

## Evaluation Board for 8 lead MSOP devices in the Switch/Mux portfolio

### FEATURES

- 8 lead MSOP evaluation board
- Clamp to allow the main device to be changed easily
- Gold pin connectors to allow the addition of passive components
- SMB connectors for the input/output of signals
- Additional space on board to allow for prototyping

### EVALUATION KIT CONTENTS

- [EVAL-8MSOPEBZ](#) evaluation board

### ONLINE RESOURCES

#### Documents Needed

- [Data sheet of the device to be evaluated](#)
- [EVAL-8MSOPEBZ](#) user guide

### EQUIPMENT NEEDED

- Device to be evaluated
- DC voltage source
- Analog signal source
- Method to measure voltage, such as a digital multimeter (DMM)

### GENERAL DESCRIPTION

The [EVAL-8MSOPEBZ](#) is the evaluation board for the 8 lead MSOP devices in the switch/mux portfolio which are to be purchased separately. A clamp is supplied with the board so that the device can be secured to the board without the need for soldering. This makes the board reusable for multiple devices.

Figure 1 shows the [EVAL-8MSOPEBZ](#) evaluation board. The device can be clamped or soldered to the center of the evaluation board. Each pin of the device is broke out to a link that can be set to either  $V_{DD}$  or GND and a wire screw terminal is provided to supply  $V_{DD}$  and GND. SMB connectors are on the board allow for additional external signals to be supplied to the device. In addition, there is space at the top of the board available for prototyping.

Full specifications of the device under test are available in the product data sheet, which should be consulted in conjunction with this user guide when using the evaluation board.

### EVALUATION BOARD

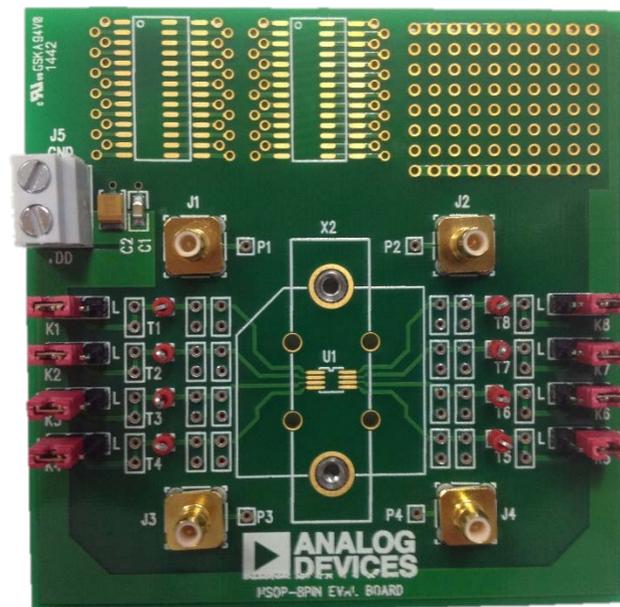


Figure 1. [EVAL-8MSOPEBZ](#) Evaluation Board

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**REVISION HISTORY**

**8/15—Revision 0: Initial Version**

## EVALUATION BOARD HARDWARE

The operation of a 8 lead MSOP devices in the switch/mux portfolio can be evaluated using the [EVAL-8MSOPEBZ](#). Figure 1 shows the evaluation board.

### POWER SUPPLY

Connector J5 provides the ability to supply VDD and GND supplies to the board. These can then be selected for each pin of the device by setting the link headers to either VDD or GND. If a  $V_{SS}$  supply is needed then the voltage can applied directly to the pin of the device. An example of how this can be done is by removing the link and then supplying the required voltage to the central pin of the header or to the gold pin connectors on the relevant trace.

### LINK HEADERS

The link headers are used to supply the device under test with either  $V_{DD}$  or GND. Each header is designated K1 to K8, with the number corresponding to the pin number of the device. Table 1 shows a summary of the link headers and how they function on the evaluation board.

Table 1. Link Header Descriptions

Label	Position	Description
K1to K8	H	$V_{DD}$
	L	GND

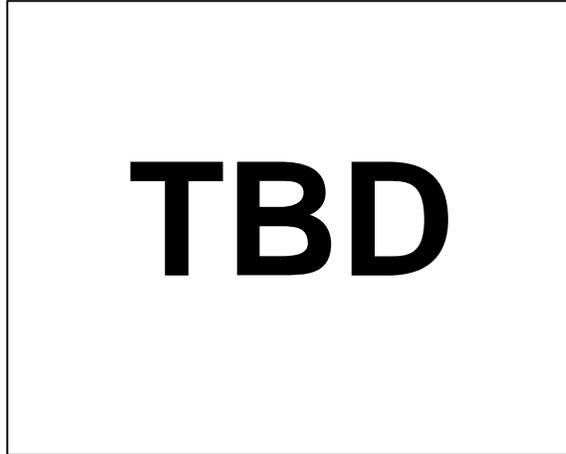
### SMB CONNECTORS

They are four SMB connectors on evaluation board labelled J1 to J4. When an SMB cable is one of these connectors, the signal becomes available on either P1 to P4. This signal can then be applied to the pin of the device by forming a connection from either P1 to P4 to a gold pin connector found on the relevant trace.

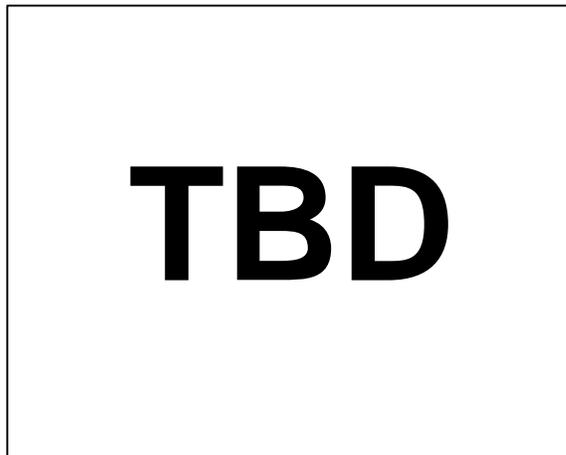
### INPUT SIGNAL TRACES

Each trace includes three sets of gold pin connectors, two of which can be used to place a load on the signal path to ground and another that is in series with the signal path. The three sets of gold pin connectors can be used to create a simple resistor-capacitor (RC) filter.

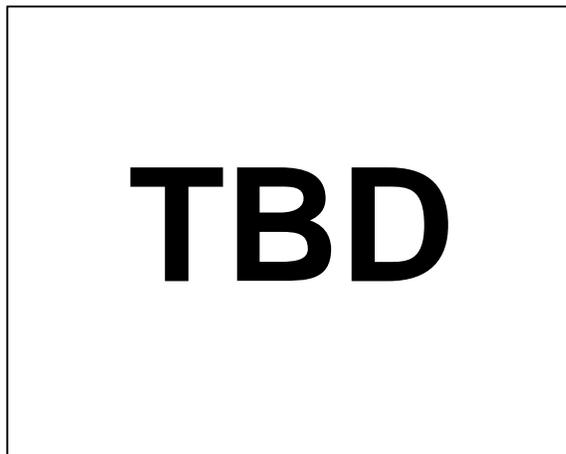
## EVALUATION BOARD SCHEMATICS AND ARTWORK



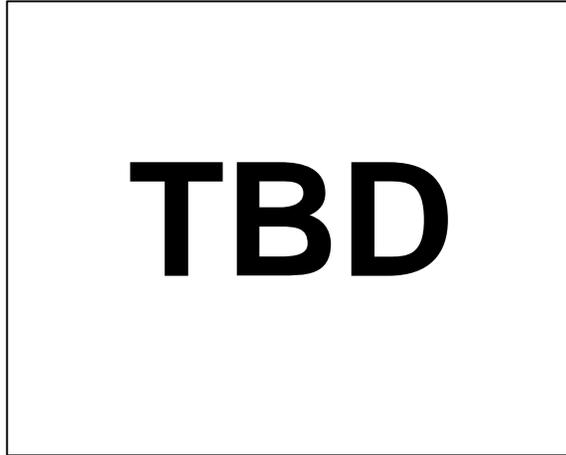
*Figure 2. ADG5208F Evaluation Board Schematic*



*Figure 3. EVAL-ADG5208FEBZ Silkscreen*



*Figure 4. EVAL-ADG5208FEBZ Top Layer*



*Figure 5. EVAL-ADG5208FEBZ Bottom Layer*

**ORDERING INFORMATION**

**BILL OF MATERIALS**

Table 2.

## 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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