Study-USB2.0 仿真器产品说明

[实物照片]



[主要特点]

- 1、适用于工作电压在1.0~5.0伏之间的数字信号处理。
- 2、 支持 Windows98/2000/XP.
- 3、支持 TI 全系列 DSP 芯片的硬件仿真,包括 TMS320C2000、C5000、C6000、C3X、C4X、C5X 及 0MAP 等系列芯片。
- 4、与主机采用 USB2.0 接口通讯,使用简单,即插即用。
- 5、支持热插拔,随时插拔不会损伤硬件。
- 6、通过 USB 总线供电,无需外接电源。
- 7、支持 CCS2 系列开发环境,支持 C 语言和汇编语言调试。
- 8、采用 DSP 的 JTAG 口进行调试通讯,不占用系统任何资源。
- 9、支持多 DSP 调试,一套开发系统可以对板上的多个 DSP 芯片同时进行调试.
- 10、 价格低廉,性价比高。

[相关配件]

- 1、USB 电缆: 1条
- 2、14芯 JTAG 排线: 1条
- 3、赠送相关调试工具(CCS)、驱动和相关资料,供学习用。

[安装指南]

1、USB2.0 仿真器驱动程序安装

连接 Study-USB2.0 仿真器到计算机, Windows 将提示"发现新设备"; 以下将阐述安装过程, Win98 系统在左边, Win200/XP 系统在右边

Windows 98/ME

Found New	v Hardware
	USB Device
Please wa	st

Windows 2000/XP

Found Ne	w Hardware		
-	USB Device		
Installing	J		

Figure 2 - First found new hardware dialog for emulator driver install

如果你是第一次安装 Study-USB2.0 仿真器,添加新设备向导将会引导你安装驱动程序, 点击 Next>按钮。



Figure 3 - Beginning of found new hardware process

最简单的方法是让系统自动搜索驱动程序,选择"Search for the best driver for the device (Recommended)"并且点击*Next*>按钮。

a summariant for community of meconimic and must		Found Few Fierdware History
Add New Hardware Wi	izand What do you want Windows to do?	Install Hardware Device Drivers A device driver is a software program that enables a hardware device to work with an operating system.
	 Search for the best driver for your device. Recommended! Display a list of all the drivers in a spacific location, so you can select the driver you want. 	This visual will complete the installation for this device:
	(<u>R</u> ack Next) Cancel	< <u>B</u> ack Newt> Cancel

Figure 4 - Search for new hardware dialog

选择CD-ROM驱动器或指定一个位置,点击Next>按钮。



Figure 5 - Location for new hardware drivers dialog

指定 CD-ROM 中或硬盘中驱动程序 mdpjtag.inf,通常在..\驱动\UsbJtag-DD-19\UsbJtag1_9 下。安装结束会出现提示完成。



Figure 8 - End of add new hardware process

安装结束后,在设备属性中应能看到 BlackHawk 的 USB 设备。

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Blackhawk	
Blackhawk USB 2.0 JTAG Emulator (S/N:FX2-0001)	
E - B Texas Instruments Emulators	
Texas Instruments XD5560 PCI JTAG Emulator	
□ □ 磁盘驱动器	
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□ → 🖓 键盘	
□ □ □ □ 人体学输入设备	
□□□□□ 状温空制器	
□ → √ → √ 声音、视频和游戏控制器	
田 🕤 鼠标和其它指针设备	
📄 😋 通用串行总线控制器	
Cypress EZ-USB Sample Device	
Sis 7001 PCI to USB Open Host Controller	
Sis Your PCI to Osb Open Host Controller	_

2、CCS2.0 程序安装

- 拷贝MDPJTAG3.DLL到CCS安装目录,该目录下有XDSFAST3.DLL文件,通常为 C:\ti\cc\bin目录。
- (2) 拷贝BLACKHAWK.CFG到其他CFG文件存在的目录,通常为 C:\ti\drivers, 也可能会因安装不同而不同。
- (3) 运行CCS Setup,根据不同的目标板选择不同的DVR文件,以下以5402为例说 明以下设置过程。
- (4) 运行CCS Setup,如下图,选择Close。

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(5) 删除左栏System Configuration 中的C54x XDS或其他配置。

🍯 Code Composer Studio Setup		
<u>File E</u> dit <u>V</u> iew <u>H</u> elp		
System Configuration	Available Board/Simulator Types	
□ ● ● 54x XD5 (Texas Instruments) ○ CPU_1 点右键删除	C54x Parallel Port (Texas Instruments) C54x Simulator (Texas Instruments) C54x XDS (Texas Instruments) C55x Simulator (Texas Instruments) C55x XDS (Texas Instruments) Heterogeneous Multi-Target (Texas Instruments) Sigo5xx	Import a Configuration File Install a Device Driver Uninstall Add To System 安装 C54x XDS (Texas Instruments) Device Driver Location: C:\tildrivers\tixds54x.dvr Device Driver Revision: 04.05.100 Device Driver Description: C54x Emulator for Windows 95/NT, wit RTDX. User Description: None. Processor(s) Supported: TMS320C5400 Capabilities: Single stepping Procement biding ✓
Drag a device driver to the left to add a board to	o the system.	///

- (6) 选择安装Install a Device driver。在弹出的窗口中选择相应的TI驱动。
 - C24xx 选择相应tixds24x.dvr
 - C2000 选择相应tixds2xx.dvr
 - C54xx 选择相应tixds54x.dvr
 - C6000 选择相应tixds6000.dvr
 - C6400 选择相应tixds6400.dvr
- (7) 在ti\driver目录里找到tixds54x.dvr,选择"打开"。

Code Composer Studio Setup File Edit View Help		
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Drag a device driver to the left to add a board	to the system.	

(8) 在板子属性中, Board Name & Data File项目下选择Auto-generate board data file with extra configuration file.

<u>File E</u> dit <u>V</u> iew <u>H</u> elp	
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Board C54x	XDS (Texas Instruments)
Auto- Auto- Auto- Speci	generate board data file generate board data file generate board data file fy custom board data file fy custom board data file ion:
Device Driver C:\ti\drivers\ti	xds54x. dvr
	Next > 取消 prted:
	Capabilities: Single stepping

(9) 然后指定配置文件BLACKHAWK.CFG的路径。

File Edit View Help		- 4
System Configuration	Available Board/Simulator Types	
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File:	Erowse	
Device Dr C:\ti\dri	打 ·····························	2 ×
	SIMS48.cfg SIMS48.cfg	Þ
Drag a device driver to the left to add a board to	文件名 @): blackhawk.cfg 文件名 @): Configuration Files (*.cfg)	

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CPU_1 Proces	ssor Configuration	Startup GEL File(s)	
Boar	l Name & Data File	Board Properties	
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I/O Port	0>	(0	
Change prope	rty value as necessary in	the right column.	
		Next > 取	2消
	-		
Select the system node to add a new board to th	e system configuration.		li.

(10) 点击Next,在以下画面中,将I/O Port的值设为0x0。

(11) 点击Next,在Processor Configuration中,选择Add Single,添加一 个CPU.

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⊡	autori Properties	
	Board Name & Data File Board Properties	
	Processor Configuration Startup GEL File(s)	
	Available Processors: Processors On Init	
	Mdd Single Add Multiple	
	Processor Name:	
	CPU_2	
	Identify processors on your board by selecting a processor type from "Available Processors," changing the "Processor Name" as required, and then select "Add Single" or "Add Multiple." Repeat for all processors on your board.	
	Next > 取消	
Drag a processor to the left to a	dd to the currently-selected board.	11.

🔁 Code Composer Studio Setup			
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CPU_1 Board	l Name & Data File	Board Properties	
Proces	sor Configuration	Startup GEL File(s)	
CPU	Ste	rtup GEL	
CPU_1	C:\ti	\cc\gel\c5402.gel	
		Finish	取消
Drag a processor to the left to add to the curren	, ly-selected board.	- 9 -	1

(12) 点击Next,选择相应的目标CPU对应的gel文件。

- (13) 存盘后退出,这时可以启动CCS了。
- (14) 启动CCS,可以看到如下类似画面就说明驱动和CCS设置都是正确的了。否则请 检查硬件连线、CCS Setup情况或目标板问题。

Black	hawk
BIACKI	by EWA Inc.
DLL Version Na.	Device Serial No.

注意事项:

请注意正确连接14 针的JTAG 电缆,该电缆接错可能会导致仿真器或目标系统永久损坏;仿真器14 针插头第六孔应该已经堵死,目标系统14针插座第六针应该拔掉。