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Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Evaluation Board for Dual High Speed Selectable Gain Differential Amplifiers (24-Lead, 4 mm × 4 mm LFCSP)

FEATURES

- Enables quick breadboarding/prototyping
- Selectable gain of 1, 2, or 3
- Edge-mounted SMA connector provisions
- Easy connection to test equipment and other circuits
- Two independent circuits enhance flexibility

GENERAL DESCRIPTION

The EB-D24CP44SG-2Z is designed to aid in the evaluation of dual high speed, selectable gain differential amplifiers. It has the flexibility to choose between the gain of 1, 2, or 3. The EB-D24CP44SG-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-D24CP44SG-2Z evaluation board supports any of Analog Devices, Inc., dual high speed differential amplifiers in 4 mm × 4 mm lead frame chip scale packages (LFCSP).

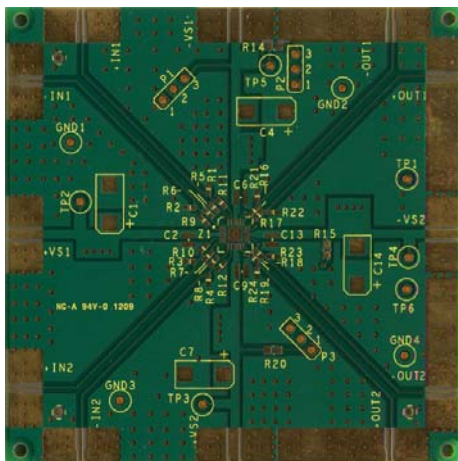
Figure 1 and Figure 2 show the component side and circuit side of the evaluation board. Figure 3 shows the evaluation board schematic.

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, 0603, and 7343.

Figure 4 and Figure 6 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 5 and Figure 7.

DIGITAL PICTURES OF THE EVALUATION BOARD

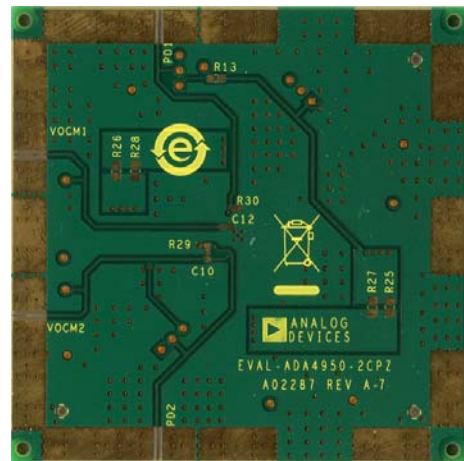


NOTES

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

088894-001

Figure 1. Component Side of PCB



NOTES

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

088894-007

Figure 2. Circuit Side of PCB

TABLE OF CONTENTS

| | | | |
|--|---|---|---|
| Features | 1 | Revision History | 2 |
| General Description | 1 | Evaluation Board Schematic | 3 |
| Digital Pictures of the Evaluation Board | 1 | Assembly Drawing and Board Layout | 4 |

REVISION HISTORY

4/10—Revision 0: Initial Version

EVALUATION BOARD SCHEMATIC

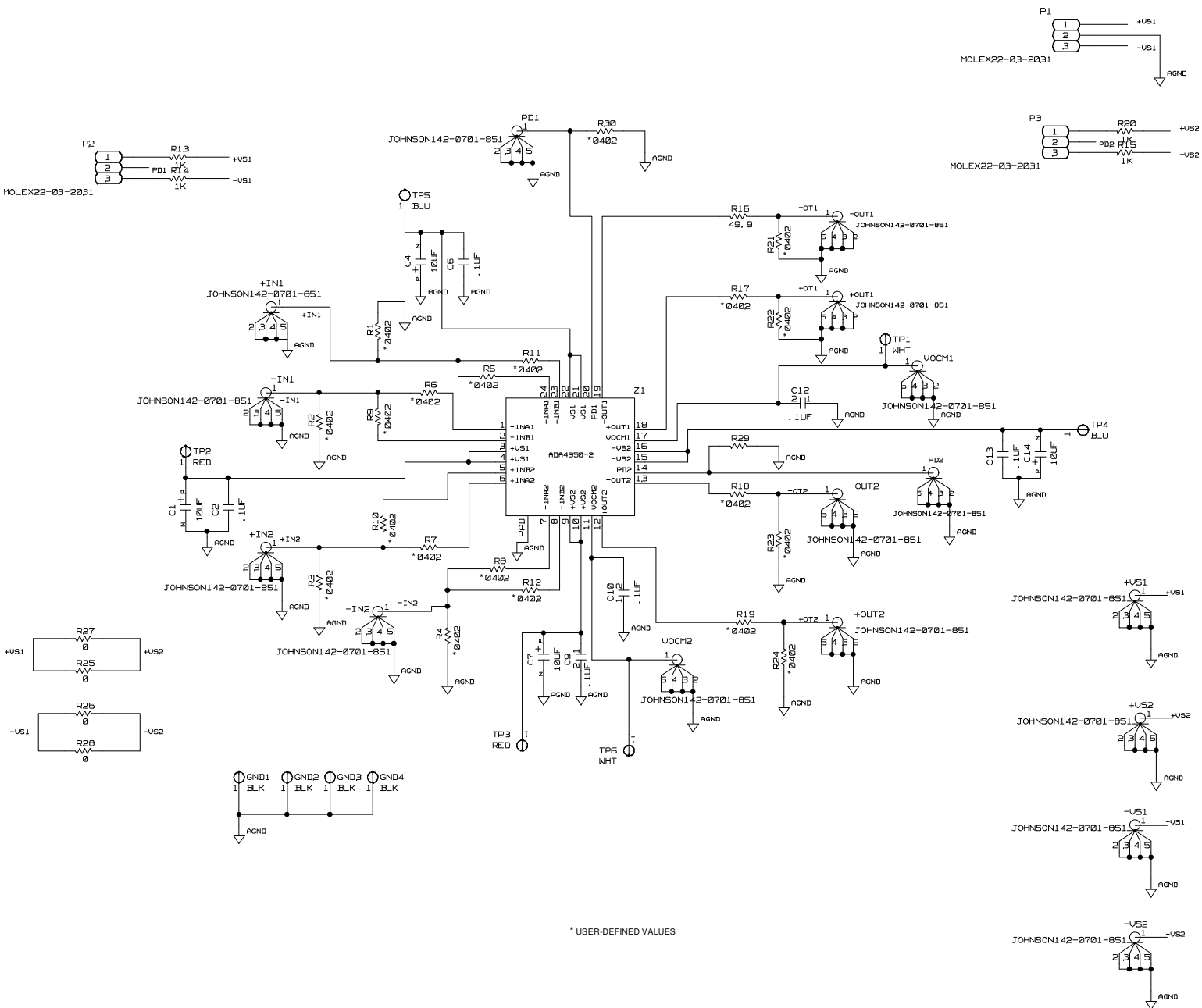


Figure 3. Dual Differential Amplifier Universal Evaluation Board Schematic

ASSEMBLY DRAWING AND BOARD LAYOUT

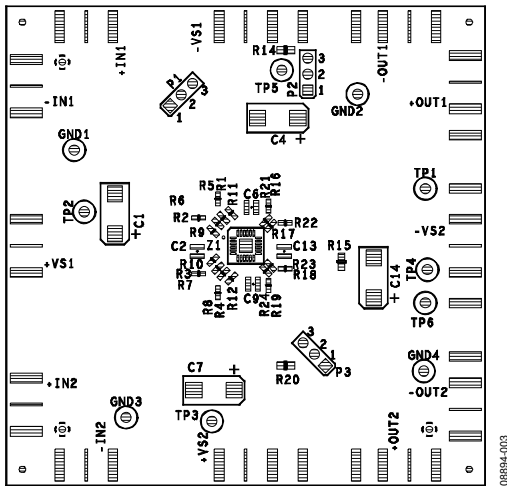


Figure 4. Board Assembly Drawing, Component Side

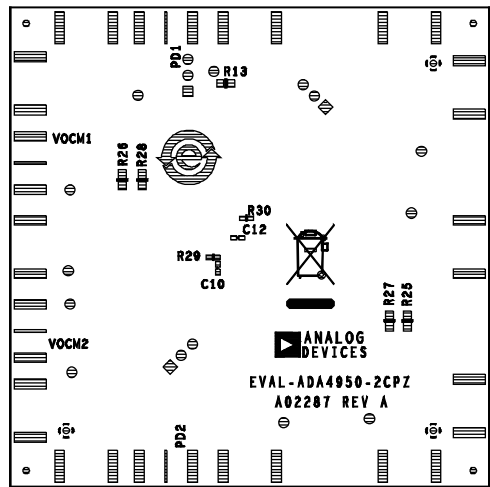


Figure 6. Board Assembly Drawing, Circuit Side

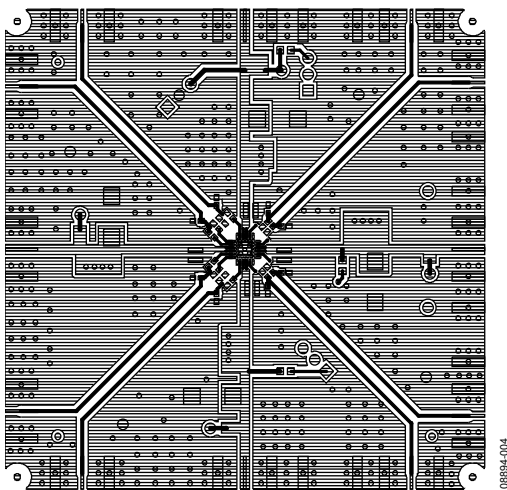


Figure 5. Board Layout Pattern, Component Side

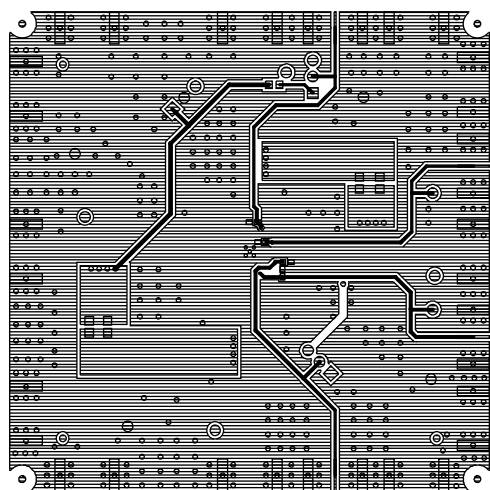


Figure 7. Board Layout Pattern, Circuit Side

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**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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