

## Application Note Configuration of 1 miniDIGI + 2 miniDSP

### Warning:

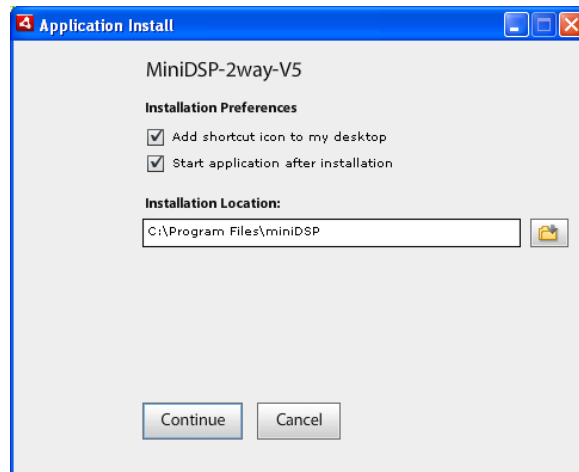
A wrong connection could damage the board and unfortunately void your MiniDSP kit Warranty. Please make sure to double carefully follow this application note.

### Description

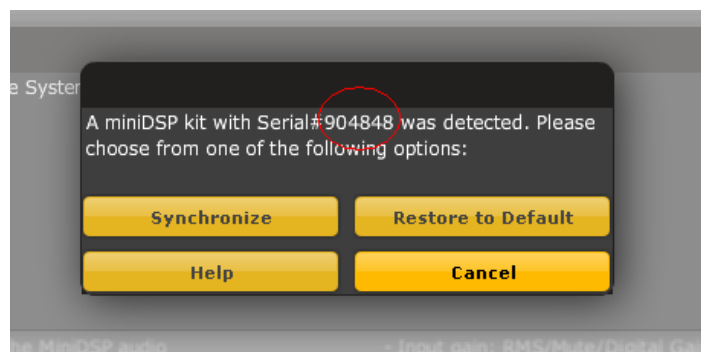
Since miniDSP kits were not initially intended to be stacked, a couple of modifications are required to operate 2 miniDSP with one miniDIGI. First of all, miniDSP are by default configured as I2S master. If both were to be connected together, their clocks would both act as I2S masters. This system would not work. For this configuration to work, the following application will explain how to place both miniDSP to I2S slave and miniDIGI to I2S master. The second required step is modification of the link cables to make sure that miniDSP signals do not conflict with each others.

### Software configuration

1. Install the plug-in software on your computer. The Default installation path will be "C:\Program Files\miniDSP". If a previous version was installed, make sure to un-install first.

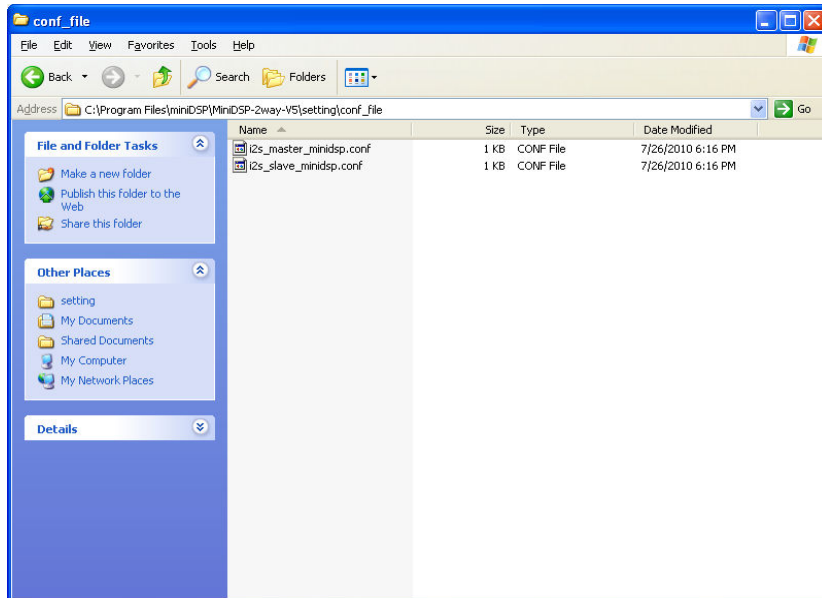


2. Once installation completed, we need to create a unique folder called "90 + your board id" to ensure that only this board will be configured as I2S slave in future synchronization your\_installation\_path/your\_plug-in\_name/setting/.. You can find your board id from the synchronization pop up window as follow.

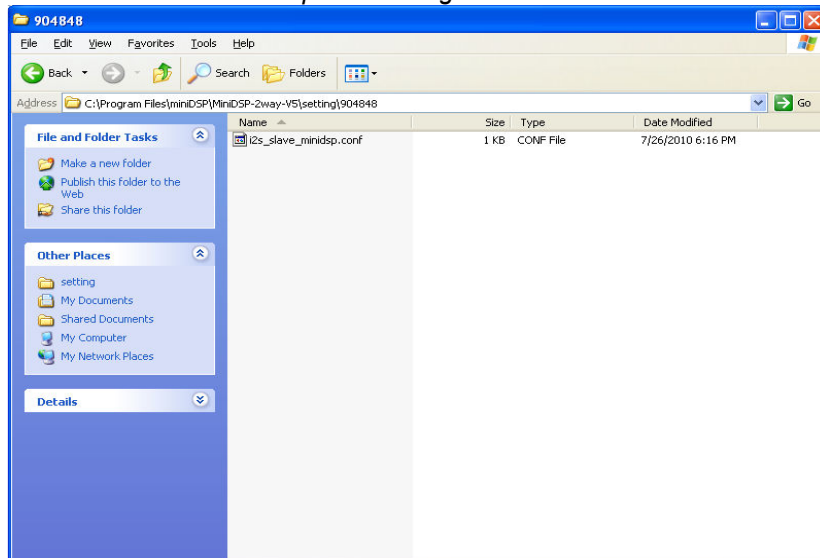


For example, if my plug-in name is 2way-V5, and my board ID is 4848 Create a folder called "904848" in the above "setting" folder. C:\Program Files\miniDSP\MiniDSP-2way-V5\setting\904848

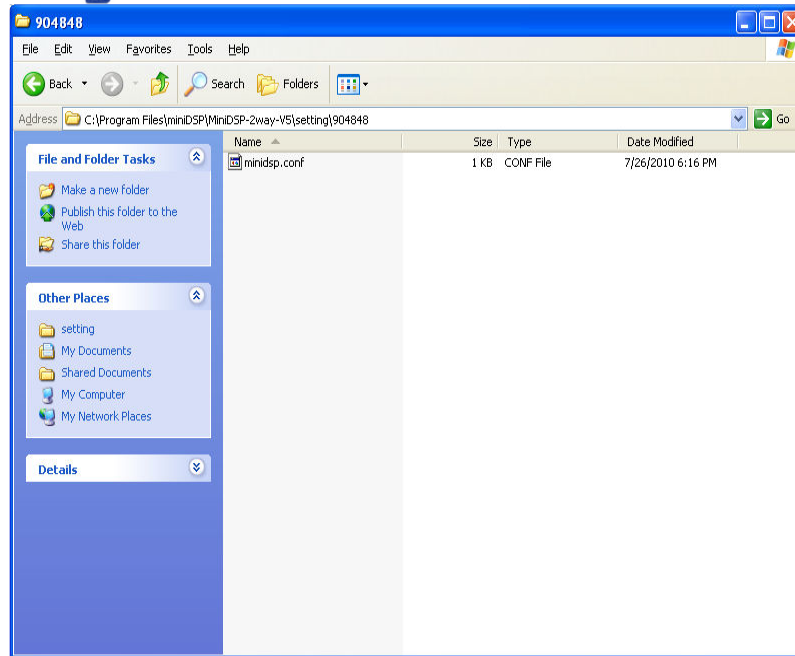
3. Next step, go to the "conf\_file" folder in the same directory and copy the "i2s\_slave minidsp.conf" file into the newly created "904848" folder



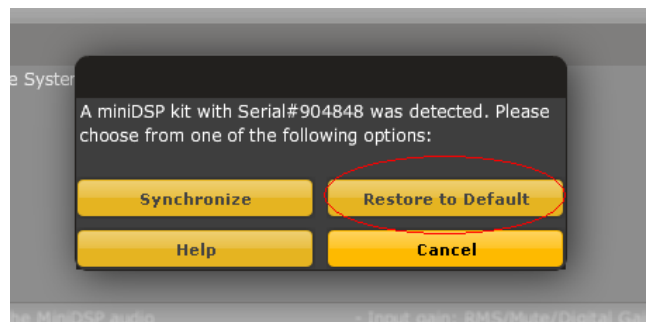
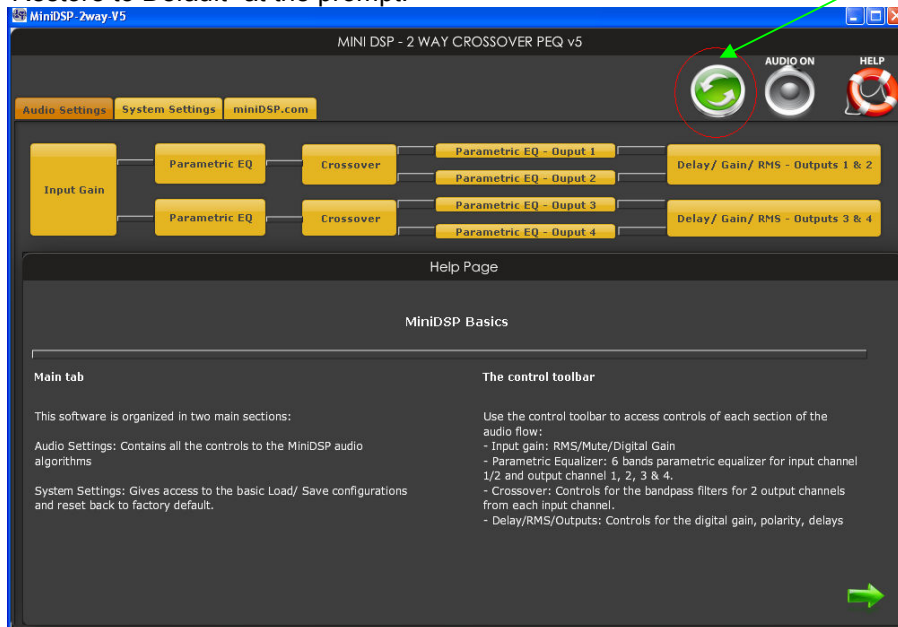
*"i2s\_master\_minidsp.conf" is the default settings configuration file  
"i2s\_slave\_minidsp.conf" is used for 2 minidsp + 1 minidigi.*



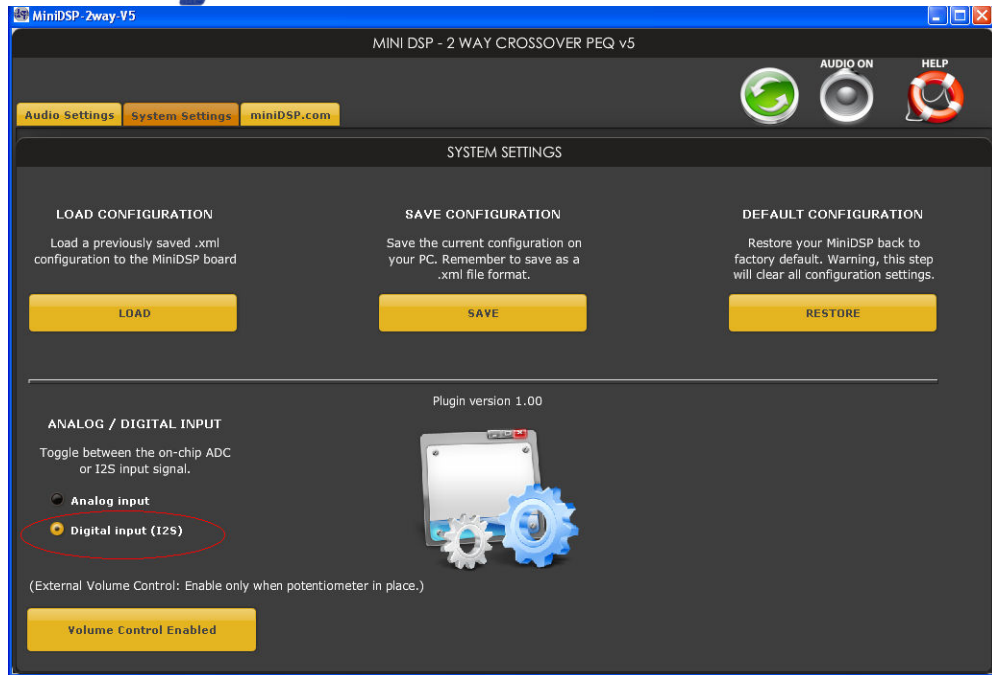
4. Rename the copied file as the name "minidsp.conf".



5. Plug in the usb cable to one minidsp. Open the plug-in software and click on the Connect button. Click the "Restore to Default" at the prompt.



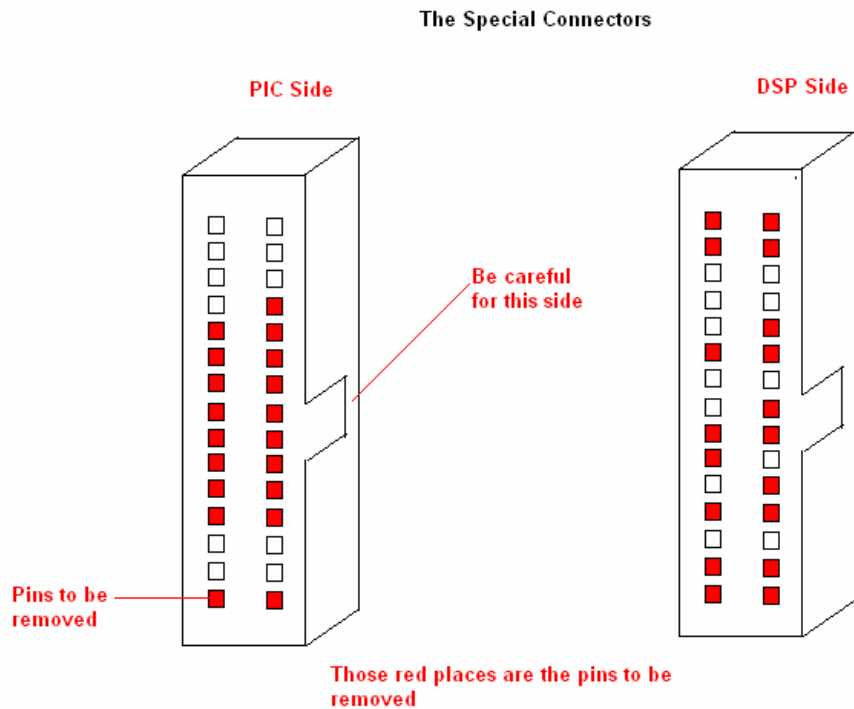
6. Once the restore to default complete, go to system settings tab to select the "Digital input(I2S)". Adjust values in the crossover, PEQ or delay as required. Unplug the usb to disconnect the synchronization after setting.



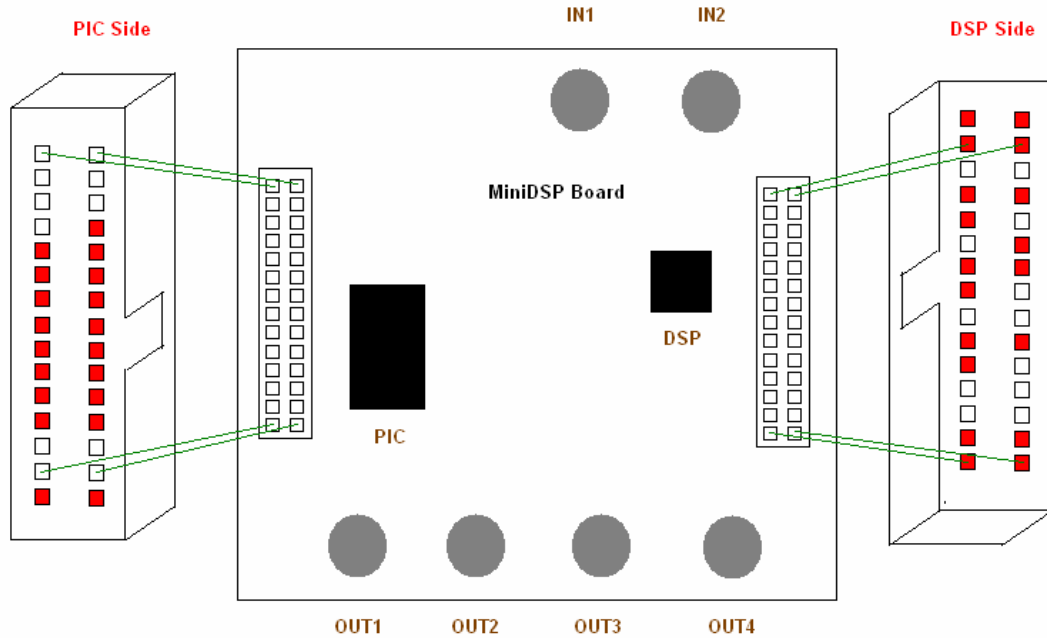
7. We now need to do the same for the other board. Repeat the Steps 2 to 6 with the second miniDSP kit.

## B. Hardware settings:

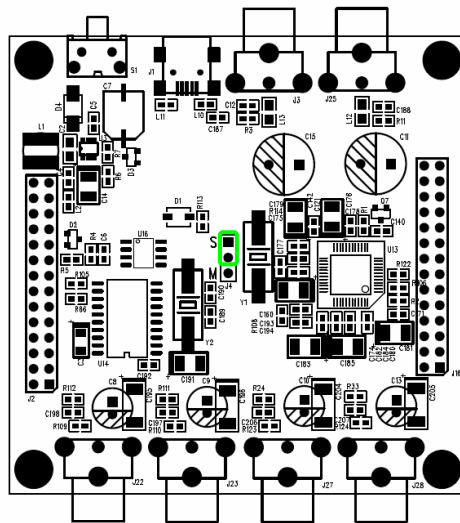
1. To make sure there are no signal short circuits, some connectors pins should be removed from the below graph for plugging into minidsp.



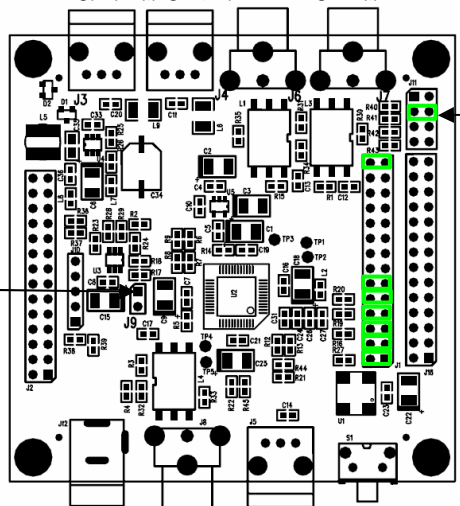
2. Place the above two custom connectors to ONLY one of the miniDSPs. Put in the connectors as the below graphs:



4 Next is to configure both miniDSP as MCLK slave and miniDIGI as Master



miniDSP Left board configured in Slave MCLK



Make sure to place miniDIGI in Master by removing jumper typically located here

Jumper location depends on selected source. See miniDIGI manual for more info.

# minidsp

3. Finally, to the assembly stage, follow the below photos to connect those 3 boards together. Two miniDSPs on the base and a miniDIGI on the top. All inputs on the same side for all 3 boards.

**NOTE:** This picture does not show the custom link cables on each side. Such cable can be assembled by miniDSP and shipped on request together with your order.

