

Headset Reference Design

Getting Started Guide v1.0

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1 Introduction

The Headset Reference Design kit contains the following hardware:

- Headset (x2)
- Batteries (x4)
- Antenna (x2)
- USB dongle (x1)
- ISP cable (x1) (not shown in picture)
- Headset application board (x1)
- Audio application board (x1)

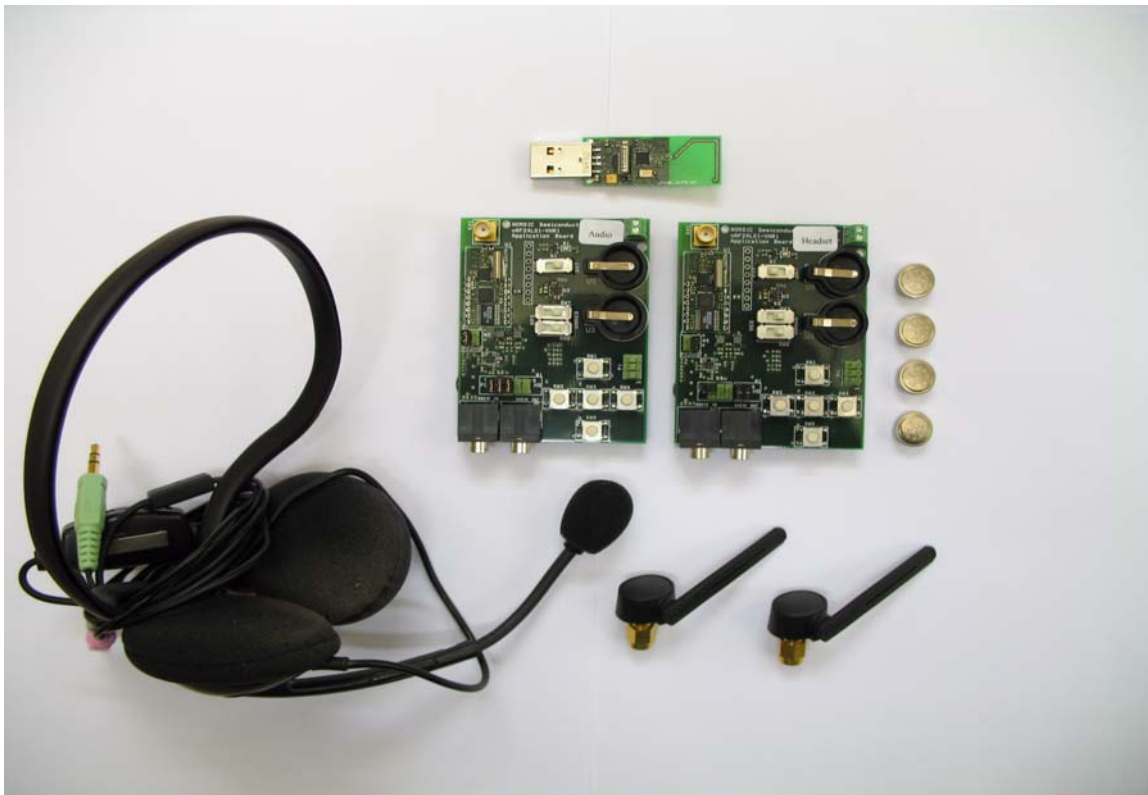


Figure 1. Hardware packaged in the Headset Reference Design kit

2 Using the headset with the USB dongle

Follow the instructions below to set up the headset application board:

1. Remove the headset application board (marked "Headset") from the box.
2. Screw one of the supplied antennas into the antenna port (marked CJ1) on the headset application board.
3. Unpack two batteries and place them in the battery holders on the headset application board ensuring correct polarity.
4. Insert the headset's microphone cable into the AUDIO IN interface.
5. Insert the headset's audio cable into the AUDIO OUT interface.
6. Make sure switch 6 (SW6) is set to BAT if you are using the batteries provided.
7. Make sure switch 7 (SW7) and switch 8 (SW8) are set to UNREG.

Follow the instructions below to set up the USB dongle:

1. Insert the USB dongle into a USB slot on your PC. To function properly, your PC must be running Microsoft Windows 2000, XP, or Vista.
2. The USB dongle flashes indicating it is active.
3. The following message is displayed on your PC monitor: "Your new hardware is installed and ready for use".

To check if the headset is working correctly, try a test call on Skype or another VoIP network.

When the headset is in idle/search mode a light flashes on the application board approximately every second. The application board will stop flashing when a RF connection is established with the USB dongle.

Note: When the headset application board is packaged the jumpers are in their correct position. However, they are liable to become displaced in transit. Please see Figure 2 and Figure 3 below for correct jumper layout.

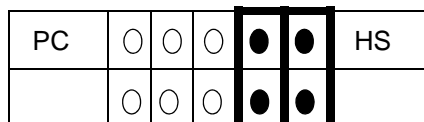


Figure 2. Position of jumpers (covering black squares) in W1

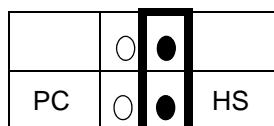


Figure 3. Position of jumpers (covering black squares) in W2

3 Using the headset with the audio application board (in "Walkie-talkie" mode and with PC analog signals)

Follow the instructions below to set up the headset application board:

1. Remove the headset application board (marked "Headset") from the box.
2. Screw one of the supplied antennas into the antenna port (marked CJ1) on the headset application board.
3. Unpack two batteries and place them in the battery holders on the headset application board ensuring correct polarity.
4. Insert the headset's microphone cable into the AUDIO IN interface.
5. Insert the headset's audio cable into the AUDIO OUT interface.
6. Make sure the jumpers are placed as shown in Figure 2 and Figure 3.
7. Make sure switch 6 (SW6) is set to BAT if you are using the batteries provided.
8. Make sure switch 7 (SW7) and switch 8 (SW8) are set to UNREG.

3.1 Using the audio application board with a headset (“Walkie-talkie” mode)

Follow the instructions below to set up the audio application board:

1. Remove the audio application board (marked “Audio”) from the box.
2. Screw one of the supplied antennas into the antenna port (marked CJ1) on the audio application board.
3. Unpack two batteries and place them in the battery holders on the audio application board ensuring correct polarity.
4. Connect the headset’s microphone cable to the AUDIO IN interface.
5. Connect the headset’s audio cable to the AUDIO OUT interface.
6. Make sure the jumpers are placed as shown in Figure 2 and Figure 3.
7. Make sure switch 6 (SW6) is set to BAT if you are using the batteries provided.
8. Make sure switch 7 (SW7) and switch 8 (SW8) are set to UNREG.
9. Press the left button to start a call.

3.2 Using the audio application board with PC analog signals

Follow the instructions below to set up the audio application board:

1. Remove the audio application board (marked “Audio”) from the box.
2. Screw one of the supplied antennas into the antenna port (marked CJ1) on the audio application board.
3. Unpack two batteries and place them in the battery holders on the audio application board ensuring correct polarity.
4. Connect the AUDIO IN interface to the headphone output in your PC using a stereo audio cable with male 3.5mm jack connectors in both ends.
5. Connect the AUDIO OUT interface to the MIC input on your PC using a stereo audio cable with male 3.5mm jack connectors in both ends.
6. Make sure the jumpers are placed as shown in Figure 4 and Figure 5.
7. Make sure switch 6 (SW6) is set to BAT if you are using the batteries provided.
8. Make sure switch 7 (SW7) and switch 8 (SW8) are set to UNREG.
9. Press the left button to start a call.

Note: When the audio application board is packaged the jumpers are in the correct position for use with PC analog signals. However, they are liable to become displaced in transit.

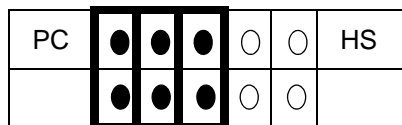


Figure 4. Position of jumpers (covering black squares) in W1 on the audio application board

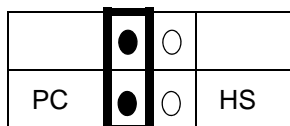


Figure 5. Position of jumpers (covering black squares) in W2 on the audio application board

There should now be communication between the headset application board and the audio application board.

Note: Make sure you have the USB dongle removed from your PC's USB slot when using the headset with the audio application board.

4 Buttons

There are five buttons available on the headset application board. These have functions as shown in Figure 6. "Headset controls".

Note: The volume control and mute buttons have no functionality when using the headset application board with the audio application board.

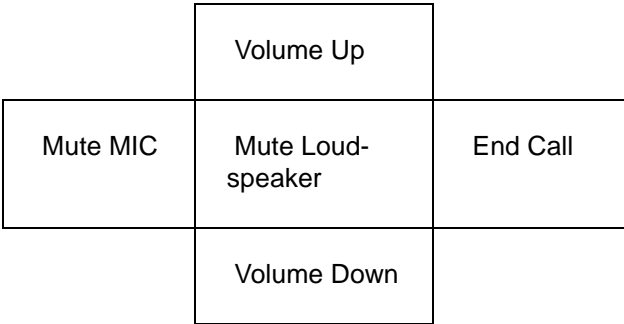


Figure 6. Headset controls

Note: The "end call" function has no interface to the USB driver in the current version of the software.

There are five buttons available on the audio application board. These have functions as shown in Figure 7. "Audio application board controls".

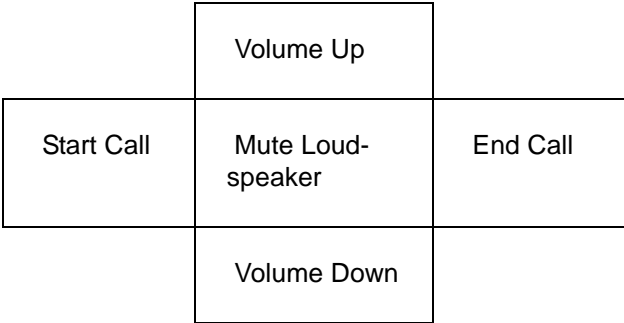


Figure 7. Audio application board controls

5 Troubleshooting

Q: What should I do if I am getting no signal through my headset?

A: Check if the light D1 is flashing on your headset application board. If it isn't, make sure the batteries are in correctly and that switch 6 (SW6) is switched to BAT.

Q: My battery is working correctly, but I am still not receiving any signal. What should I do?

A: Check if switch 7 (SW7) and switch 8 (SW8) are both switched to UNREG and also make sure that all the jumpers are positioned correctly.

Q: When I try using the headset with the audio application board it does not work. What should I do?

A: Check if you still have the USB dongle inserted into your PC's USB slot. If you do, remove it. You cannot use the headset with the audio application board when the USB dongle is active in a USB slot.