Evaluation Board for Single, High Speed Operational Amplifiers (8-Lead SOIC)

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 AD8036/AD8037 evaluation board is designed to aid in the evaluation of single, high speed operational amplifiers. The AD8036/AD8037 evaluation board is a bare board (that is, there are no components soldered to the board) that enables users to quickly prototype a variety of operational amplifier circuits, which minimizes risk and reduces time to market. The AD8036/AD8037 evaluation board supports Analog Devices, Inc., single, high speed operational amplifiers in an 8-lead SOIC package with output clamps.

The 4-layer evaluation board accepts edge-mounted Subminiature Version A (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 are optimized for maximum circuit flexibility and performance. The evaluation board uses a variety of surface-mount technology (SMT) component case sizes: 0402, 0508, 0603, and 7343.

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

Figure 4 and Figure 6 show the evaluation board assembly drawings. Figure 5 and Figure 7 show the metal layout pattern for connecting the board to the op amp and to the supporting circuitry.
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REVISION HISTORY
8/12—Revision 0: Initial Version
Figure 3. AD8036/AD8037 Evaluation Board Schematic
NONINVERTING CONFIGURATION

When using this board in a noninverting configuration, with a gain larger than 1, there are two recommended ways to place the gain resistor. The first way is to place the gain resistor in the R1 location and use a 0 Ω resistor for the R2 location to short to ground. The second way is to place the gain resistor between the first pad of R1 and ground, without using a second resistor (see Figure 8).

Figure 8. Noninverting Configuration with a Gain of Higher Than 1
## ORDERING INFORMATION

### BILL OF MATERIALS

<table>
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<th>Quantity</th>
<th>Reference Designator</th>
<th>Description</th>
<th>Package</th>
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<tr>
<td>5</td>
<td>+IN, −IN, OUT, VCH, VCL</td>
<td>Subminiature Version A/surface-mount technology</td>
<td>SMA/SMT</td>
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<td>User-defined capacitors</td>
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<td>2</td>
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<td>3</td>
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<td>1</td>
<td>U1</td>
<td>Amplifier</td>
<td>8-lead SOIC</td>
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