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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

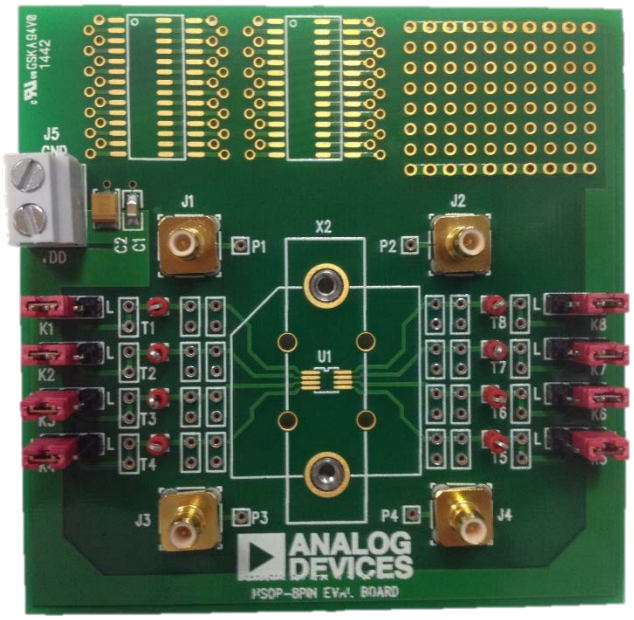


Figure 1. EVAL-8MSOPEBZ Evaluation Board

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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 them 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

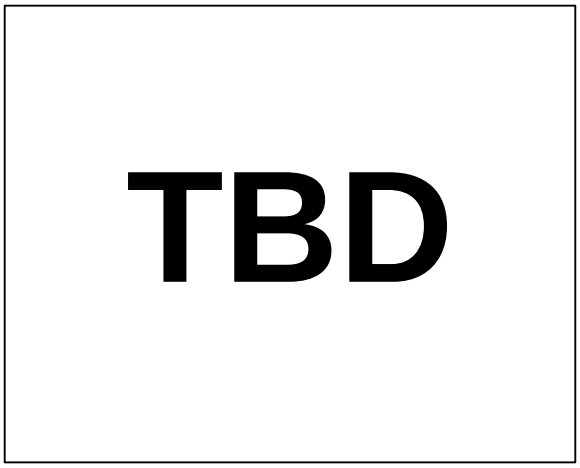


Figure 2. ADG5208F Evaluation Board Schematic

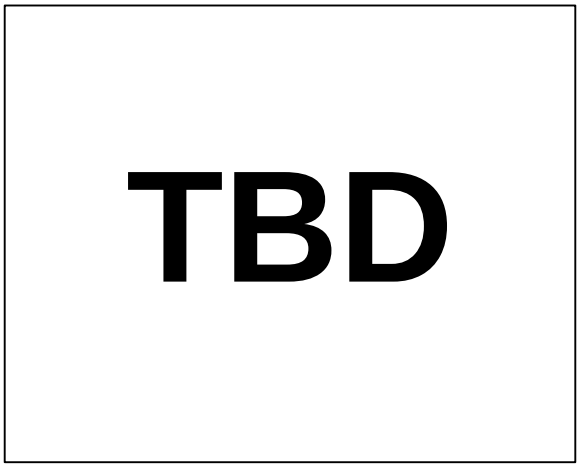


Figure 3. EVAL-ADG5208FEBZ Silkscreen

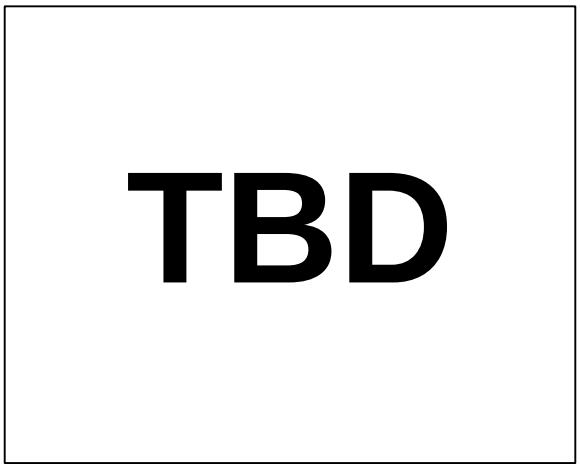


Figure 4. EVAL-ADG5208FEBZ Top Layer

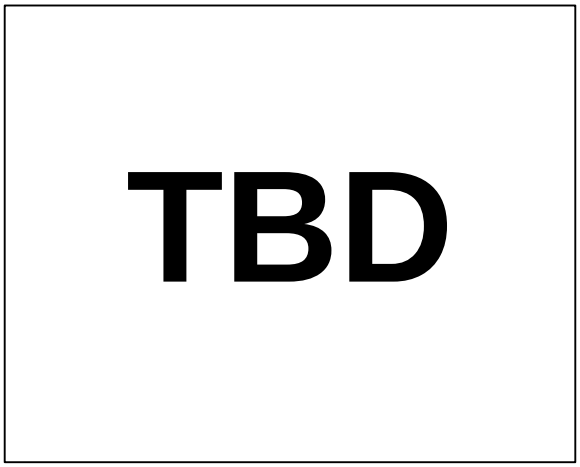


Figure 5. EVAL-ADG5208FEBZ Bottom Layer

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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