

# Evaluation Board User Guide

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### Evaluation Board for Dual High Speed Op Amps Offered in 16-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
RoHS compliant

#### **GENERAL DESCRIPTION**

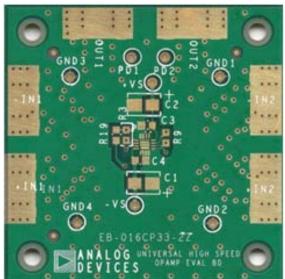
The Analog Devices, Inc., 16-lead LFCSP evaluation board is designed to help users evaluate dual high speed op amps offered in 16-lead, 3 mm  $\times$  3 mm LFCSP packages. The evaluation board is a bare board (that is, there are no components or amplifier soldered to the board; these must be ordered separately) 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 and circuit sides.

The evaluation board is a 2-layer PCB that accepts SMA edge mounted connectors on the inputs and outputs for efficient connection to test equipment or other circuitry. The ground plane, component placement, and supply bypassing are designed to minimize parasitic inductances and capacitances. The evaluation board components are primarily SMT 0805 case size, with the exception of the electrolytic bypass capacitors (C1 and C2), which are 3528 case size.

Figure 3 shows the evaluation board schematic. The evaluation board assembly drawings and layout patterns are shown in Figure 4 through Figure 7.

#### **EVALUATION BOARD COMPONENT AND CIRCUIT SIDES**



NOTES
1. THE EVALUATION BOARD SILKSCREEN PART NUMBER LABELING
ON YOUR BOARD MAY BE DIFFERENT FROM WHAT IS SHOWN HERE.

Figure 1. Component Side of Evaluation Board



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1. THE EVALUATION BOARD SILKSCREEN PART NUMBER LABELING ON YOUR BOARD MAY BE DIFFERENT FROM WHAT IS SHOWN HERE.

Figure 2. Circuit Side of Evaluation Board

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

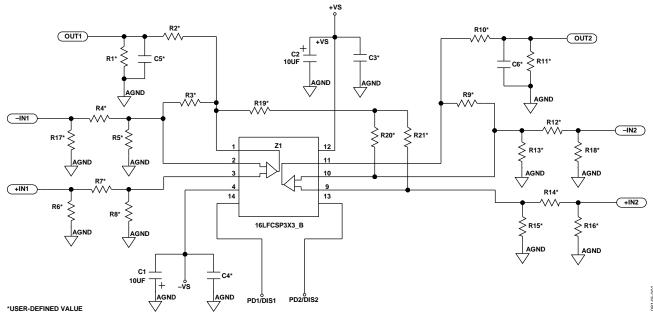


Figure 3. Evaluation Board Schematic

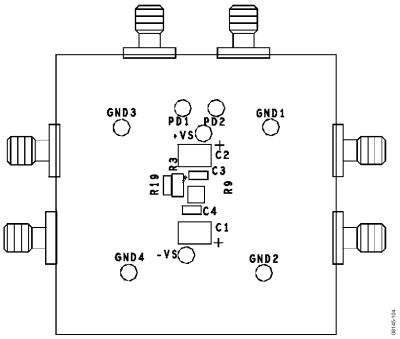


Figure 4. Assembly Drawing, Component Side

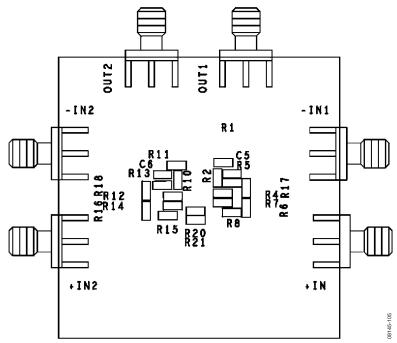


Figure 5. Assembly Drawing, Circuit Side

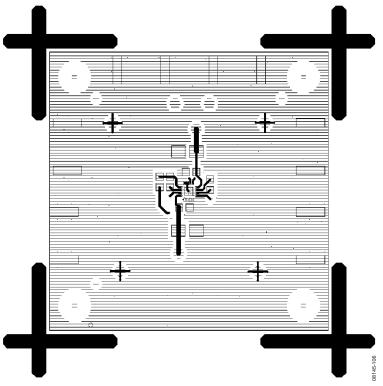


Figure 6. Layout Pattern, Component Side

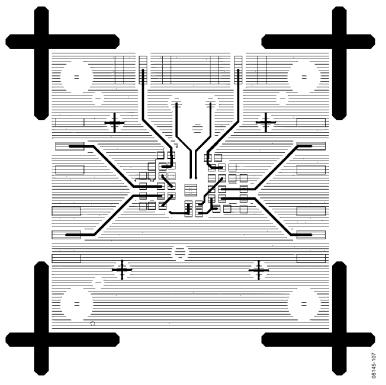


Figure 7. Layout Pattern, Circuit Side

### **ORDERING INFORMATION**

### **BILL OF MATERIALS**

#### Table 1.

Quantity	Reference Designator	Description	Package
8	+VS, –VS, GND1, GND2, GND3, GND4, PD1, PD2	Test point	TP
2	C1, C2	10 μF capacitor	3528
4	C3, C4, C5, C6	Capacitor, user defined	C0805
1	DUT	DEV, QFN16_3x3	16-lead LFCSP
6	+IN1, +IN2, -IN1, -IN2, OUT1, OUT2	SMA/SMT	SMA/SMT
21	R1 to R21	Resistor, user defined	R0805

# NOTES

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#### **NOTES**



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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