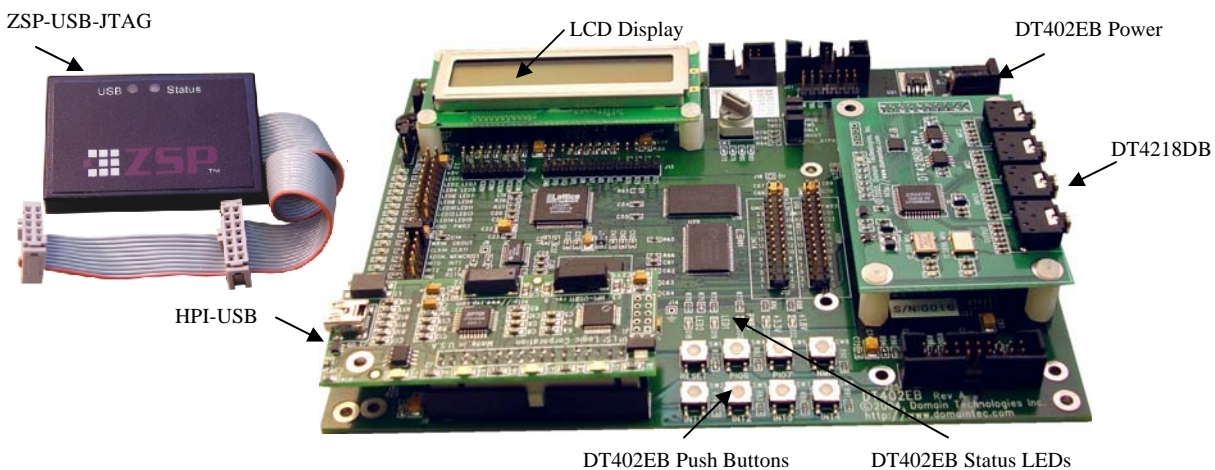


## STD402CS Quick Start Guide

The STD402CS is Domain Technologies' two channel audio development system. The advanced DT402EB evaluation board provides access to all ZSP 402ZX peripherals and external memory. The DT4218DB provides stereo audio input and output. An external ZSP-USB-JTAG emulator allows for independent control of the JTAG port, and the HPI-USB interface provides up to 400K bytes of the real-time data transfer between the ZSP host port and the host PC:



## Hardware Preparation

Inspect the hardware. Refer to the STD402CS picture above and note the location of the DT4218DB and HPI-USB. Note the DT402EB with available push buttons, status LEDs, and LCD display. Perform the following steps to setup the hardware:

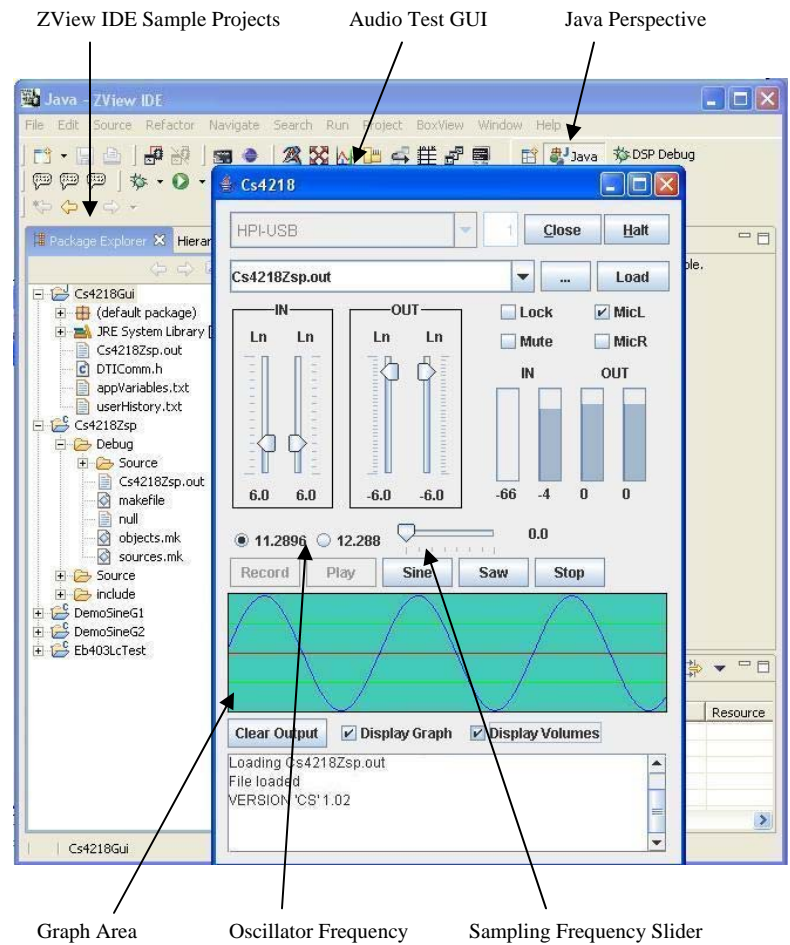
1. Connect pins 3 and 4 on J7; this provides the on-board oscillator to the ZSP.
2. Connect pins 7 and 8 on J20; this sets the IBOOT pin in a state allowing bootstrap from external flash-ROM.
3. Connect pins 9 and 10 on J20; this disables the PLL bypass.
4. Connect pins 2 and 3 on J2; this connects only the ZSP 402ZX to the JTAG Emulator.
5. Power the DT402EB with the 5 volt power supply. Power causes the status LEDs of the DT402EB to blink.
6. USB Connectivity with the PC:
  - For demos, connect the USB cable from the PC to HPI-USB; the PC will control the ZSP through the HPI-1.1 adapter.
  - For ZSP development, connect the ZSP-USB-JTAG emulator to the DT402EB J21 connector.

### Demo Software

To illustrate the functionality of the DT4218DB audio daughter board, the DT402EB development board will be used to execute sample application Cs4218ZSP. The host controls the ZSP through the HPI 1.1 adapter. User control will be provided by the Cs4218Gui program running on the PC. The Graphical user interface of the JAVA Cs4218Gui monitors incoming waveforms and displays their amplitude values.

#### Execution Steps:

1. Load ZView IDE; use a Java Perspective.
2. Select CS4218Gui in Navigator, choose Run->Debug. Choose Cs4218 in the Debug Configuration's Java folder. Select Debug button
3. Connect the HPI-USB to the PC with the USB cable.
4. If the *Found New Hardware* Wizard starts up, choose 'No, not at this time' when prompted to 'Connect to Windows Update and Search'. Select *Next* and choose to 'Install software automatically'. The required drivers were installed in step 1.
5. Select the HPI-USB as the *Target* option in the Dialog.
6. Use the Dialog's *Open* button to establish connection; choose *Load* button followed by the *Run* button to execute the board CS4218Zsp code.
7. Plug-in the supplied 3.5mm loop-back cable from input to output on the DT4218DB.
8. Select the *Display Graph* checkbox and press the *Sine* button.



### Additional Help

Additional information for the following products can be found:

Product	Documentation
STD402CS	The latest product information for the STD402CS 2 Channel Audio Development Kit can be found at: <a href="http://www.domaintec.com/STD402CS.html">http://www.domaintec.com/STD402CS.html</a>
DT402EB	The DT402EB Users Guide is available for review; the document as well as the latest product information can be found at: <a href="http://www.domaintec.com/DT402EB.html">http://www.domaintec.com/DT402EB.html</a>
DT4218DB	The DT4218DB Users Guide is available for review; the document as well as the latest product information can be found at: <a href="http://www.domaintec.com/DT4218DB.html">http://www.domaintec.com/DT4218DB.html</a>
ZSP-USB-JTAG	The latest product information for the ZSP-USB-JTAG emulator can be found at: <a href="http://www.domaintec.com/ZspUsbJtag.html">http://www.domaintec.com/ZspUsbJtag.html</a>
HPI-USB	The latest product information for the USB 1.1 interface can be found at: <a href="http://www.domaintec.com/HPI-USB.html">http://www.domaintec.com/HPI-USB.html</a>