

MAXIM

MAX3885 Evaluation Kit

Evaluates: MAX3885

General Description

The MAX3885 evaluation kit (EV kit) simplifies evaluation of the MAX3885 2.488Gbps, SDH/SONET 1:16 deserializer. The EV kit requires only a single +3.3V supply and includes all the external components necessary to interface with 3.3V PECL and LVDS logic. The board can be connected directly to the output of a clock-and-data-recovery circuit (such as the MAX3875) and to the input of an LVDS device (such as an overhead termination circuit). A signal generator or stimulus system can be used with an oscilloscope to evaluate the MAX3885's basic functionality.

Component Suppliers

SUPPLIER	PHONE	FAX
Coilcraft	847-639-6400	847-639-1469
Sprague	603-224-1961	603-224-1430

Note: Please indicate that you are using the MAX3885 when contacting these component suppliers.

Features

- ◆ Single +3.3V Supply
- ◆ Inputs and Outputs Terminated for Interfacing with 3.3V PECL and LVDS Logic
- ◆ Fully Assembled and Tested Surface-Mount Board

Ordering Information

PART	TEMP. RANGE	IC PACKAGE
MAX3885EVKIT	-40°C to +85°C	64 TQFP

Component List

DESIGNATION	QTY	DESCRIPTION
C1, C3, C5, C7, C12-C21	14	0.1μF, 25V min, 10% ceramic caps (0603)
C2, C4, C6, C8	0	Not installed (shorted by PC board trace)
C9	1	33μF, 10V min, ±10% tantalum cap Sprague 293D336X0010C2
C10	1	2.2μF, 10V min, ±10% tantalum cap Sprague 293D225X0010A2
C11	0	Not installed (open)
R1, R3, R5, R7	4	133Ω, 1% resistors (0603)
R2, R4, R6, R8	4	86.6Ω, 1% resistors (0603)
R12, R15, R18, R21, R24, R27, R30, R33, R36, R39, R42, R45, R48, R53, R56, R59, R62	17	100Ω, 1% resistors (0603)

DESIGNATION	QTY	DESCRIPTION
R13, R14, R16, R17, R19, R20, R22, R23, R25, R26, R28, R29, R31, R32, R34, R35, R37, R38, R40, R41, R43, R44, R46, R47, R49-R52, R54, R55, R57, R58, R60, R61	0	Not installed
J1-J6	6	SMA connectors (PC mount)
J7-J40	34	SMB connectors (PC mount)
L1	1	56nH inductor Coilcraft 0805CS-560XKBC
IN1, IN2	2	Test points
U1	1	MAX3885ECB
None	1	MAX3885 EV kit PC board
None	1	MAX3885 data sheet

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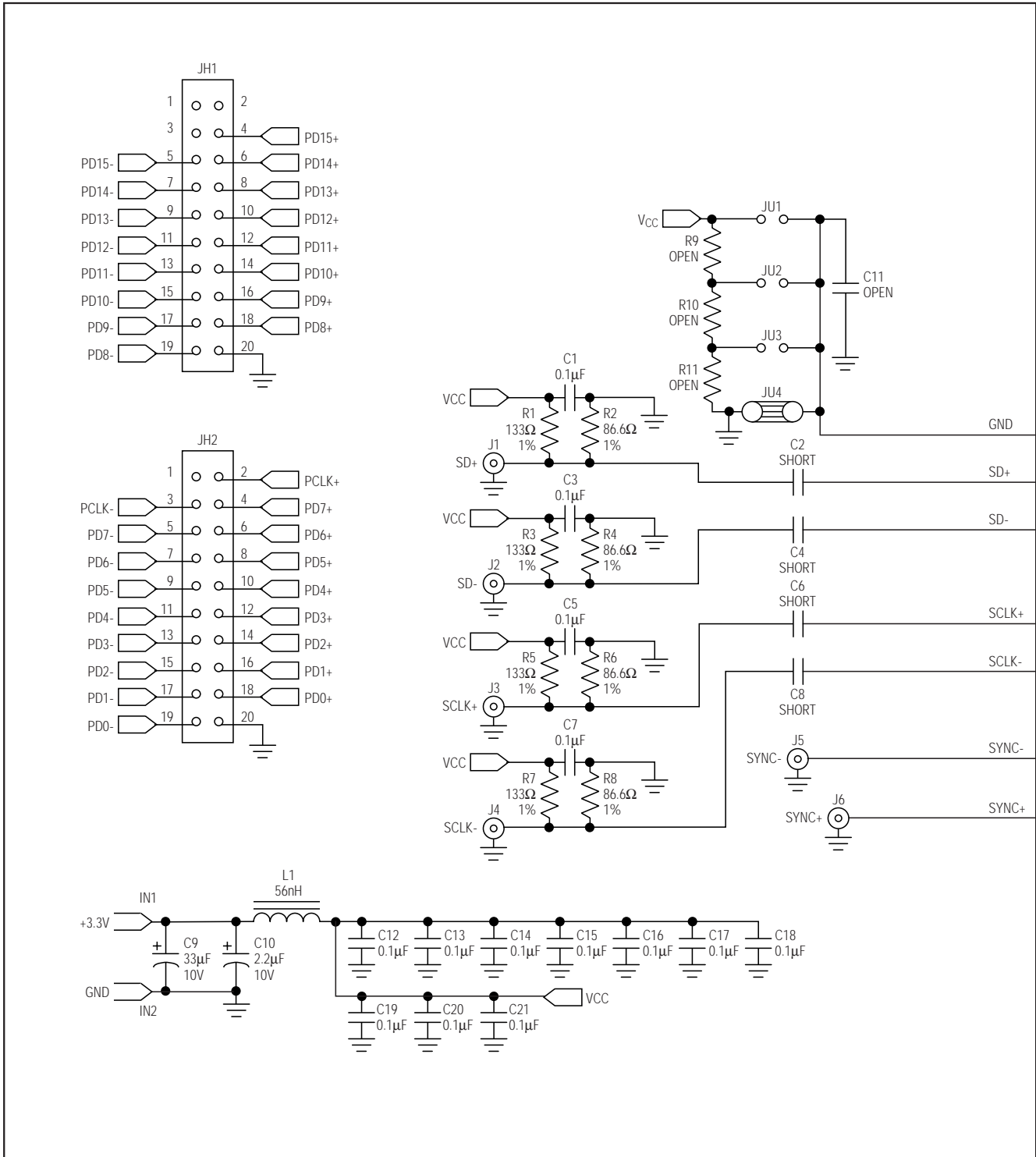


Figure 1. MAX3885 EV Kit Schematic

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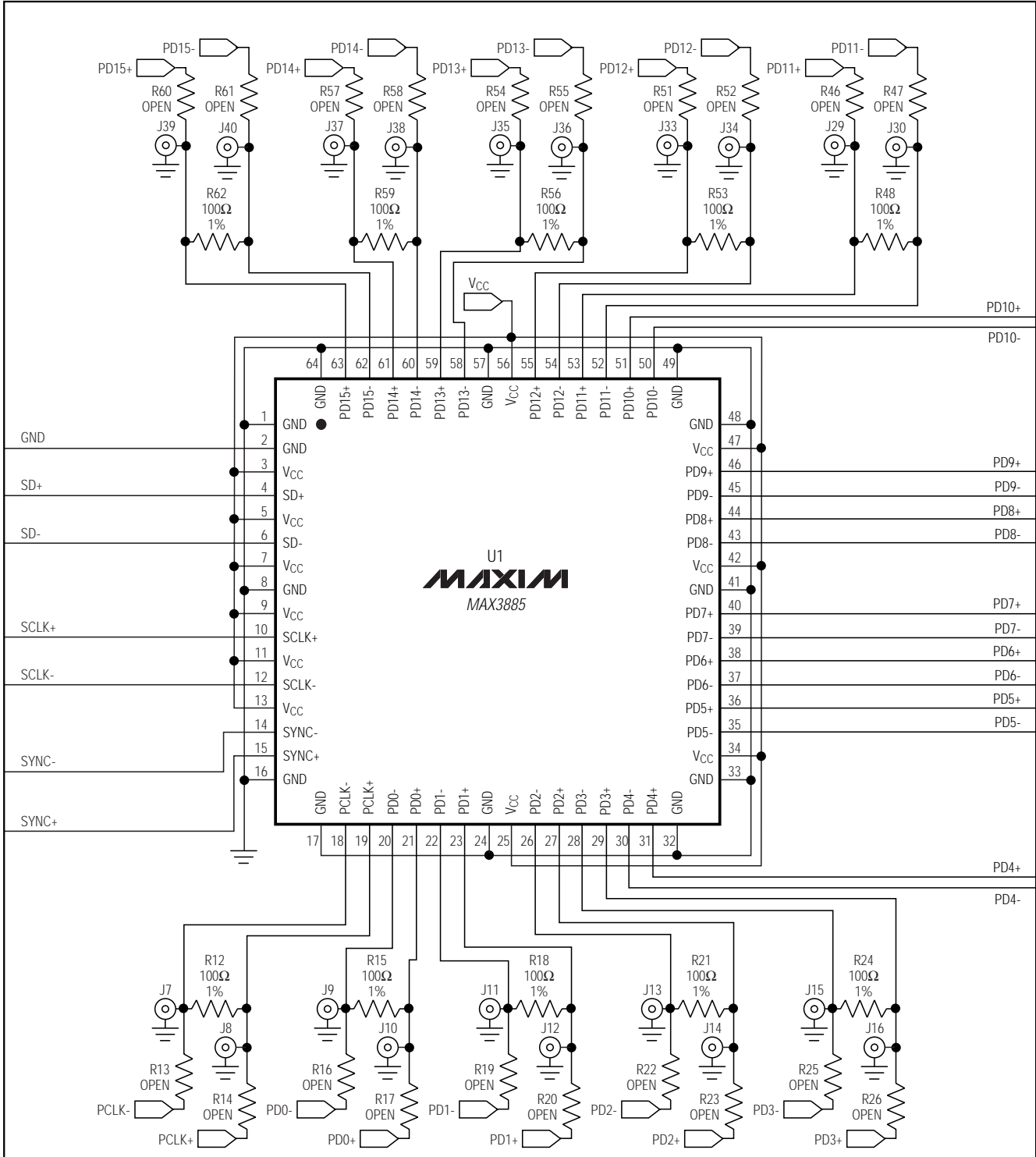


Figure 1. MAX3885 EV Kit Schematic (continued)

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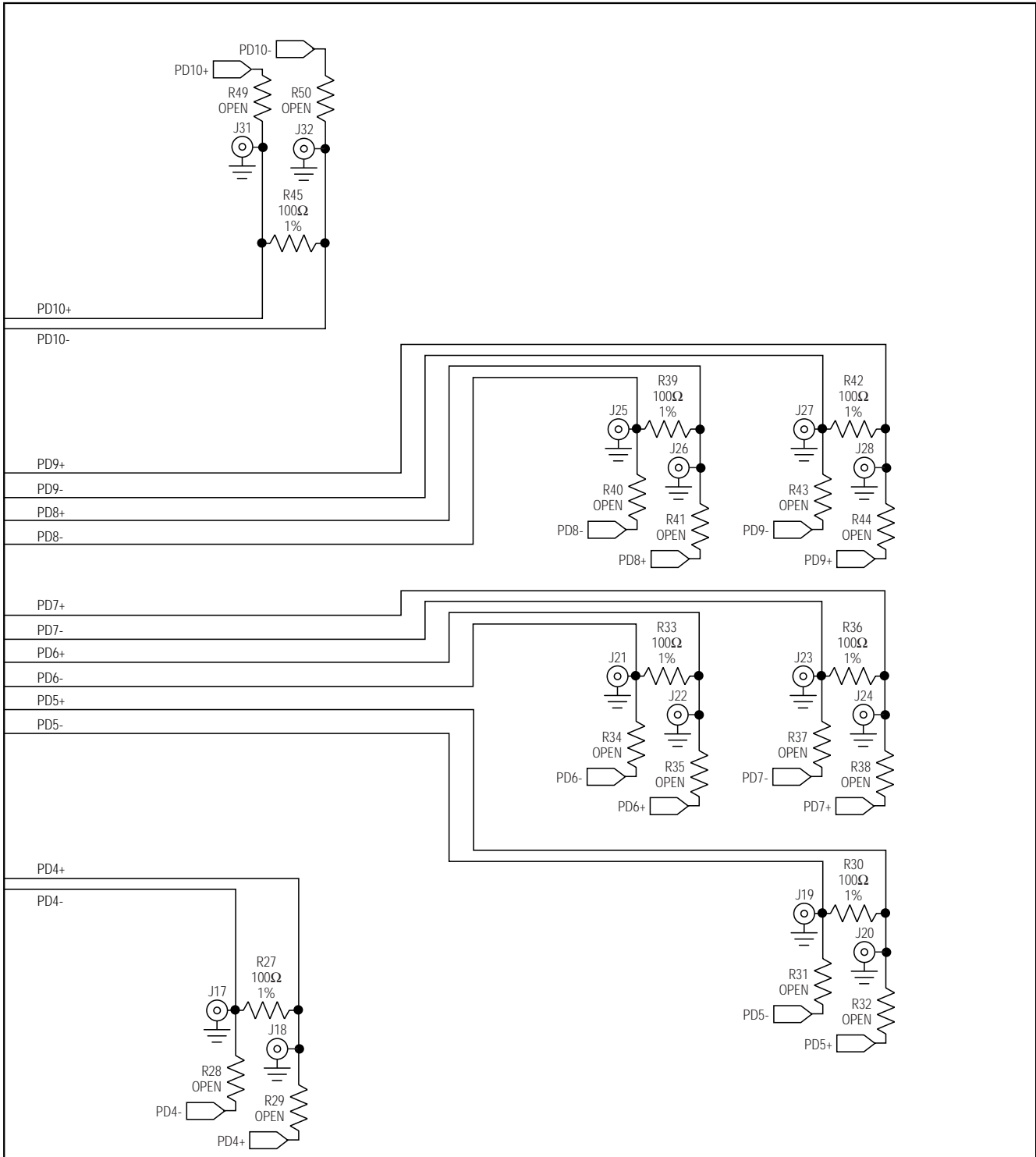


Figure 1. MAX3885 EV Kit Schematic (continued)

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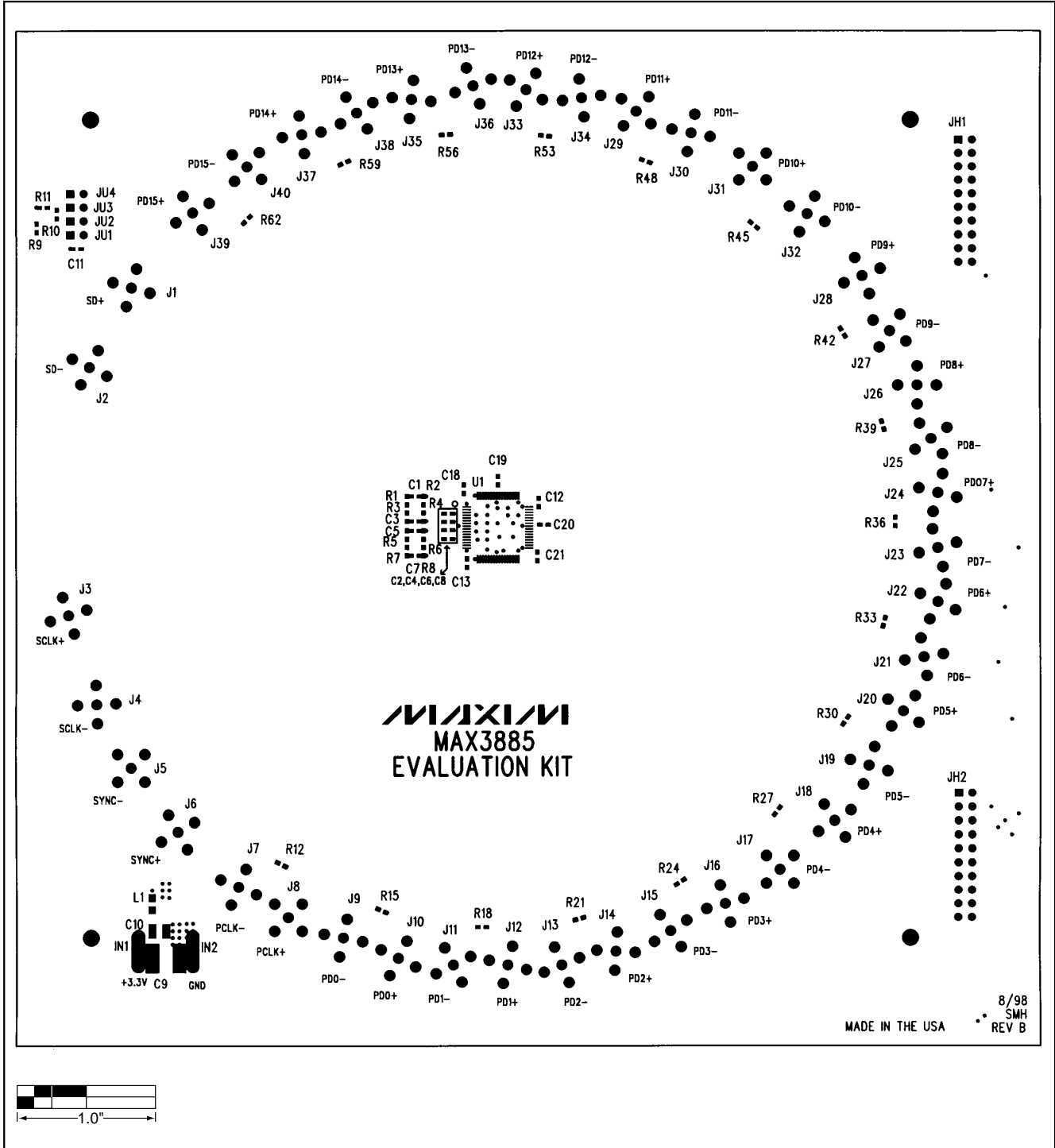


Figure 2. MAX3885 EV Kit Component Placement Guide—Component Side

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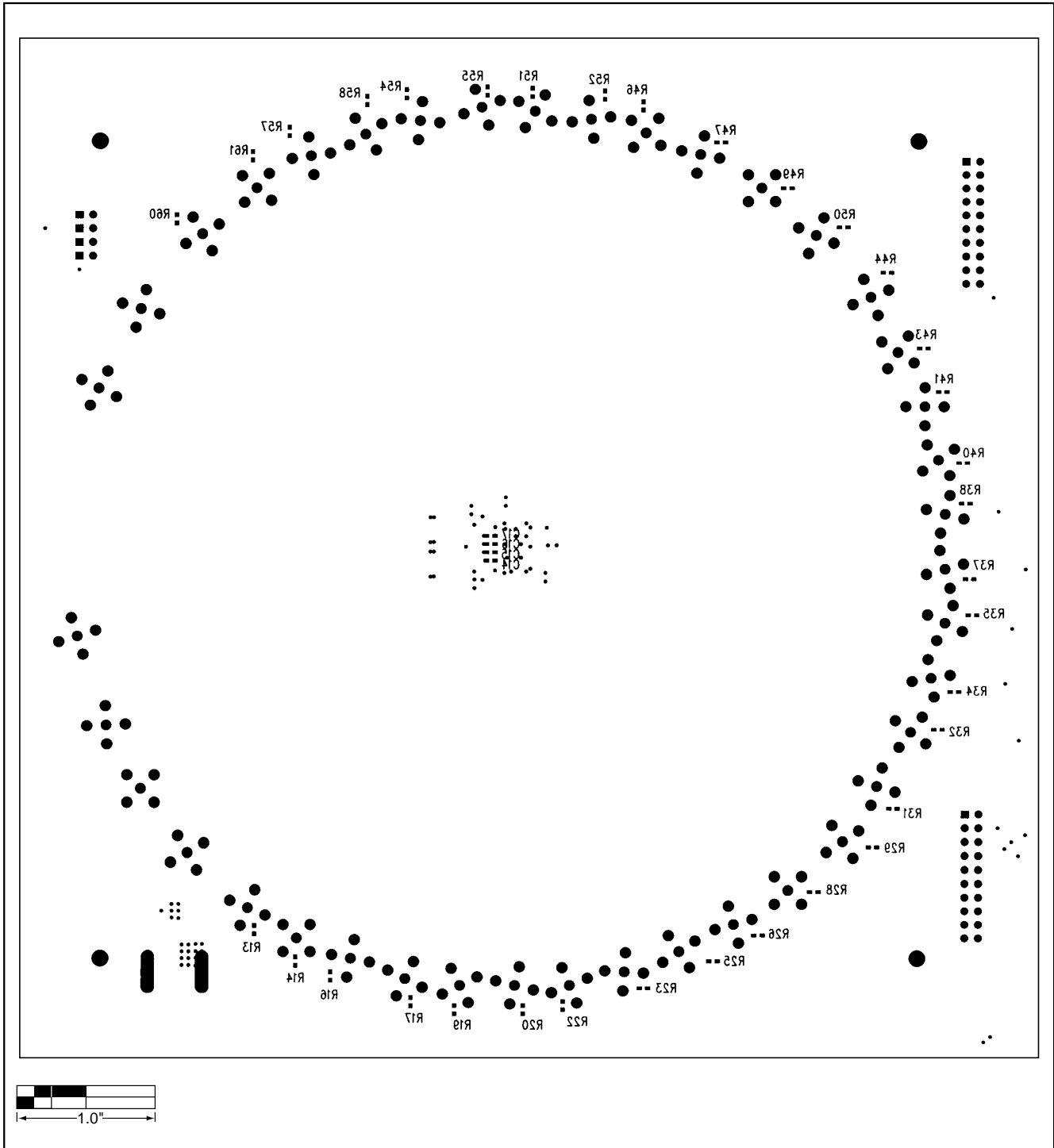


Figure 3. MAX3885 EV Kit Component Placement Guide—Solder Side

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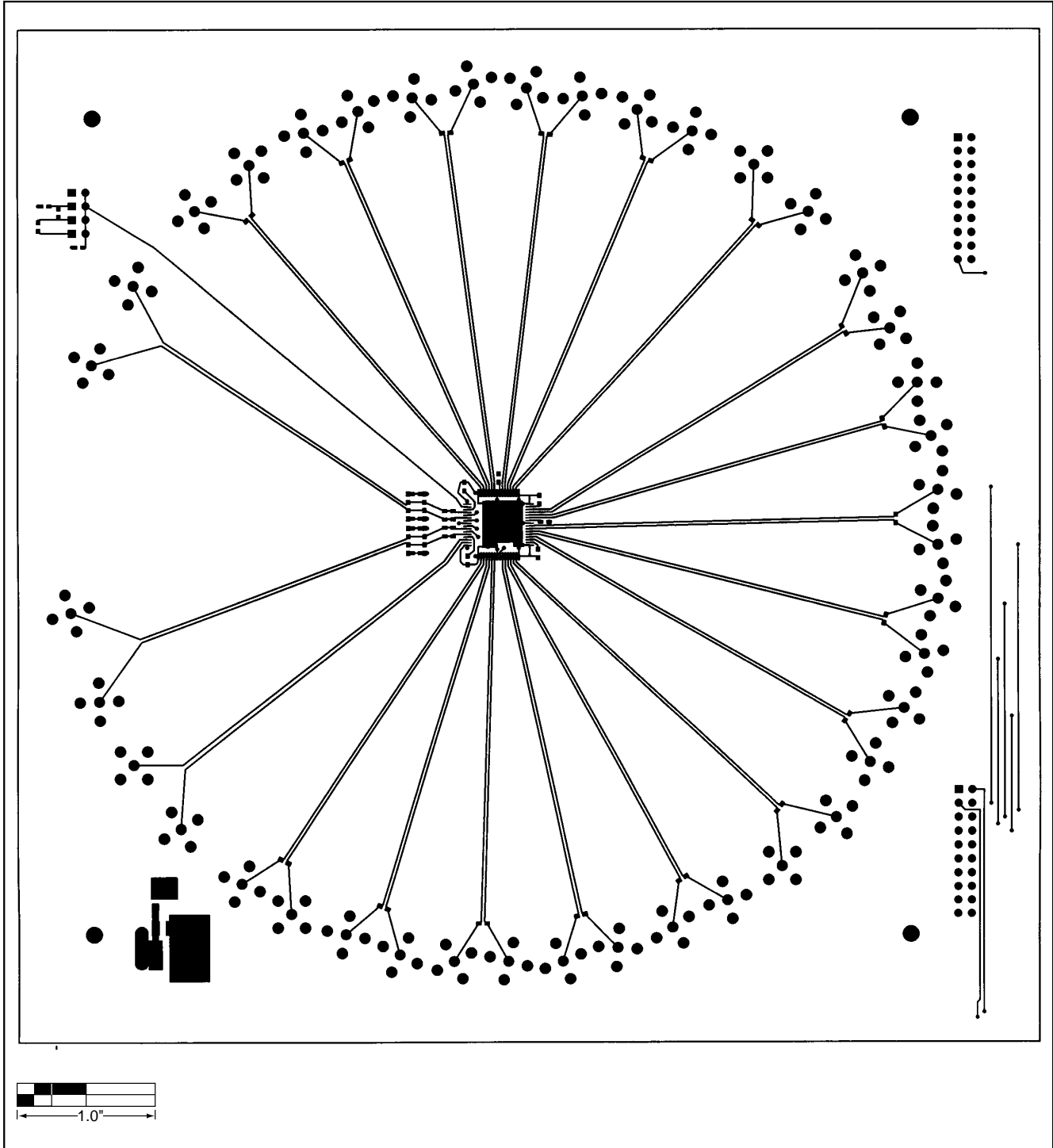


Figure 4. MAX3885 EV Kit PC Board Layout—Component Side

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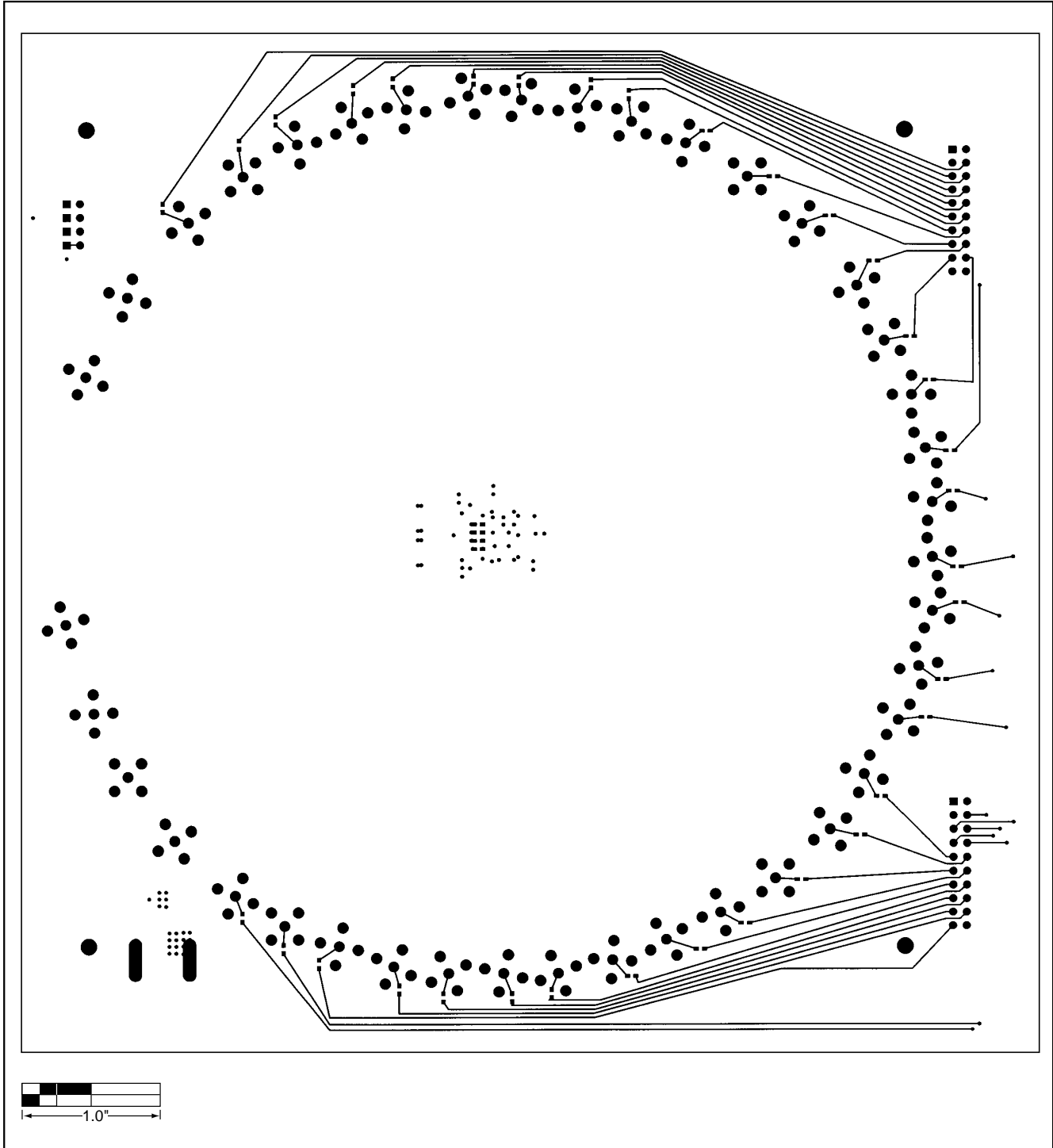


Figure 5. MAX3885 EV Kit PC Board Layout—Solder Side

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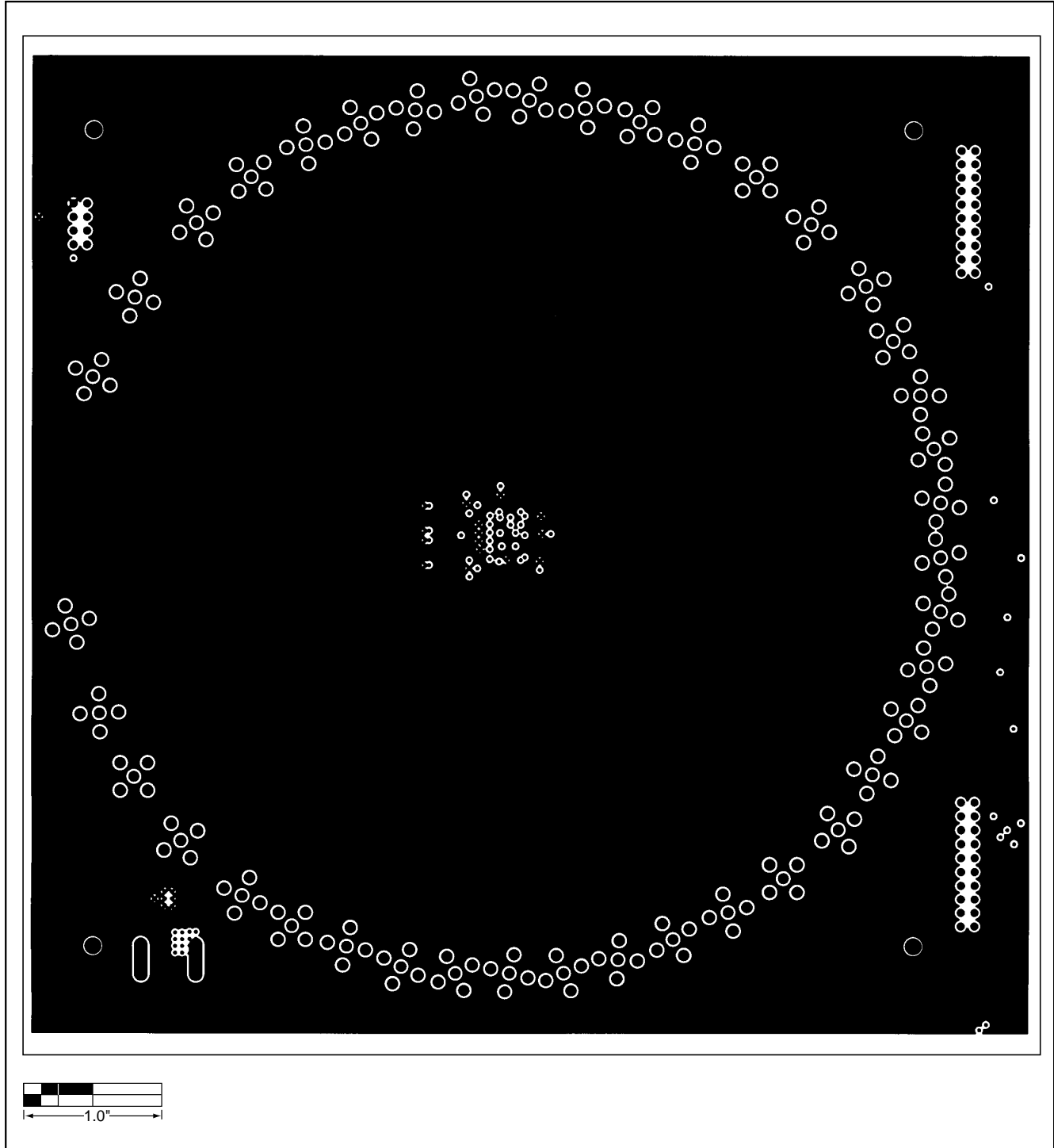


Figure 6. MAX3885 EV Kit PC Board Layout—Power Plane

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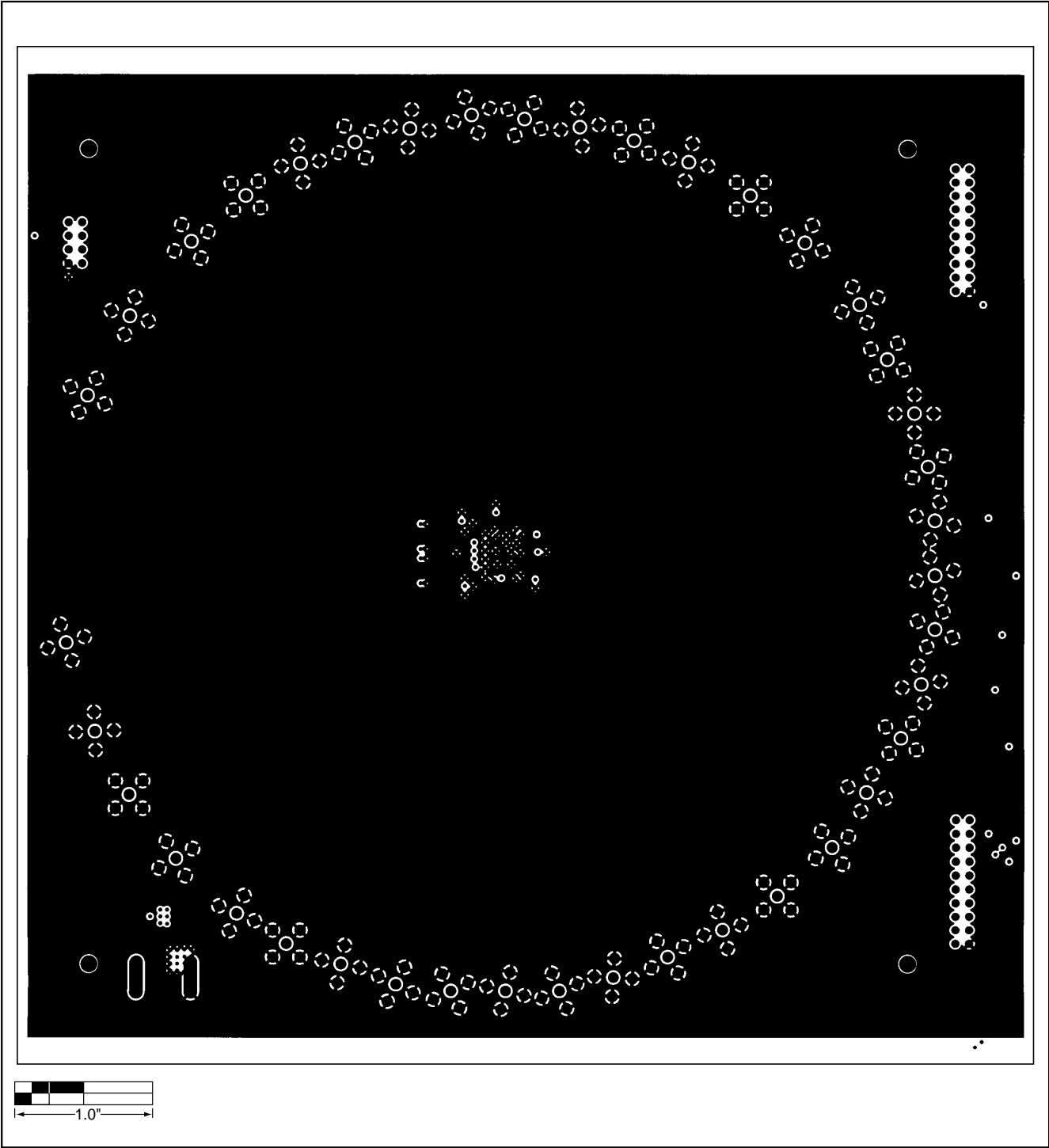


Figure 7. MAX3885 EV Kit PC Board Layout—Ground Plane

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NOTES

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.

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