ISL84684ii CSP to Dip Converter Board with Mounted IC

Application Note | January 6, 2006 | AN1238.0

Purpose

The handling and evaluation of tiny chipscale package (CSP) ICs can be difficult and cumbersome. In a typical lab environment it is impossible to solder the IC on to a PC board. The ISL84684ii CSP to Dip Converter Board was design to provide customer's with a quick and easy method to handle and evaluate the ISL84684ii dual SPDT switch.

Description

A picture of the ISL84684ii CSP to Dip Converter Board is shown in Figure 1. The pinout for the Converter Board is shown in Figure 2. Each Converter Board comes with an ISL84684ii IC soldered directly on to a 14 pin dip header board. The over-all dimensions of the board is 0.7 inches long by 0.4 inches wide. The spacing of the dip pins allow the converter board to plug into a standard dip socket. It contains a triangle in the upper right hand corner to identify pin 1.

Using The Converter Board

It is recommended that the ISL84684IIEVAL1 Converter Board be used with a lab one to one board with a 14 pin or greater dip socket. Power, ground, logic, signal, load and test equipment connections can be applied easily through the one to one board to the ISL84684ii IC.

Basic Equipment Required:

1. DC Power Supply
2. One to One Board with standard dip socket
3. ISL84684IIEVAL1 CSP to Dip Converter Board
4. Signal Sources (Signal Generator, Radio, CD player, etc.)
5. Loads (Resistors, Headphones, Speaker, etc.)
6. Test Equipment (Oscilloscope, Audio Analyzer, etc.)

Example of a basic test setup is shown in Figure 3. The ISL84684ii IC, in this example, is being used to allow two stereo sources to share a single headphone. When the logic control switch is in the "L" (low) position, Audio Source 1 passes through to the headphone. When logic control switch is in the "H" (high) position, Audio Source 2 passes through to the headphone.

Related Literature

- Data Sheet FN6190 "ISL84684II"
- Technical Brief TB451 "PCB Assembly Guidelines for Intersil Wafer Level Chip Scale Package Devices"

Features

- ISL84684ii IC Soldered on the Converter Board
- Converter Board Dip Pins fit Standard Dip Socket

Ordering Information

PART NUMBER	TEMP. RANGE (^{O}C)	DESCRIPTION
ISL84684IIEVAL1	-40 to 85	CSP to Dip Converter Board

FIGURE 1. CSP TO DIP CONVERTER BOARD

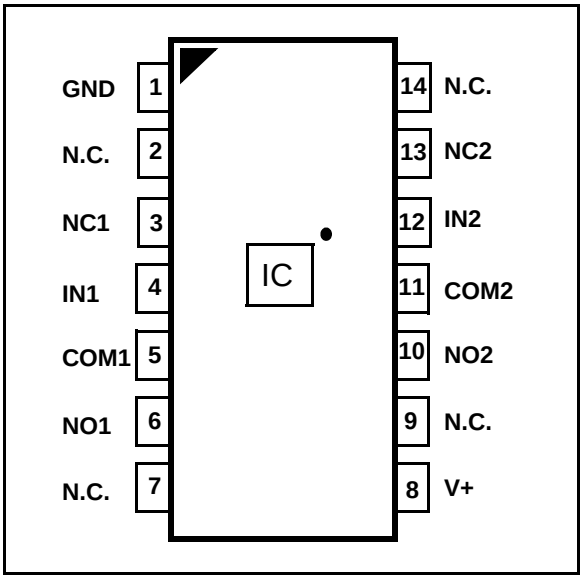

FIGURE 2. CSP TO DIP CONVERTER BOARD PINOUT

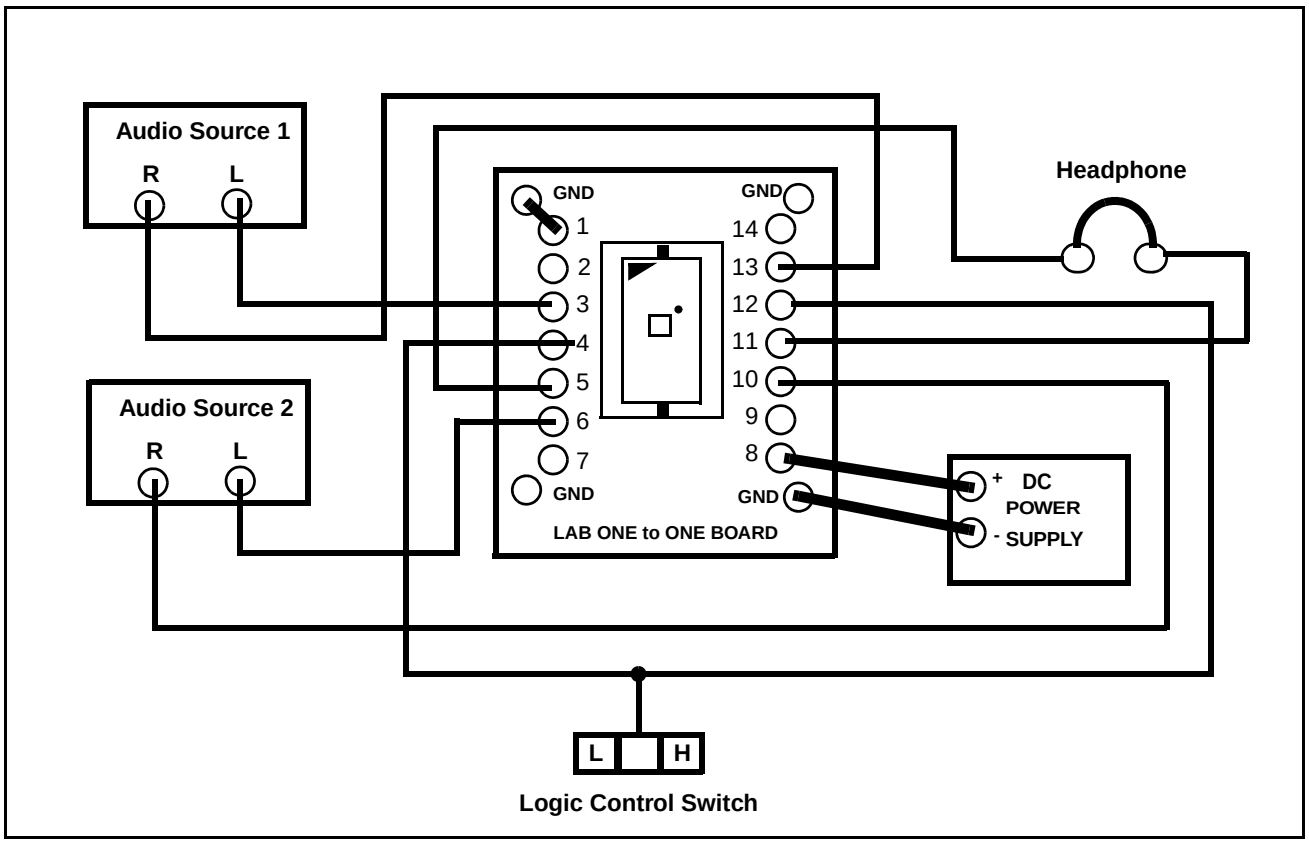

FIGURE 3. EXAMPLE OF BASIC LAB TEST SETUP