

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

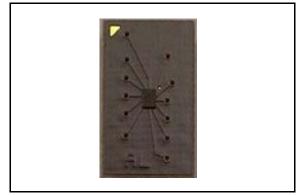


FIGURE 1. CSP TO DIP CONVERTER BOARD

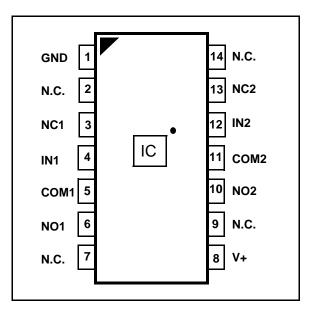


FIGURE 2. CSP TO DIP CONVERTER BOARD PINOUT

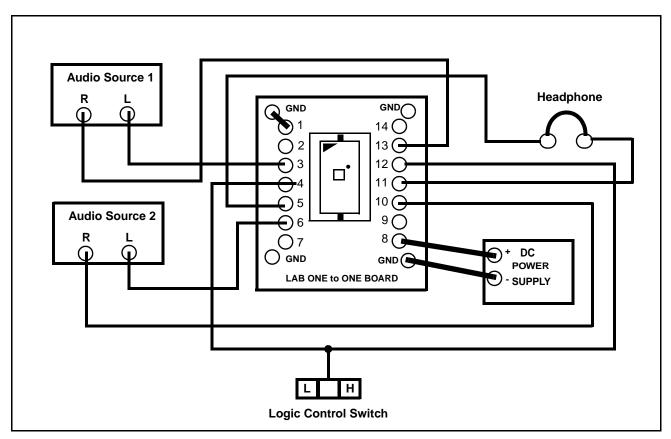


FIGURE 3. EXAMPLE OF BASIC LAB TEST SETUP

All Intersil U.S. products are manufactured, assembled and tested utilizing ISO9000 quality systems. Intersil Corporation's quality certifications can be viewed at www.intersil.com/design/quality

Intersil products are sold by description only. Intersil Corporation reserves the right to make changes in circuit design, software and/or specifications at any time without notice. Accordingly, the reader is cautioned to verify that data sheets are current before placing orders. Information furnished by Intersil is believed to be accurate and reliable. However, no responsibility is assumed by Intersil or its subsidiaries for its use; nor for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Intersil or its subsidiaries.

For information regarding Intersil Corporation and its products, see www.intersil.com