

# Evaluation Board User Guide

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## 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**

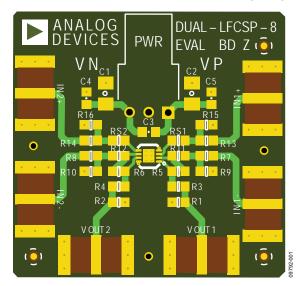


Figure 1. Evaluation Board, Component Side

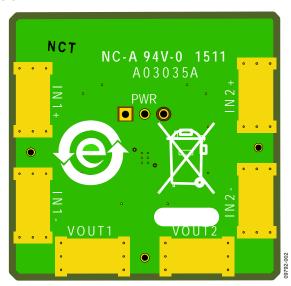


Figure 2. Evaluation Board, Solder Side

## **UG-267**

## **Evaluation Board User Guide**

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#### **REVISION HISTORY**

6/11—Revision 0: Initial Version

## **EVALUATION BOARD SCHEMATIC AND ARTWORK**

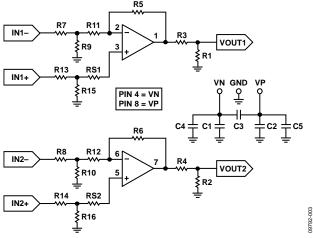


Figure 3. Dual LFCSP Evaluation Board Schematic

#### **EVALUATION BOARD ASSEMBLY DRAWINGS AND LAYOUT PATTERNS**

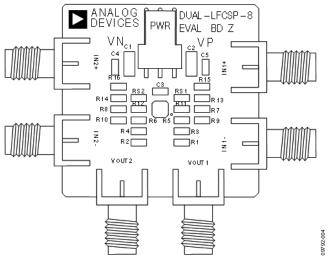


Figure 4. Component Side Assembly Drawing

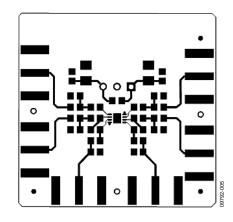


Figure 5. Component Side Layout Pattern

### **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.

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