

Evaluation Board User Guide

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Evaluation Board for Dual High Speed Differential Amplifiers

FEATURES

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

GENERAL DESCRIPTION

The EB-D24CP44-2Z is designed, to aid in the evaluation of dual high speed differential amplifiers. The EB-D24CP44-2Z is a bare board (that is, there are no components soldered to the board) that enables users to quickly prototype a variety of differential amplifier circuits, which minimizes risk and reduces time to market. The EB-D24CP44-2Z evaluation board supports any of Analog Devices, Inc., dual high speed differential amplifiers in 4 mm \times 4 mm lead frame chip scale packages (LFCSP).

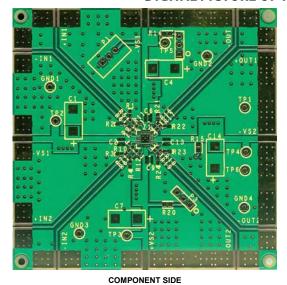
Figure 1 shows the component side and circuit side of the evaluation board. Figure 2 shows the evaluation board schematic.

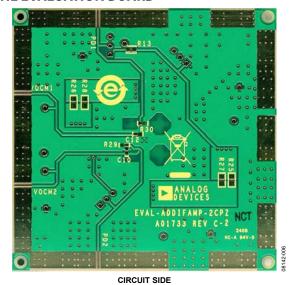
The 4-layer evaluation board accepts edge-mounted SMA connectors on both inputs and outputs, which allows efficient and quick connection to test equipment or other circuitry.

The board ground plane, component placement, and power supply bypassing have been optimized for maximum circuit flexibility and performance. The evaluation board uses a variety of SMT component case sizes: 0402, 0508, 0805, and 7343.

Figure 3 and Figure 5 show the evaluation board assembly drawings. The metal layout pattern for connecting the board to the op amp and to the supporting circuitry is shown in Figure 4 and Figure 6.

DIGITAL PICTURE OF THE EVALUATION BOARD





NOTES

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

Figure 1. Component and Circuit Side of PCB

UG-018

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EVALUATION BOARD SCHEMATIC 100-24180 P3 1 0.1µF C12 PD2 §\$₹<u>≅</u> /OCM2 (TP6) PD1/DIS1 VOCM2 zs∧+ 7 zs∧+ +VS2 (TP3) AGND +EB2 PD1/DIS1 \$\$ 8 \$\$8 . 82 <u>\$</u> *USER-DEFINED VALUE DNI = DO NOT INSTALL

Figure 2. Dual Differential Amplifier Universal Evaluation Board Schematic

P2 2

ASSEMBLY DRAWING AND BOARD LAYOUT

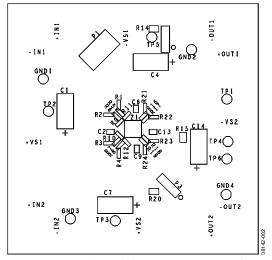


Figure 3. Board Assembly Drawing, Component Side

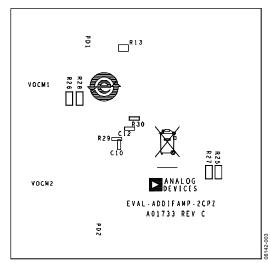


Figure 5. Board Assembly Drawing, Circuit Side

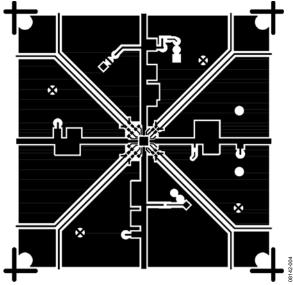


Figure 4. Board Layout Pattern, Component Side

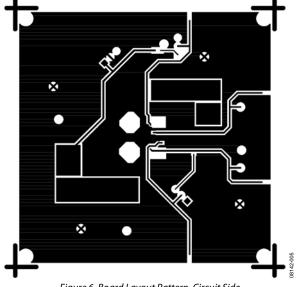


Figure 6. Board Layout Pattern, Circuit Side

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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