19-0395; Rev 0; 7/05

MAX3787 Evaluation Kit

Evaluates: MAX3787

General Description

The MAX3787 evaluation kit (EV kit) is an assembled demonstration board that provides easy evaluation of the MAX3787 1Gbps to 12.5Gbps passive equalizer for backplanes and cables. SMA connectors with 50Ω controlled-impedance transmission lines to the MAX3787 are provided for input and output ports to facilitate connection to high-speed test equipment.

Component List

DESIGNATION	QTY	DESCRIPTION
J1–J8	8	SMA connectors, edge mount, tab contact EF Johnson 142-0701-851
U1	1	MAX3787ABL 4 UCSP
None	1	MAX3787 EV kit circuit board, Rev A

Component Suppliers

SUPPLIER	PHONE	FAX
EF Johnson	507-833-8822	507-833-8256

Note: *Please indicate that you are using the MAX3787 when ordering from these suppliers.*

Features

- **Fully Assembled and Tested**
- **SMA Connectors for Inputs and Outputs**
- **Calibration Test Strip**
- **No Power Supply Required**

Ordering Information

PART	TEMP RANGE	IC PACKAGE
MAX3787EVKIT	-40°C to +125°C	4 UCSP-4

Quick Start

Caution: The MAX3787 is a DC-coupled evaluation board. Use DC-blocks when the MAX3787 is placed between test equipment and any circuit with a supply-referenced input or output.

1) Set the pattern generator to 8.5Gbps with a 2^7-1 PRBS pattern. Set the data output amplitude to 1Vp-p differential.
2) Connect the pattern generator data outputs to the inputs of an 18in FR4 board or 5m cable.
3) Connect the FR4 board or cable outputs to the MAX3787 EV kit inputs (IN+, IN-).
4) Connect the MAX3787 EV kit outputs (OUT+, OUT-) to an oscilloscope with 50Ω input terminations.

For pricing, delivery, and ordering information, please contact Maxim/Dallas Direct! at 1-888-629-4642, or visit Maxim's website at www.maxim-ic.com.

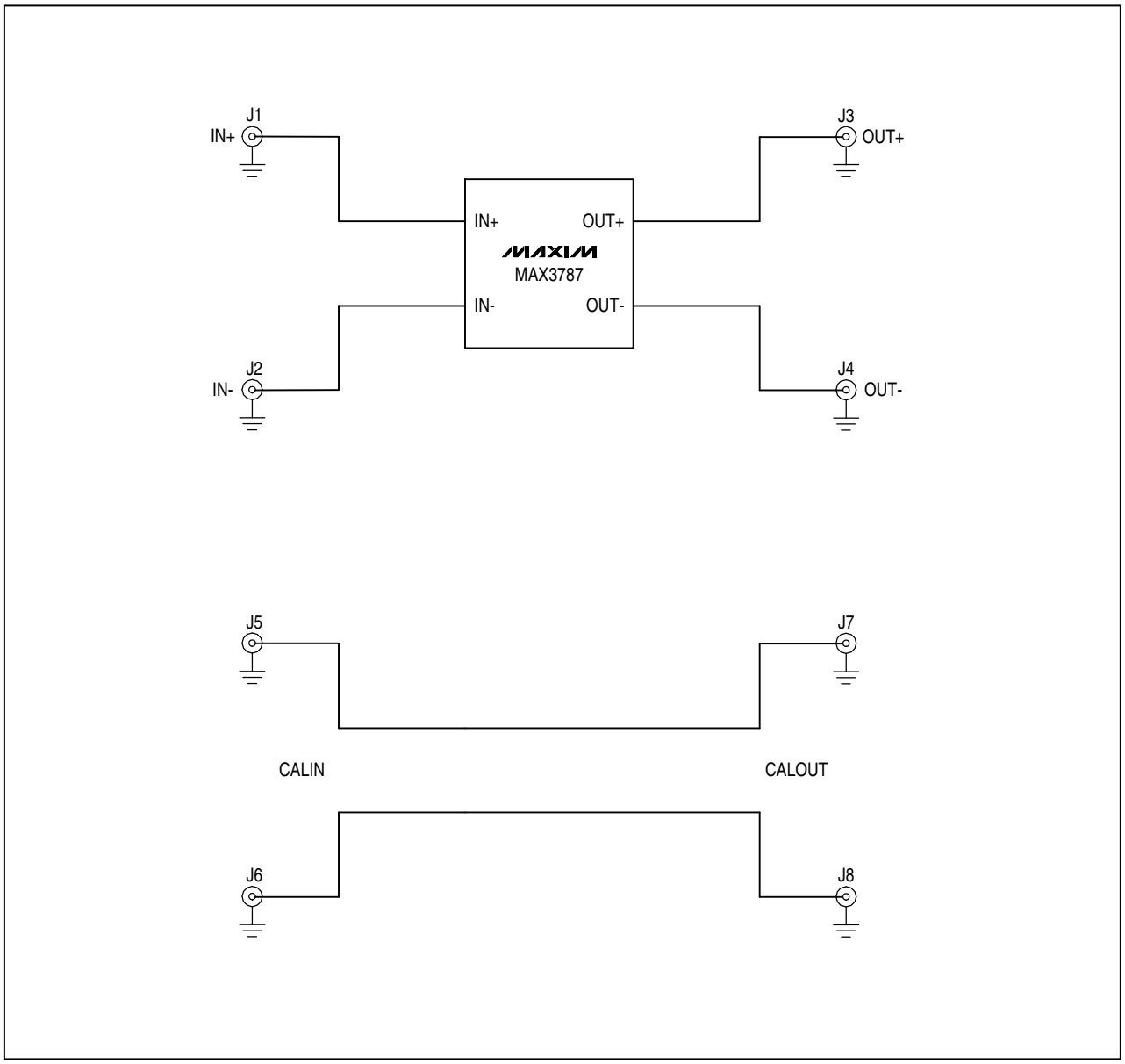


Figure 1. MAX3787 EV Kit Schematic

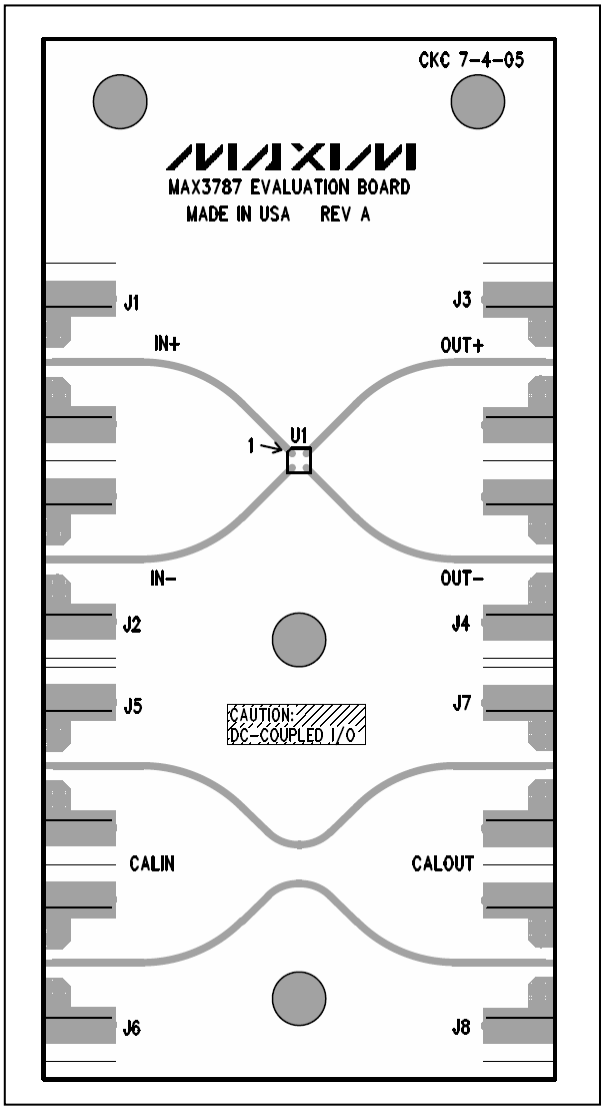


Figure 2. MAX3787 EV Kit Component Placement Guide—Component Side

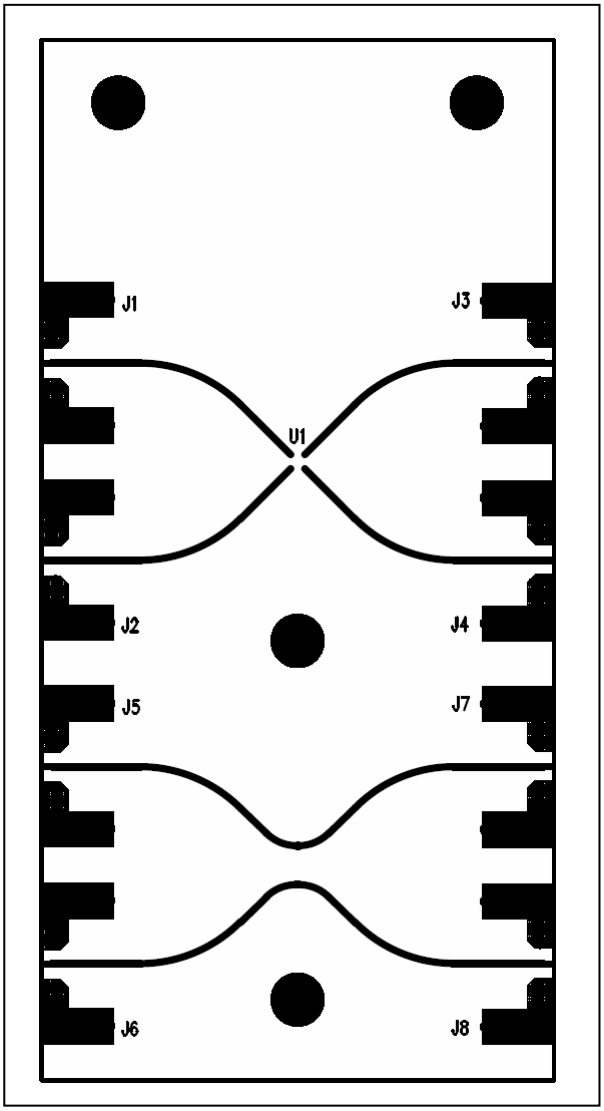


Figure 3. MAX3787 EV Kit PC Board Layout—Component Side

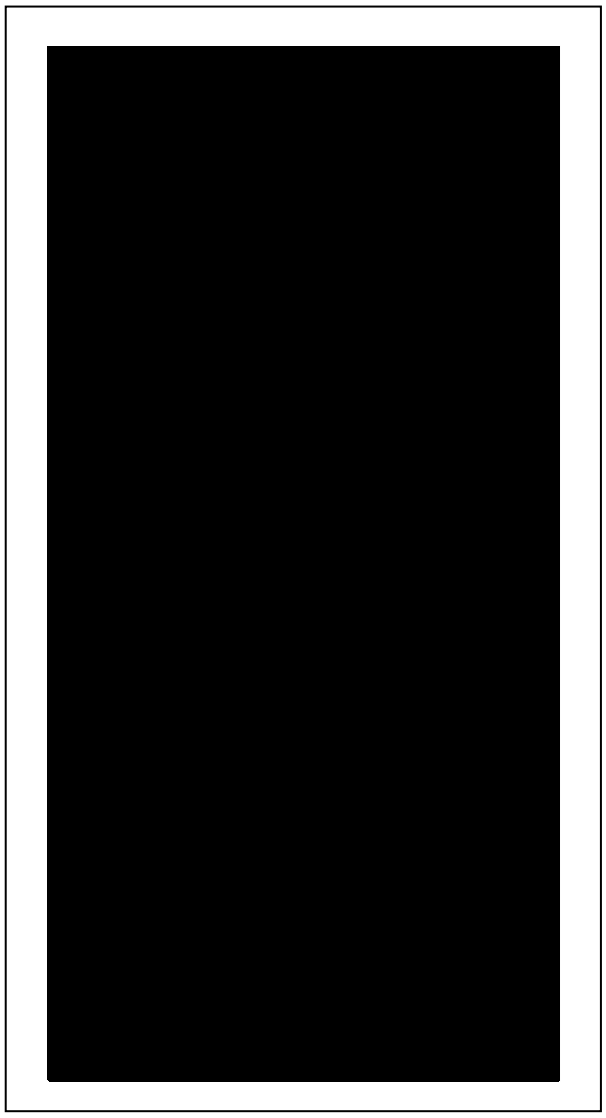


Figure 4. MAX3787 EV Kit PC Board Layout—Ground Plane

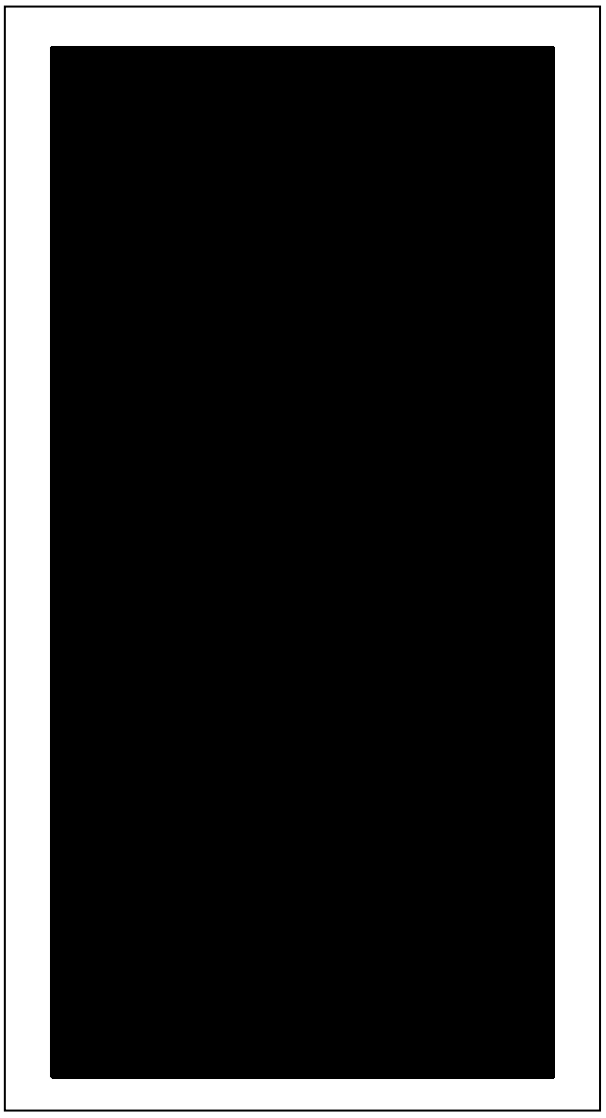


Figure 5. MAX3787 EV Kit PC Board Layout—Power Plane

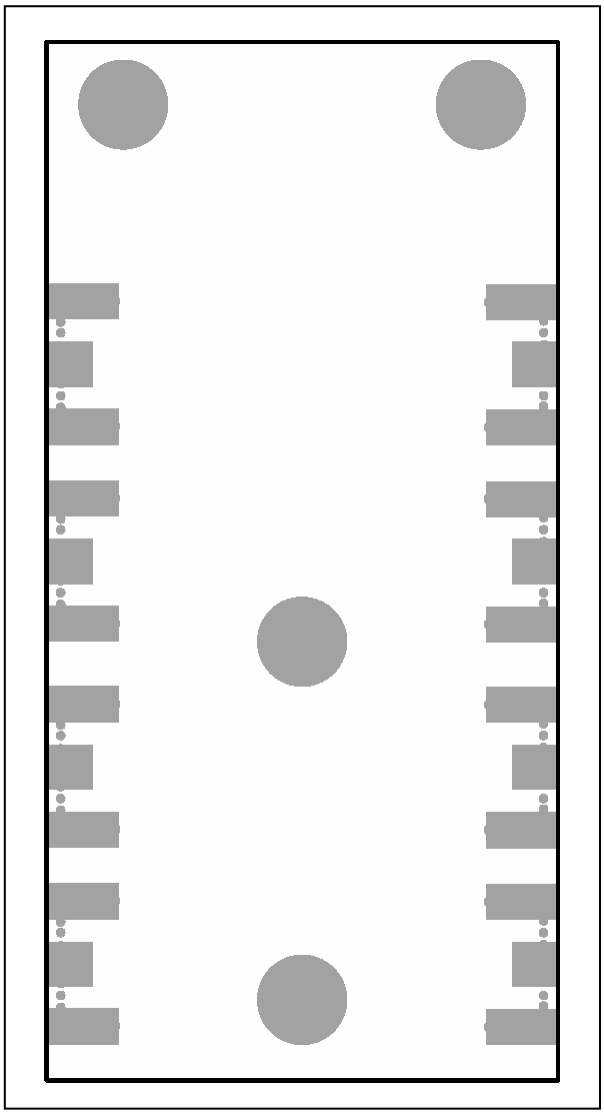


Figure 6. MAX3787 EV Kit PC Board Layout—Solder Side

Maxim cannot assume responsibility for use of any circuitry other than circuitry entirely embodied in a Maxim product. No circuit patent licenses are implied. Maxim reserves the right to change the circuitry and specifications without notice at any time.

© 2005 Maxim Integrated Products Printed USA MAXIM is a registered trademark of Maxim Integrated Products