver must be installed. This is accomplished as follows:

- 1. Insert the VisualDSP++ Emulator Tools CD-ROM into the CD-ROM drive.
- 2. Power on the PC and start Windows 98. This will activate the **Windows 98 Add New** Hardware Wizard as shown in Figure 2-4.

Add New Hardware Wizard	
	This wizard searches for new drivers for: PCI Device A device driver is a software program that makes a hardware device work.
	< Back Next > Cancel

Figure 2-4: Add New Hardware Wizard Dialog Box

- 3. Click Next.
- 4. Select Search for the best driver for your device as shown in Figure 2-5.



Figure 2-5: Search for the Driver

- 5. Click Next.
- 6. Select **CD-ROM drive** as shown in Figure 2-6.

Add New Hardware Wizard		
	Windows will search for new drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.	
	Eloppy disk drives	
	I✓ <u>C</u> D-ROM drive	
🛛 🗞 😞	Microsoft Windows Update	
	Specify a location:	
 ↓ 	D:\WIN98	
	Browse	
	< <u>B</u> ack Next> Cancel	

Figure 2-6: Search the CD-ROM

7. Click Next.

Windows 98 will locate the PCIEmul.inf file that is on the CD-ROM as shown in Figure 2-7.

Add New Hardware Wizard	
	Windows driver file search for the device:
	Summit-ICE PCI Emulator
	Windows is now ready to install the best driver for this device. Click Back to select a different driver, or click Next to continue.
🏽 🇞 🌧 🛛	Location of driver:
Ţ,	
	< <u>B</u> ack Next > Cancel

Figure 2-7: The Driver is Located

8. Click Next.

Figure 2-8 will appear.

Copying	Files	×
_	The file 'MtnSmtlce.sys' on (Unknown) cannot be found.	OK
_	Setup had trouble copying a file. Click OK to try copying the file again. If this message	Cancel
	reappears, quit Setup and then try running Setup again.	<u>S</u> kip File
	Copy files from:	<u>D</u> etails
	D:\WIN98	<u>B</u> rowse

Figure 2-8: Search for .sys File Dialog Box

9. Click **Browse** button.

Figure 2-9 will appear.

Open		? ×
File <u>n</u> ame: MtnSmtIce.sys	Eolders: d:\ d:\	OK Cancel N <u>e</u> twork
	Drives:	

Figure 2-9: Open the .sys File

10. In **Drives** select your CD-ROM drive.

11. Click **OK**.

Figure 2-10 will appear.



Figure 2-10: Copying Files

12. Click OK.

The driver installation is now complete as shown in Figure 2-11.

Add New Hardware Wizard	
	Summit-ICE PCI Emulator
	Windows has finished installing the software that your new hardware device requires.
8	
	< Back Finish Cancel

Figure 2-11: Finish the Software Installation

13. Click **Finish** to exit the wizard.

Verify driver installation by following the instructions in Section 2.7.5.

2.7.2 Windows NT PCI Driver Installation

Before using the Summit-ICE for the first time, run the Emulator Tools installation and be sure to select Summit/Mountain as the Emulator to install. The install will place the driver in the appropriate folder so that the driver is installed properly.

2.7.3 Windows 2000 PCI Driver Installation

Before using the Summit-ICE for the first time, the Windows 2000 PCI driver must be installed. This is accomplished as follows:

- 1. Insert the VisualDSP++ Emulator Tools CD-ROM into the CD-ROM drive.
- 2. Power on the PC and start Windows 2000. This will activate the **Windows 2000 Found** New Hardware Wizard as shown in Figure 2-12.



Figure 2-12: Found New Hardware Wizard

- 3. Click Next.
- 4. Select Search for a suitable driver for my device as shown in Figure 2-13.

Found New Hardware Wizard		
Install Hardware Device Drivers A device driver is a software program that enables a hardware device to work with an operating system.		
This wizard will complete the installation for this device:		
PCI Device		
A device driver is a software program that makes a hardware device work. Windows needs driver files for your new device. To locate driver files and complete the installation click Next.		
What do you want the wizard to do?		
 Search for a suitable driver for my device (recommended) 		
Display a list of the known drivers for this device so that I can choose a specific driver		
< Back Next > Cancel		

Figure 2-13: Search for a Suitable Driver

- 5. Click Next.
- 6. Ensure that **CD-ROM drive** is selected as shown in Figure 2-14.

Found New Hardware Wizard	
Locate Driver Files Where do you want Windows to search for driver files?	
Search for driver files for the following hardware device: PCI Device The wizard searches for suitable drivers in its driver database on your computer and in any of the following optional search locations that you specify. To start the search, click Next, If you are searching on a floppy disk or CD-ROM drive,	
Insert the Hoppy disk of CD before clicking Next. Optional search locations: ☐ Floppy disk drives ☑ CD-ROM drives ☐ Specify a location ☐ Microsoft Windows Update	
< Back Next > Cancel	

Figure 2-14: Locate Driver Files

7. Click Next.

Figure 2-15 appears.

Found New Hardware Wizard
Driver Files Search Results The wizard has finished searching for driver files for your hardware device.
The wizard found a driver for the following device:
PCI Device
Windows found a driver for this device. To install the driver Windows found, click Next.
d:\PCIEmul.inf
< Back Next> Cancel

Figure 2-15: Driver File Search Results

8. Click Next.

Windows 2000 will automatically install the Summit-ICE JTAG Emulator driver. The driver installation is now complete as shown in Figure 2-16.



Figure 2-16: Completing Driver Installation Dialog Box

9. Click **Finish** to exit the wizard.

Verify driver installation by following the instructions in section 2.7.5.

2.7.4 Windows XP PCI Driver Installation

Before using the Summit-ICE for the first time, the Windows XP PCI driver must be installed. This is accomplished as follows:

- 1. Insert the VisualDSP++ Emulator Tools CD-ROM into the CD-ROM drive.
- 2. Power on the PC and start Windows XP. This will activate the **Windows XP Found** New Hardware Wizard as shown in Figure 2-17.

Found New Hardware Wizard				
	Welcome to the Found New Hardware Wizard			
	This wizard helps you install software for:			
	PCI Device			
	If your hardware came with an installation CD or floppy disk, insert it now.			
	What do you want the wizard to do? Install the software automatically (Recommended)			
	Install from a list or specific location (Advanced)			
	Click Next to continue.			
	< Back Next > Cancel			

Figure 2-17: Found New Hardware Wizard

- 3. Select Install from a list or specific location.
- 4. Click Next.

5. Select Search for the best driver in these locations and select Include this location in the search as shown in Figure 2-18. Enter the path for the drive that contains VisualDSP++ Emulator Tools CD-ROM.

Found New Hardware Wizard
Please choose your search and installation options.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM)
✓ Include this location in the search:
d:\ Browse
Don't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< <u>B</u> ack <u>N</u> ext > Cancel

Figure 2-18: Search for a Suitable Driver

6. Click Next.

7. Windows XP will automatically install the Summit-ICE JTAG Emulator driver. The driver installation is now complete as shown in Figure 2-19.

Found New Hardware Wizard				
Found New Hardware Wize	Completing the Found New Hardware Wizard The wizard has finished installing the software for: Summit-ICE PCI Emulator			
	Click Finish to close the wizard.			
	< <u>B</u> ack Finish Cancel			

Figure 2-19: Completing Driver Installation Dialog Box

8. Click **Finish** to exit the wizard.

Verify driver installation by following the instructions in Section 2.7.5.

2.7.5 Verifying Driver Installation

Before using your Summit-ICE PCI-based emulator, verify that the PCI driver software is installed properly.

1. Open **Device Manager** and verify that Summit-ICE JTAG Emulator shows under DSP Emulators with no exclamation point as shown in Figure 2-20.

🚇 Device Manager	
Action View	
NASH-COMPUTER	
🗄 🖳 Computer	
⊡ —	
🕀 🖳 Display adapters	
□ ····································	
Summit CE PCI Emulator	
DUD/CD-ROM drives	
Elegan disk controllers	
the second seco	
Monitor Monitor	
E B Network adapters	
The Ports (COM & LPT)	
Profit Sound, video and name controllers	
The System devices	
The Universal Serial Bus controllers	

Figure 2-20: Verifiying Driver Installation

2. From Start\Program Files\VisualDSP\ICE Test Utility open IceTest as shown in Figure 2-21 to verify that the driver is installed correctly and that there is connectivity with the target board.

🚇 ICE Test	_ 🗆 ×
Emulator	
Type: Summit-ICE	▼
Base Address: DC60	
Status	 Continuous scan
Opening Emulator Interface	Continuous scan
Resetting ICEPAC module	Start
Testing ICEPAC memory	
Determining scan path length	Exit
Performing scan test	Help

Figure 2-21: IceTest Utility

3. If there is more than one emulator installed in the PC click on the **browse** button ("...") to the right of Type as shown in Figure 2-21 to bring up the list of Emulators installed as shown in Figure 2-22. If there is only one emulator installed in the PC then the address information will be filled in automatically when launching IceTest and you can skip to step 5.

Detected Emulator	5		? ×
Туре		Address	
🔧 Summit-ICE		0xDC60	
I			
		Lancel	

Figure 2-22: Detected Emulators

- 4. Choose **Summit-ICE** as shown in Figure 2-22 and click **OK**. This will fill in Base Address with the appropriate address as shown in Figure 2-21.
- 5. Ensure that the JTAG header is connected to a target board and click Start.
- 6. If all the tests pass, green check marks appear next to the entries in the Status group as shown in Figure 2-23.

🚇 ICE Test	÷				_ 🗆 ×
Emulator					
	Туре:	Summit-ICE		•	
Base	Address:	DC60			
- Status					
1	Opening	Emulator Interf	ace	🔲 Contin	uous scan
1	Resetting) ICEPAC modu	le	Sta	art
1	Testing I	CEPAC memory	,		<u> </u>
1	2 JTAG o	device(s) detec	ted	E>	it
1	Performin	ng scan test: 1		Не	ь I
					Ψ

Figure 2-23: IceTest Pass

The driver is installed correctly and communication with the target board has been established.

If they do not pass you will see a note at the bottom of the dialog box explaining the failure in more detail as show in Figure 2-24.

🚇 ICE Tes	t	_ 🗆 X
Emulator		
	Type: Summit-ICE	▼
Base	Address: DC60	
- Status		
1	Opening Emulator Interface	Lontinuous scan
1	Resetting ICEPAC module	Start
1	Testing ICEPAC memory	
×	Determining scan path length	Exit
	Performing scan test	Help
No JTAG (devices detected in the scan path. Che	eck target power and
veniy JTA	a signal integrity.	

Figure 2-24 IceTest Failure

2.7.6 Creating a New Platform

When creating a new platform, use an existing template or create a new template from scratch. Base your platform on one of the existing platforms (Analog Devices evaluation kits) listed in the VisualDSP++ Configurator window's Platform Templates box. To launch the VisualDSP++ Configurator go to Start\Program Files\VisualDSP\VisualDSP++ Configurator.

2.7.6.1 Creating a new platform based on an Analog Devices Evaluation Kit

To create a platform that is based on an Analog Devices, Inc. evaluation kit follow theses instructions:

> NOTE: The Addresses shown are for example purposes only. Actual addresses will depend on the PC and operating system.

- 1. Bring up the **VisualDSP++ Configurator** from the Windows Start menu.
- 2. In the Platform Templates box, **highlight the template** on which to base your new platform as shown in Figure 2-25.

VisualDSP+	+ Configurator			_ 🗆 ×
	Platform Templates		Platforms	
Copy	∰ADSP-21535 EZ-KIT Lite via Summit ∰ADSP-TS101 EZ-KIT Lite via Summit			New Modify Delete Delete All
	OK	Cance	Help	·

Figure 2-25: VisualDSP++ Configurator (from template)

3. Click Copy and Figure 2-26 will appear.

Platform Properties				? ×
Platform:	- Devices:			
Name: ADSP-TS101 EZ-KIT Lite via Summit	De	vices listed in seq	uential order from TDO to 1	ſDI
	TDO	Name		New
		ISPU DSP1	ADSP-TS101 ADSP-TS101	Modify
Emulator Settinos:				Delete
Base Address: DC60				
				Up
	TDI			Down
	OK	Cancel		

Figure 2-26: Platform Properties (from template)

4. If required, you can add a new device by following steps 9 and 10 in section 2.7.6.2 or click **OK** to add your new platform as shown in Figure 2-27.

😵 VisualDSP + ·	+ Configurator			
	Platform Templates		Platforms	
Copy	ADSP-21535 EZ-KIT Lite via Summit ADSP-TS101 EZ-KIT Lite via Summit		ADSP-TS101 EZ-KIT Lite via Summit	New Modify Delete Delete All
	ОК	Cance	I Help	

Figure 2-27: VisualDSP++ Configurator (from template) Platform Added

5. Click **OK** to finish the VisualDSP++ Configurator

2.7.6.2 Creating a New Platform from Scratch

Follow the instructions below to create a platform that is **not** based on an Analog Devices evaluation kit.

- 1. Bring up the **VisualDSP++ Configurator** from the Windows Start menu.
- 2. Click New in the VisualDSP++ Configurator to open the Platform Properties dialog box as shown in Figure 2-28 to create a new platform.

Platform Properties				? ×
Platform:	- Devices: -			
Name: Platform 0	De	vices listed in sequen	tial order from TDO to TD)
	TDO	Name	Туре	New
Type: Summit-ICE		Device 0	Unknown	Modify
				Delete
Emulator Settings:				Delete All
Base Address: DC60				
				Up
	TDI			Down
	or 1	Course 1		
		Lancel		

Figure 2-28: Platform Properties (from scratch)

- 3. In the name field, **type** an appropriate name for the platform that is being created. The Type field indicates the type of emulator that you would like to use.
- 4. If there is more than one emulator installed in the PC click on the **browse** button ("…") to the right of Type as shown in Figure 2-28 to bring up the list of Emulators installed shown in Figure 2-29. If there is only one emulator installed in the PC then the address information will be filled in automatically when launching IceTest and you can skip to step 6.

Detected Emulators	? 🗙
Туре	Address
reference Summit-ICE	0xDC60
ОК	Cancel

Figure 2-29: Detected Emulators

- 5. **Highlight** the emulator to be used for your platform and click **OK**. Notice that the Emulator Settings group shown in Figure 2-28 gets filled in with the correct information based on the emulator you chose.
- 6. **Highlight Device 0** in the Devices list and click **Modify** to display the Device Properties dialog box shown in Figure 2-30.

Name: Device 0	
Type: ADSP-TS101	•
JTAG instruction register width: 5	
Initial reset on startup	

Figure 2-30: Device Properties

- 7. Select an appropriate name for your device and then select the type of device to which you will be connecting.
- 8. Click **OK** and you will see that your device shows up under the Devices list with the appropriate type as shown in Figure 2-31.

Platform Properties				? ×
Platform:	Devices:			
Name: ADSP-TS101S Summit-ICE	De	vices listed in sequent	ial order from TDO to TI	ы
	TDO	Name	Туре	New
Type: Summit-ICE		Device 0	ADSP-TS101	Modify
				Delete
Emulator Settings:				Delete All
Base Address: DC60				
				Up
	TDI			Down
OK Cancel				

Figure 2-31: Platform Properties (from scratch) Device Added

9. Click **OK** to add your new platform as shown in Figure 2-32.

🐉 VisualDSP + +	+ Configurator			_ 🗆 ×
	Platform Templates]	Platforms	
Copy	ADSP-21535 EZ-KIT Lite via Summit ADSP-TS101 EZ-KIT Lite via Summit		ADSP-TS101 EZ-KIT Lite via Summit ADSP-TS101S Summit-ICE	New Modify Delete Delete All
OK Cancel Help				

Figure 2-32: VisualDSP++ Configurator (from scratch) Platform Added

10. Click **OK** to finish the VisualDSP++ Configurator.

3 Support

3.1 Technical Support

For technical support, you may contact the Analog Devices DSP Tools Technical Support group in any of the following ways:

- Fill out the DSP Tools Technical Support Web site form at: http://forms.analog.com/Form Pages/DSP/tools/contactDSP.asp
- Send a description of the problem by e-mail to: <u>dsptools.support@analog.com</u>
- Call the customer support hotline at 1-800-ANALOG-D (1-800-262-5643 U.S.A. only)

For direct support of the Analog Devices' DSPs, call the Analog Devices' DSP Applications Engineering group at 1-800-ANALOG-D or email <u>dsp.support@analog.com</u>.

3.2 Quality Assurance

Analog Devices is committed to providing quality products and services. To continually provide this quality, please contact our Quality Assurance Department directly if you have any concerns (603) 883-2430, Monday through Friday during normal business hours or via e-mail at *dsptools@analog.com*. Our Quality Assurance Manager will listen to your concerns and provide a timely and effective solution.

4 References

This section describes other documentation resources you may find helpful in developing your application.

- For information on designing the interface between an Analog Devices JTAG DSP and the emulation header on your custom DSP target board, refer to the latest version of Analog Devices EE-68.
- For information on the architecture and system interface of the ADSP processor, refer to the appropriate Analog Devices *DSP Hardware Reference*.
- For ADSP timing specification and other hardware design information, refer to the appropriate DSP *Data Sheet*.
- For complete information on software development tools (assembler, compiler, linker, and so on), refer to the documentation included with VisualDSP++. This information is available in printed manuals, online help, and online in PDF format.
- For information about your development platform, refer to your operating system manuals and hardware system manuals.
- For information about digital signal processing theory and applications, you may wish to consult:
 - Higgins. Digital Signal Processing In VLSI. Prentice-Hall, 1990.
 - Oppenheim and Schafer. Digital Signal Processing. Prentice-Hall, 1975.

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