

Contents

The files on this digital media are required to run the DA7218 Accessory Codec customer evaluation board.

This media contains the following:

1. [DA7219 Evaluation GUI installation files](#)
2. [USB control interface drivers](#)
3. [DA7219 user guide](#)
4. [DA7219 schematics, layout and BOM](#)
5. [Conversion tools for PLL division ratio values](#)
6. [Example Scripts](#)

Minimum system requirements Windows 2000 or later

Installation Guide

Insert the media and open windows explorer (Start/Computer or keyboard shortcut = HOLD down windows logo button and press E).

Install the Driver

Prior to connecting the Evaluation Board to your PC for the first time please install the driver from [here](#).

Connecting the USB to the evaluation board for the first time

On connecting the USB to the PC for the first time, the SAM3U USB driver will request driver updating/installation from the Windows operating system. The driver after installation should appear as [Figure 1](#) when viewed in Control Panel.

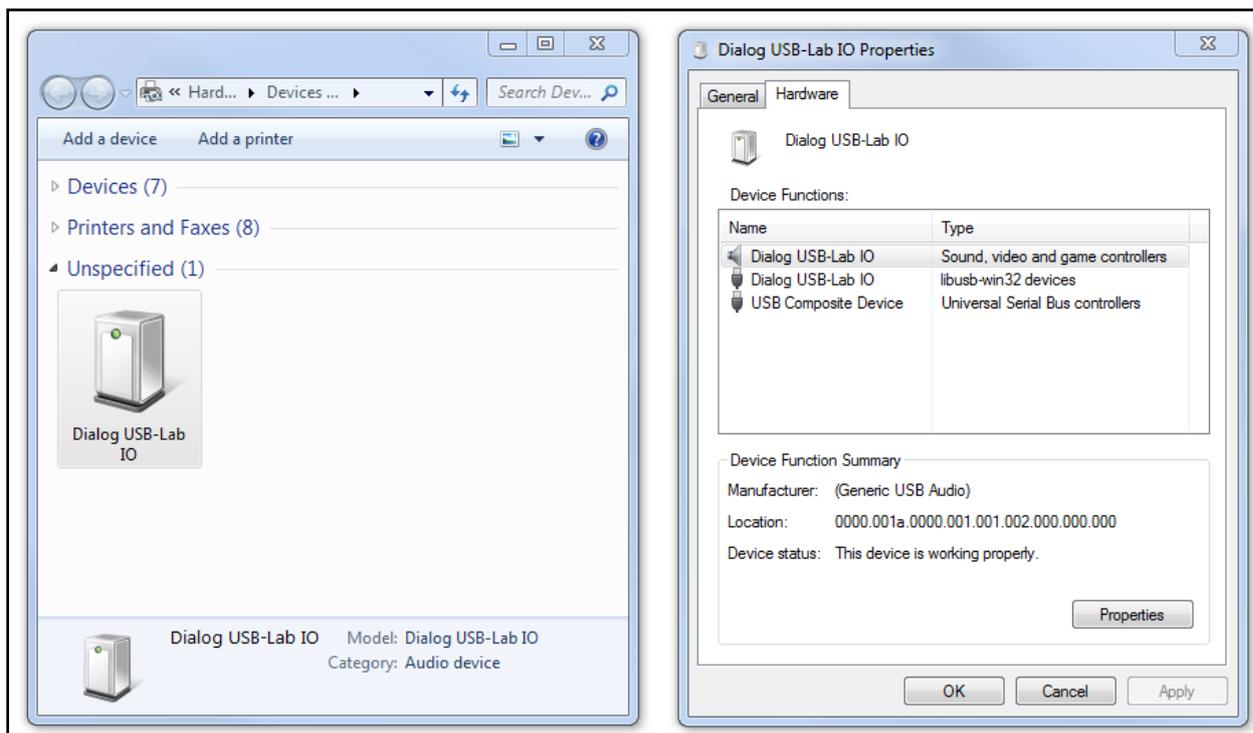


Figure 1: Correctly installed driver details

Install the DA7219 Evaluation GUI by running the [setup file](#).

Quick Start Guide

After following the installation instructions run the software from the Start Menu:

- \Dialog Semiconductor\Audio\DA7219 Evaluation GUI\DA7219 Evaluation GUI.exe (default)

Example Scripts

Several setup scripts have been provided in the 'Example Scripts' directory on the supplied USB stick to enable you to quickly setup the basic functionality of the codec using the evaluation GUI. There are two types of scripts provided

1. Initialisation scripts
 - a. These setup the clocking for the device and should be run prior to the 'Set up path' scripts.
2. Set up path scripts
 - a. These configure the audio paths in DA7218.

USB Headphone Playback

The evaluation board can be configured as a USB soundcard. To enable USB playback

- Ensure that MCLK SELECT header (J28) has the jumper at position 'USB'. This connects the USB's MCLK to the DA7219 Evaluation Board.
- Ensure that the DAI header (J27) has jumpers fitted between rows A and B.
- Use a suitable cable to connect the mini-USB on the Digital IO Board to a USB port on your PC or Laptop. On making this connection, the system will automatically detect the USB port as an audio device named 'Dialog USB-Lab', as illustrated below.

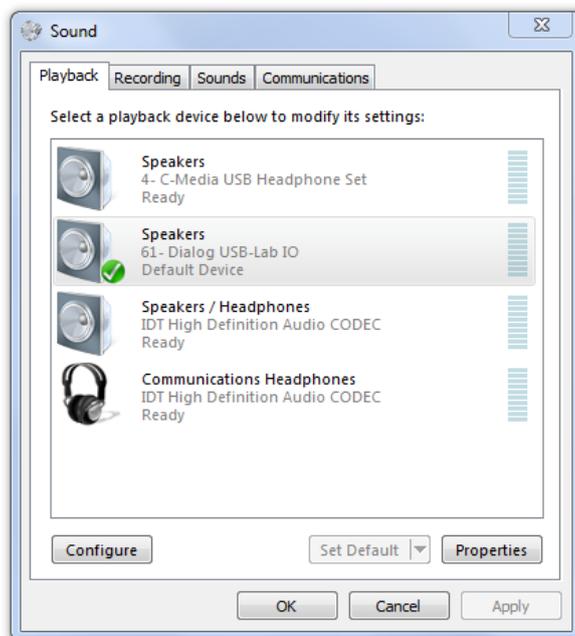


Figure 2: Successful detection of the USB audio connection named 'Dialog USB-Lab'

Setup the Windows Playback devices – 'Dialog USB-Lab IO'

1. Open your Playback sound device by right-clicking on the volume control in the Windows Tray and selecting '**Playback Devices**'.

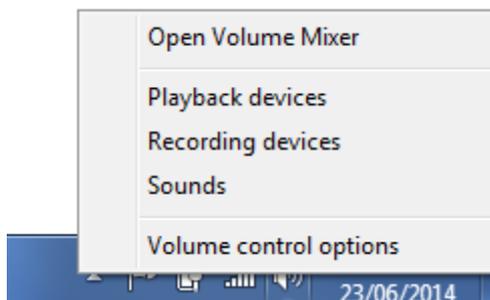


Figure 3: Selecting playback/recording devices shortcut

2. Set '**Dialog USB-Lab IO**' as your default device.

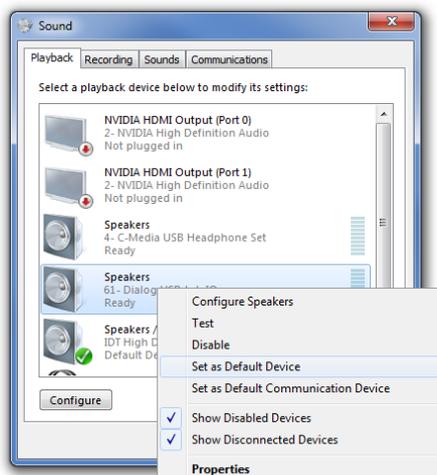


Figure 4: Set 'Dialog USB-Lab IO' as Default Device

3. Right click on '**Speakers – Dialog USB-Lab IO**' and select 'Properties'
4. Go to the Advanced Tab
5. Set the default format to 16bit, 48000 Hz.
6. Press the Test button
7. Press OK

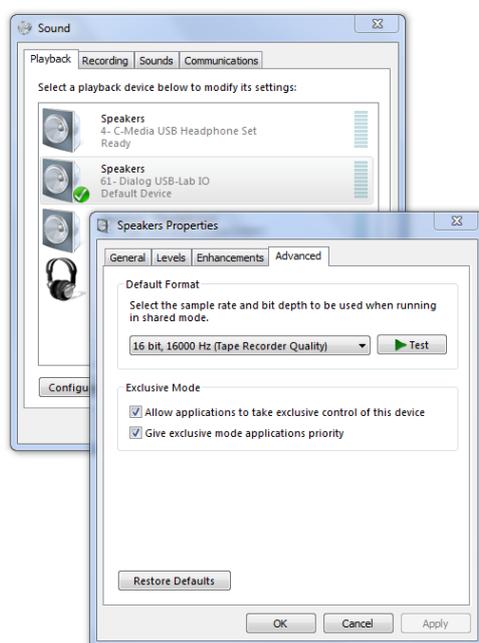


Figure 5: Advanced properties for 'Dialog USB-Lab IO'

Setup the Windows Recording devices – ‘Dialog USB-Lab IO’

1. Open your Playback or Recording sound devices by right-clicking on the volume control in the Windows Tray and selecting ‘Recording Devices’.



Figure 6: Selecting playback/recording devices shortcut

2. Right click on ‘Line - Dialog USB-Lab IO’ and select ‘Properties’
3. Go to the Advanced Tab
4. Set the default format to 16bit, 48000 Hz

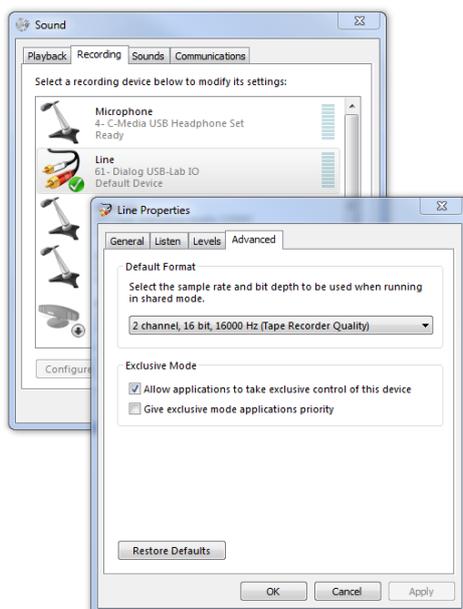


Figure 7: Advanced properties for – ‘Dialog USB-Lab IO’

5. Press **OK**

Setup the codec registers for USB Playback

1. In the DA7219 Evaluation GUI click the load button.

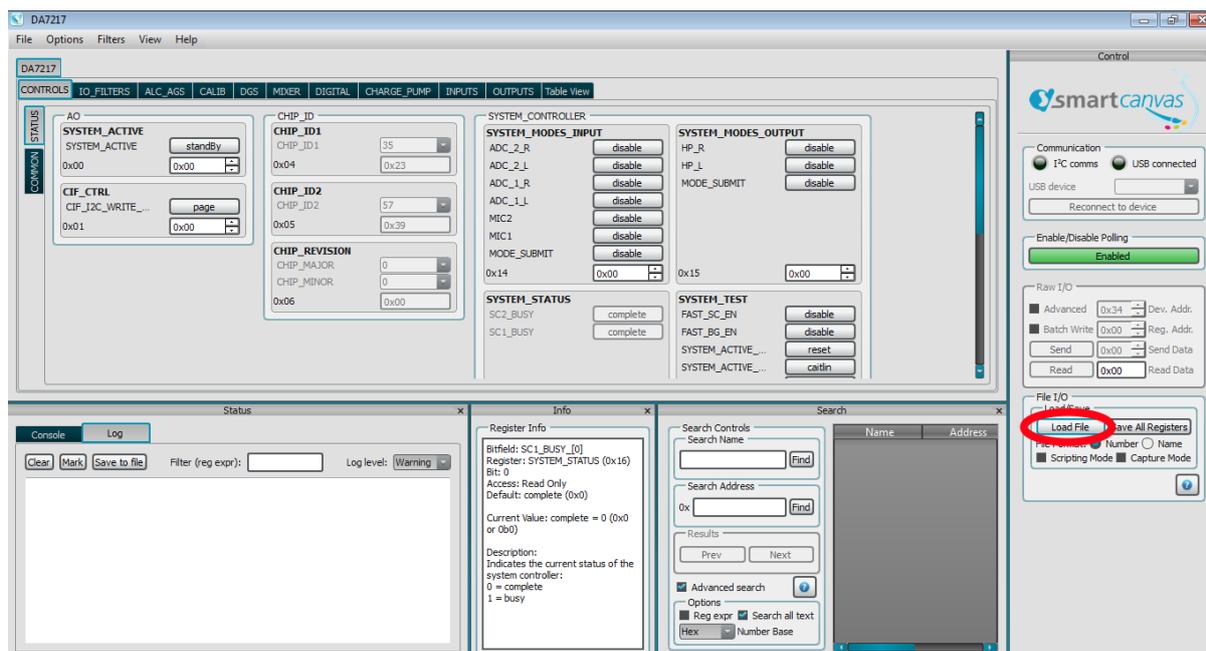


Figure 8 DA7218 Evaluation GUI Load Script File

2. Select the Slave_PLL_SRM_12MHz_48k_16bit_I2S_USB_AUDIO.txt file from the Example Scripts\Initialise Codec\ folder on the USB stick.
3. Click the load button
4. Select the DAC to HP.txt file from the Example Scripts\Set Up Path\ folder on the USB stick.

All sounds from the PC should now be played through the headphone output of DA7219. The DA7219 Evaluation GUI main panel will reflect the register settings in the device.

Troubleshooting

These scripts are dependent on motherboard configuration for correct operation.

By default the board is configured to use the USB soundcard function as it's I2S interface.

Refer to the evaluation platform schematics and User Guide for further setup information.

Support

Further scripts and troubleshooting help is available by contacting audioapps@diasemi.com or your local Dialog office.

