## **JTAGjet-C2000**™

## **Emulator for the C2000 Family of MCU/DSPs from Texas Instruments**



**JTAGjet-C2000** is a small, palm-sized In-Circuit Debugger for the TMS320C2000 family of MCU/DSPs from Texas Instruments. It is equipped with USB 2.0 interface that runs in the High-Speed mode at 480 Mb/sec.

### **Support for the entire C2000 Family**

JTAGjet-C2000 supports the following C2000 MCU/DSP devices:

- TMS320C24x TMS320F28xx TMS320F24x TMS320F2801x, 28044 TMS320F2802x, 3x Piccolo™ TMS320LC240x □ TMS320LF240x □ TMS320F2806x Piccolo™ TMS320F2823x □ TMS320F2833x Delfino™ TMS320F2833x □ TMS320C2834x Delfino™ ■ TMS32028M35x Concerto<sup>™</sup> TMS320C28xx
- □ TMS320R28xx

### **Compatible with Code Composer Studio**

JTAGjet-C2000 is fully compatible with Code Composer Studio 3.3 or newer. It installs directly into the Code Composer Studio directories and becomes visible as JTAGjet Emulator in the CCS Setup utility and preconfigured with many C2000 targets. Setting up to work with JTAGjet is just as easy as setting up a TI emulator – just drag and drop the preconfigured target and emulator configuration and start Code Composer Studio.

#### JTAG Chain Device Detection

For custom made boards with more than one device on the JTAG chain, JTAGjet can detect all devices on the chain which is necessary in order to properly configure the CCS debugger.

### **Variable JTAG Clock**

JTAGjet-C2000 supports variable JTAG clocks which may be set from 1 kHz (for slow FPGA prototypes or power saving devices) to 30 MHz to provide faster application downloads and quicker Flash programming.

### **Auto-sensing JTAG voltage**

JTAGjet-C2000 comes with a fully isolated JTAG adapter to protect from ground loops and electrical noises. The adapter comes with 14-pin XDS510 & XDS560 compatible JTAG header and supports targets from 3V to 5V. A non-isolated adapter is available for faster JTAG speeds in necessary.



### **Features**

- Supports all Texas Instruments C2000 MCU/DSPs
- ☐ USB 2.0 high-speed port (480 Mbps) provides faster downloads
- ☐ Programmable JTAG clock from 1KHz to 30 MHz (15MHz with isolated adapter)
- ☐ Powered by the USB port no external power adapters needed
- ☐ Supports Code Composer Studio 3.3, 4.x and 5.x
- ☐ Includes Flash Programmer utility (does not need CCStudio)
- ☐ Change JTAG clock even when the CCStudio is running
- ☐ Detects and graphically shows all devices on the JTAG chain
- Windows 7, XP and Vista compatible

### What's Included

- ☐ JTAGjet emulator with USB 2.0 cable
- JTAG cable with standard 14-pin fully electrically isolated JTAG adapter
- □ CD-ROM with CCStudio drivers & documentation
- ☐ Flasher-C2000 programming utility

### **Ordering Information**

Part Number	Description	Price
JTAGjet-C2000F-ISO	Emulator with CCS drivers, Flasher-	\$895
	C2000 and isolation adapter	
TMDSCCS-ALLN01	Code Composer Studio ver 5.x (node	\$495
	locked)	
TMDSCCS-ALLF01	Code Composer Studio ver 5.x	\$795
	(floating license)	

On-line store at www.signum.com/c2000.htm



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## Flasher-C2000™

# Flash Programmer for the TI C2000 Family of MCU/DSPs



**Flasher-C2000** is a software utility that enables Signum JTAGjet emulators to program the on-chip Flash memory of the Texas Instruments F2000 DSP devices. This utility works standalone and does not require the Code Composer Studio.

### **Supported Devices**

Flasher-C2000 supports all C2000 MCU/DSP devices with onchip flash:

- □ TMS320F240 □ TMS320F2808 □ TMS320F241 □ TMS320F2809 □ TMS320F243 □ TMS320F2810/11/12 □ TMS320LF2401A □ TMS320F28015/16 ☐ TMS320LF2402A □ TMS320F28044 ■ TMS320LF2403A ■ TMS320F2823x ■ TMS320LF2406A ■ TMS320F2833x, 34x Delfino™ ■ TMS320LF2407A ☐ TMS320F2802x. 3x.6x Piccolo™ □ TMS320F2801/02 ■ TMS320F28M35x Concerto<sup>™</sup>
- ☐ TMS320F2806 (available soon)

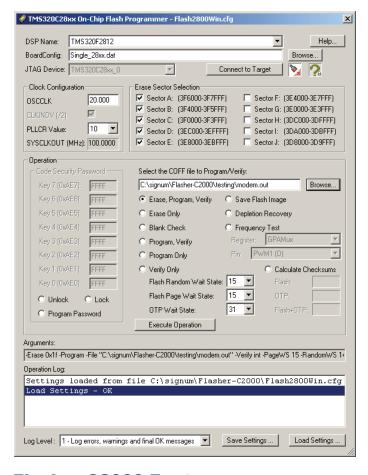
### **GUI Interface Mode**

This mode displays a dialog box (pictured at right) that enables the user to select the DSP to be programmed and set all the programming parameters in a well designed and easy to understand format. This graphical interface is very similar to the one in CCStudio Flash Programmer plug-in, which practically eliminates any learning curve for the users who are already familiar with the Flash plug-in.

#### **Command Line Mode**

This mode of operation is ideal for any small or large production environment in which the operator uses a batch flash task to minimize human errors. The flash operation may be started by clicking on a shortcut or called from an automated test system. The creation of the batch file is very simple. Once a Flash operation is created and tested using the GUI all the necessary commands and arguments can be cut-and-pasted into a DOS batch file. No learning of command syntax is needed and any command errors are totally eliminated.

With the command mode, a F/W or algorithm vendor is able to distribute flash images and algorithm updates to his customers safely and economically. The flash image and the unlock security passwords may be safely hidden in encrypted files and decrypted only while programming by the Flasher software.



### Flasher-C2000 Features

- □ Programs on-chip Flash in all F24x, F240x and F28xxx devices using the JTAGjet emulator
- GUI and command driven interfaces
- No CCStudio installation required
- ☐ Fast programming & erase algorithms
- ☐ Flash depletion recovery, blank check & save flash to file
- Flash locking, unlocking & password programming
- Support for encrypted passwords and COFF files
- □ Support for HEX files for product serialization, etc.

### **Ordering Information**

Part Number	Description	Price
Flasher-C2000	Flash programming utility S/W	\$250
JTAGjet-C2000F-ISO	JTAG emulator w/ Flasher-C2000	\$895

On-line store at www.signum.com/c2000.htm



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