FEATURES
- Fully assembled and tested
- Enables quick customer evaluation
- Edge-mounted SMA connector provisions
- Easy connection to test equipment and other circuits

GENERAL DESCRIPTION
The ADA4432-1BRJ-EBZ evaluation board makes it easy for designers to quickly observe the performance of the ADA4432-1 video filter in a real-world application. Input signals are applied through the SMA jack (IN), and output signals are taken from the SMA jack (OUT). Power is applied through the red +VS test point. Ground the black GND test point. The ADA4432-1 operates on a single-supply voltage ranging from 2.7 V to 3.6 V and draws approximately 7 mA.

The evaluation board is configured with an input termination resistor (R1) of 75 Ω. Choose this resistor to provide the correct termination or load for the input signal source. For example, some video encoders use current-mode video digital-to-analog converter (DAC) outputs that require a 300 Ω load resistance. In this case, replace R1 with a 300 Ω resistor.

The ADA4432-1BRJ-EBZ evaluation board is configured to drive a back terminated 150 Ω differential load. A series back-termination resistor of 75 Ω is installed on the output at R3. If it is different from 75 Ω, this can be changed to match the actual load impedance.

The ADA4432-1 can be powered down (disabled) by grounding the green ENA test point at the top left of the evaluation board. On the evaluation board, this pin is pulled up to +VS through the 4.99 kΩ resistor (R6).

Figure 1 shows the evaluation board, component side and circuit side. Figure 2 shows the evaluation board schematic. The printed circuit board (PCB) layout pattern for the primary side and secondary side are shown in Figure 3 and Figure 4, respectively. The silkscreen pattern for the primary side and secondary side are shown in Figure 5 and Figure 6, respectively.
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REVISION HISTORY
5/12—Revision 0: Initial Version
EVALUATION BOARD SCHEMATIC AND ARTWORK

Figure 2. ADA4432-1BRJ-EBZ Evaluation Board Circuit Schematic

Figure 3. ADA4432-1BRJ-EBZ Board Layout Pattern, Primary Side

Figure 4. ADA4432-1BRJ-EBZ Board Layout Pattern, Secondary Side

Figure 5. ADA4432-1BRJ-EBZ Board Silkscreen Pattern, Primary Side

Figure 6. ADA4432-1BRJ-EBZ Board Silkscreen Pattern, Secondary Side
ORDERING INFORMATION

BILL OF MATERIALS

Table 1.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Reference Designator</th>
<th>Description</th>
<th>Package</th>
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<tr>
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<td>2.2 µF chip capacitor</td>
<td>3216</td>
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<tr>
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<td>C2</td>
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<td>1</td>
<td>C3</td>
<td>0.1 µF chip capacitor</td>
<td>0603</td>
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<tr>
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<td>ADA4432-1BRJ-EBZ</td>
<td>6-lead SOT-23</td>
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<td>1</td>
<td>VS+</td>
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<td>ENA</td>
<td>Green test point loop connector</td>
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<td>1</td>
<td>GND1, GND2, GND3</td>
<td>Black test points loop connector</td>
<td>TP1</td>
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<td>75 Ω resistors</td>
<td>0603</td>
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<tr>
<td>1</td>
<td>R6</td>
<td>4.99 kΩ resistor</td>
<td>0603</td>
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</tbody>
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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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