

# 8-Lead MSOP Evaluation Board User Guide

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## Universal Evaluation Board for Dual High Speed Op Amps Offered in 8-Lead MSOP

#### **FEATURES**

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

#### **GENERAL DESCRIPTION**

The Analog Devices, Inc., dual MSOP universal evaluation board helps users to evaluate dual, high speed op amps offered in the 8-lead, mini small outline package (MSOP). The dual MSOP 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 component side and solder side, respectively, of the bare evaluation board.

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 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 PHOTOGRAPHS**

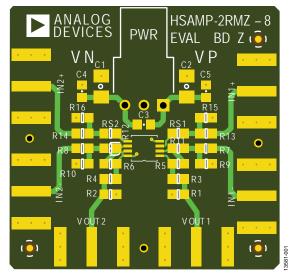


Figure 1. Evaluation Board, Component Side

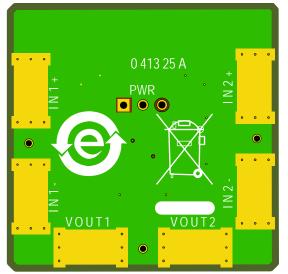


Figure 2. Evaluation Board, Solder Side

# **UG-886**

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### **REVISION HISTORY**

10/15—Revision 0: Initial Version

# **EVALUATION BOARD SCHEMATICS AND ARTWORK**

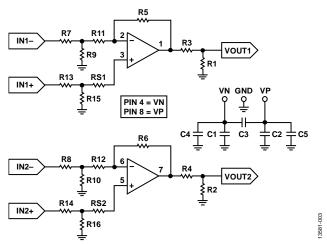


Figure 3. 8-Lead MSOP Evaluation Board Schematic

#### **EVALUATION BOARD ASSEMBLY DRAWING AND LAYOUT PATTERN**

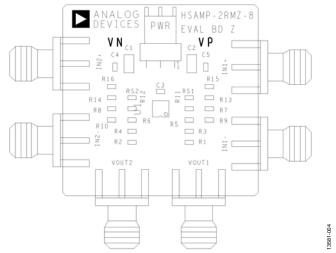


Figure 4. Component Side Assembly Drawing

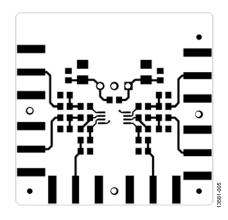


Figure 5. Component Side Layout Pattern

## 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	Device under test	See data sheet packaging information	8-lead MSOP
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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