

Evaluation Board User Guide

One Technology Way • P.O. Box 9106 • Norwood, MA 02062-9106, U.S.A. • Tel: 781.329.4700 • Fax: 781.461.3113 • www.analog.com

Universal Evaluation Board for Dual High Speed Op Amps Offered in 8-Lead 3 mm × 3 mm LFCSP

FEATURES

Enables quick breadboarding/prototyping
User defined circuit configuration
Edge mounted SMA connector provisions
Easy connection to test equipment and other circuits

GENERAL DESCRIPTION

The Analog Devices, Inc., dual LFCSP universal evaluation board is designed to help users evaluate dual high speed op amps offered in 8-lead, 3 mm \times 3 mm lead frame chip scale packages (LFCSP). The dual LFCSP board is a bare board (that is, there are no components soldered to the board) that enables users to quickly prototype a variety of dual op amp circuits, which minimizes risk and reduces time to market. Figure 1 and Figure 2

show the bare evaluation board, component side and solder side, respectively.

The evaluation board is a 6-layer printed circuit board (PCB) that accepts SMA edge mounted connectors on the inputs and outputs for efficient connection to test equipment or other circuitry. The ground plane and component placement are designed to minimize parasitic inductances and capacitances. The evaluation board components are primarily SMT 0603 case size, with the exception of the electrolytic bypass capacitors (C1 and C2), which are 1206 case size.

Figure 3 shows the evaluation board schematic. Figure 4 and Figure 5 show the assembly drawing and the layout pattern of the component side, respectively. The bill of materials is listed in Table 1.

EVALUATION BOARD LAYOUT PATTERN

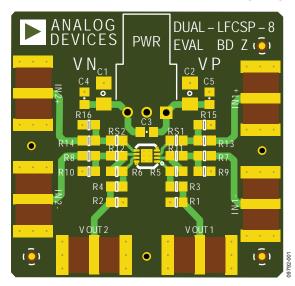


Figure 1. Evaluation Board, Component Side

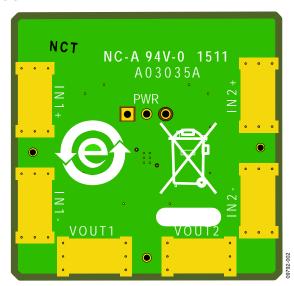


Figure 2. Evaluation Board, Solder Side

UG-267

Evaluation Board User Guide

TABLE OF CONTENTS

Features 1	Evaluation Board Schematic and Artwork
General Description1	Evaluation Board Assembly Drawings and Layout Patterns?
Evaluation Board Layout Pattern 1	Ordering Information
Revision History2	Bill of Materials

REVISION HISTORY

6/11—Revision 0: Initial Version

EVALUATION BOARD SCHEMATIC AND ARTWORK

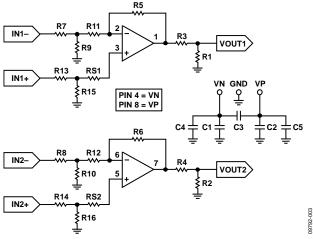
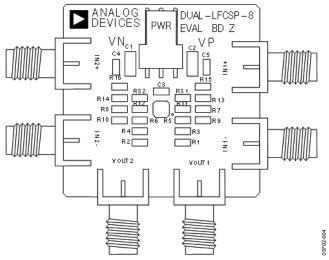
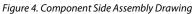


Figure 3. Dual LFCSP Evaluation Board Schematic

EVALUATION BOARD ASSEMBLY DRAWINGS AND LAYOUT PATTERNS





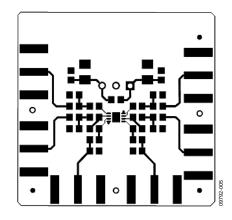


Figure 5. Component Side Layout Pattern

ORDERING INFORMATION

BILL OF MATERIALS

Table 1.

Quantity	Reference Designator	Description	Package
3	VP, VN, PWR	Test point	TP
2	C1, C2	10 μF capacitor	1206
3	C3, C4, C5	Capacitor, user defined	0603
1	DUT	See data sheet packaging information	8-lead LFCSP
6	IN1+, IN1-, IN2+, IN2-, VOUT1, VOUT2	SMA/SMT	SMA/SMT
18	R1 to R16, RS1, RS2	Resistor, user defined	R0603



ESD Caution

ESD (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

Legal Terms and Conditions

By using the evaluation board discussed herein (together with any tools, components documentation or support materials, the "Evaluation Board"), you are agreeing to be bound by the terms and conditions set forth below ("Agreement") unless you have purchased the Evaluation Board, in which case the Analog Devices Standard Terms and Conditions of Sale shall govern. Do not use the Evaluation Board until you have read and agreed to the Agreement. Your use of the Evaluation Board shall signify your acceptance of the Agreement. This Agreement is made by and between you ("Customer") and Analog Devices, Inc. "("ADI"), with its principal place of business at One Technology Way, Norwood, MA 02062, USA. Subject to the terms and conditions of the Agreement, ADI hereby grants to Customer a free, limited, personal, temporary, non-exclusive, non-sublicensable, non-transferable license to use the Evaluation Board FOR EVALUATION PURPOSES ONLY. Customer understands and agrees that the Evaluation Board is provided for the sole and exclusive purpose referenced above, and agrees not to use the Evaluation Board for any other purpose. Furthermore, the license granted is expressly made subject to the following additional limitations: Customer shall not (i) rent, lease, display, sell, transfer, assign, sublicense, or distribute the Evaluation Board; and (ii) permit any Third Party to access the Evaluation Board. As used herein, the term "Third Party" includes any entity other than ADI, Customer, their employees, affiliates and in-house consultants. The Evaluation Board is NOT sold to Customer, all rights not expressly granted herein, including ownership of the Evaluation Board, are reserved by ADI. CONFIDENTIALITY. This Agreement and the Evaluation Board shall all be considered the confidential and proprietary information of ADI. Customer may not disclose or transfer any portion of the Evaluation Board to any other party for any reason. Upon discontinuation of use of the Evaluation Board or termination of this Agreement, Customer agrees to promptly return the Evaluation Board to ADI. ADDITIONAL RESTRICTIONS. Customer may not disassemble, decompile or reverse engineer chips on the Evaluation Board. Customer shall inform ADI of any occurred damages or any modifications or alterations it makes to the Evaluation Board, including but not limited to soldering or any other activity that affects the material content of the Evaluation Board. Modifications to the Evaluation Board must comply with applicable law, including but not limited to the ROHS Directive. TERMINATION. ADI may terminate this Agreement at any time upon giving written notice to Customer, Customer agrees to return to ADI the Evaluation Board at that time, LIMITATION OF LIABILITY, THE EVALUATION BOARD PROVIDED HEREUNDER IS PROVIDED "AS IS" AND ADI MAKES NO WARRANTIES OR REPRESENTATIONS OF ANY KIND WITH RESPECT TO IT. ADI SPECIFICALLY DISCLAIMS ANY REPRESENTATIONS, ENDORSEMENTS, GUARANTEES, OR WARRANTIES, EXPRESS OR IMPLIED, RELATED TO THE EVALUATION BOARD INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, TITLE, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS. IN NO EVENT WILL ADI AND ITS LICENSORS BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGES RESULTING FROM CUSTOMER'S POSSESSION OR USE OF THE EVALUATION BOARD, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DELAY COSTS, LABOR COSTS OR LOSS OF GOODWILL. ADI'S TOTAL LIABILITY FROM ANY AND ALL CAUSES SHALL BE LIMITED TO THE AMOUNT OF ONE HUNDRED US DOLLARS (\$100.00). EXPORT. Customer agrees that it will not directly or indirectly export the Evaluation Board to another country, and that it will comply with all applicable United States federal laws and regulations relating to exports. GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the substantive laws of the Commonwealth of Massachusetts (excluding conflict of law rules). Any legal action regarding this Agreement will be heard in the state or federal courts having jurisdiction in Suffolk County, Massachusetts, and Customer hereby submits to the personal jurisdiction and venue of such courts. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Agreement and is expressly disclaimed.

©2011 Analog Devices, Inc. All rights reserved. Trademarks and registered trademarks are the property of their respective owners. UG09792-0-6/11(0)



www.analog.com

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Amplifier IC Development Tools category:

Click to view products by Analog Devices manufacturer:

Other Similar products are found below:

EVAL-ADCMP566BCPZ EVAL-ADCMP606BKSZ AD8013AR-14-EBZ AD8033AKS-EBZ AD8044AR-EBZ AD8225-EVALZ

ADA4859-3ACP-EBZ ADA4862-3YR-EBZ DEM-OPA-SO-2B AD744JR-EBZ AD8023AR-EBZ AD8030ARJ-EBZ AD8040ARU-EBZ

AD8073JR-EBZ AD813AR-14-EBZ AD848JR-EBZ ADA4858-3ACP-EBZ ADA4922-1ACP-EBZ 551600075-001/NOPB DEM-OPA-SO2E THS7374EVM EVAL-ADCMP553BRMZ EVAL-ADCMP608BKSZ MIOP 42109 EVAL-ADCMP609BRMZ MAX9928EVKIT+

MAX9636EVKIT+ MAX9611EVKIT MAX9937EVKIT+ MAX9934TEVKIT+ MAX44290EVKIT# MAX2644EVKIT MAX4073EVKIT+

DEM-OPA-SO-2C MAX2643EVKIT ISL28158EVAL1Z MAX40003EVKIT# MAX2473EVKIT MAX2472EVKIT MAX4223EVKIT

MAX9700BEVKIT MADL-011014-001SMB DC1685A DEM-OPA-SO-2D MAX2670EVKIT# DEM-OPA-SO-1E AD8137YCP-EBZ

EVAL-ADA4523-1ARMZ MAX44242EVKIT# EVAL-LT5401 32FDAZ