

## MAX20336 Evaluation Kit

Evaluates: MAX20336

### General Description

The MAX20336 evaluation kit (EV kit) is a fully assembled and tested circuit board that demonstrates the MAX20336 beyond-the-rails DPST analog switches. The EV kit comes with the MAX20336ENT+ installed.

### Features

- USB Power Option
- SMA Connection for Testing
- Proven PCB Layout
- Fully Assembled and Tested

### EV Kit Contents

- EV Kit Board Containing a MAX20336 IC Part

### Quick Start

#### Required Equipment

- MAX20336 EV kit
- USB Cable or Power Supply

#### Procedure

The EV kit is fully assembled and tested. Follow the steps below to verify board operation:

- 1) Connect a USB cable to J1 or power VB (TP1) with 5V power supply.
- 2) NO1 is connected to COM1 and NO2 is connected to COM2.

### Detailed Description

The MAX20336 EV kit is a fully assembled and tested circuit board demonstrating the MAX20336 DPST switches in a 6-bump WLP package.

### Power Supply

The EV kit can power the  $V_{CCEN}$  pin of the IC from different sources. Alternatively, on the MAX20336 EV kit, the IC can be powered externally from TP12.

**Table 1. Power Supply Jumper Setting**

JUMPER	SHUNT POSITION	DESCRIPTION
JU1	1-2*	$V_{CCEN}$ of the IC is connected to VCC of the EV kit
	2-3	$V_{CCEN}$ of the IC is connected to ground of the EV kit
JU2	1-2	VCC is connected to VEXT, TP3
	3-4*	VCC is connected to VHH, output of LDO
	5-6	VCC is connected to VB, supply from USB
JU3	1-2*	1.8V LDO output
	3-4	2.5V LDO output
	5-6	3.3V LDO output
	7-8	Variable LDO output

\*Default position.

### Ordering Information

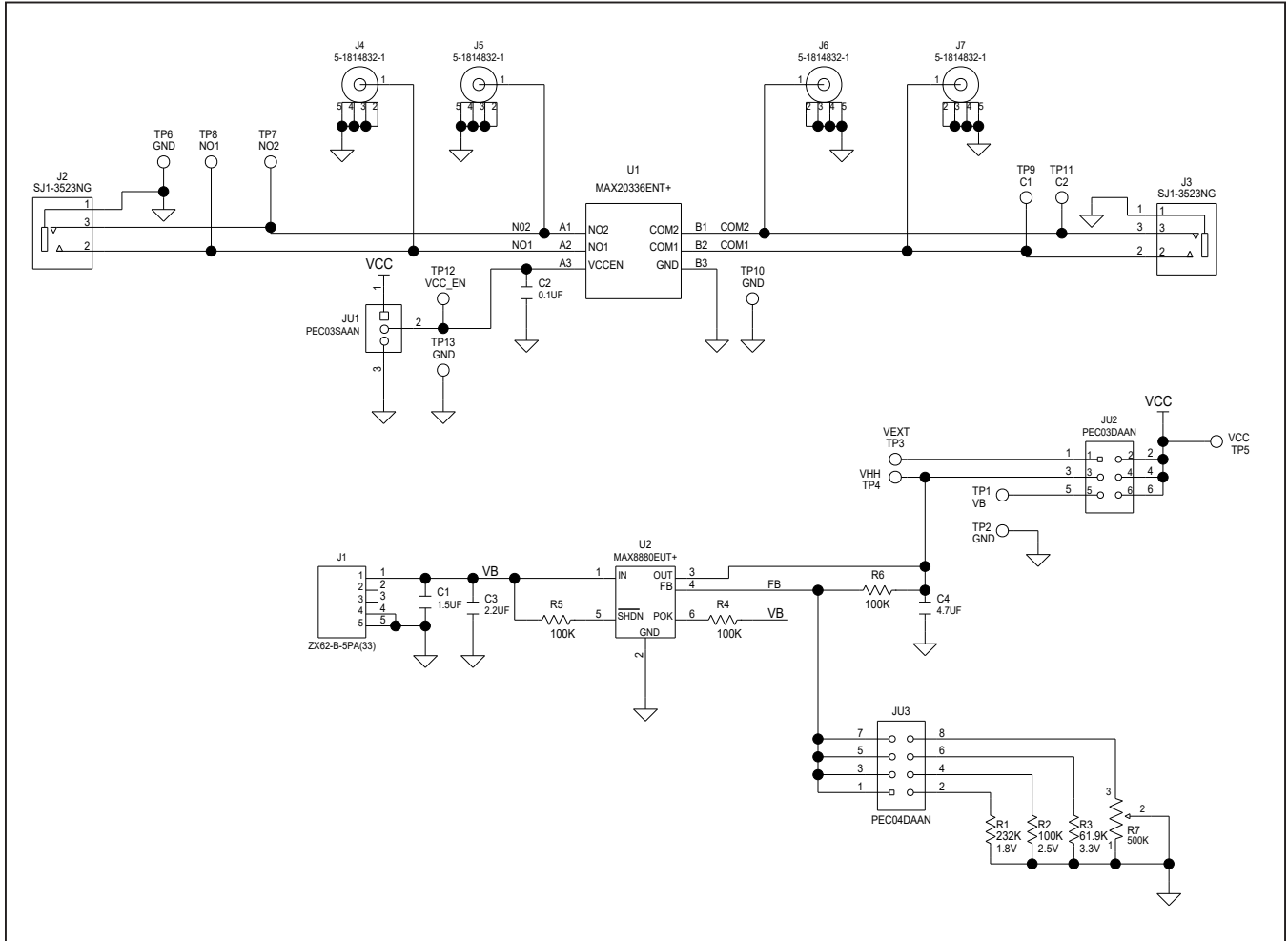
PART	TYPE
MAX20336EVKIT#	EV KIT

#Denotes RoHS compliant.

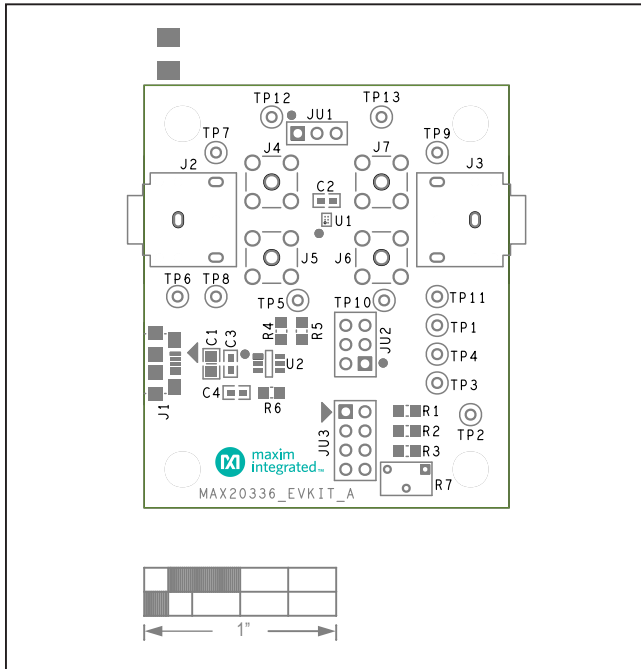
MAX20336 EV Kit Bill of Materials

ITEM	REF_DES	QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
1	C1	1	GRM21BR71E155KA	MURATA	1.5UF	CAPACITOR; SMT (0805); CERAMIC CHIP; 1.5UF; 25V; TOL=10%; MODEL=X7R; TG=-55 DEGC TO +125 DEGC; TC=+/-
2	C2	1	C1608X7R1E104K080AA	TDK	0.1UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 0.1UF; 25V; TOL=10%; MODEL=C SERIES; TG=-55 DEGC TO +125 DEGC; TC=X7R
3	C3	1	C1608X5R1V225K080AC; GRM188R6YA225KA12	TDK;MURATA	2.2UF	CAPACITOR; SMT (0603); CERAMIC CHIP; 2.2UF; 35V; TOL=10%; TG=-55 DEGC TO +85 DEGC; TC=X5R
4	C4	1	C1608X5R1V475K080AC	TDK	4.7UF	CAP; SMT (0603); 4.7UF; 10%; 35V; X5R; CERAMIC CHIP
5	J1	1	ZX62-B-5PA(33)	HIROSE ELECTRIC CO LTD.	ZX62-B-5PA(33)	CONNECTOR; MALE; SMT; USB MICRO B-TYPE; BOTTOM MOUNT; RIGHT ANGLE; 5PINS
6	J2, J3	2	SJ1-3523NG	CUI INC.	SJ1-3523NG	CONNECTOR; FEMALE; THROUGH HOLE; 3.5MM NO SWITCH JACK STEREO, RIGHT ANGLE; 3PINS
7	J4-J7	4	5-1814832-1	TYCO	5-1814832-1	CONNECTOR; FEMALE; THROUGH HOLE; CONN SOCKET SMA STR DIE CAST PCB; STRAIGHT; 5PINS
8	JU1	1	PEC03SAAN	SULLINS	PEC03SAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 3PINS
9	JU2	1	PEC03DAAN	SULLINS ELECTRONICS CORP.	PEC03DAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT THROUGH; 6PINS; -65 DEGC TO +125 DEGC
10	JU3	1	PEC04DAAN	SULLINS ELECTRONICS CORP.	PEC04DAAN	CONNECTOR; MALE; THROUGH HOLE; BREAKAWAY; STRAIGHT; 8PINS
11	MH1-MH4	4	9032	KEYSTONE	9032	MACHINE FABRICATED; ROUND-THRU HOLE SPACER; NO THREAD; M3.5; 5/8IN; NYLON
12	R1	1	CRCW0805232KFK	VISHAY DALE	232K	RESISTOR; 0805; 232K OHM; 1%; 100PPM; 0.125W; THICK FILM
13	R2, R4-R6	4	CRCW0805100KFK; RK73H2ATTD1003;ERJ-6ENF1003	VISHAY DALE;KOA SPEER;PANASONIC	100K	RESISTOR; 0805; 100K; 1%; 100PPM; 0.125W; THICK FILM
14	R3	1	ERJ-6ENF6192	PANASONIC	61.9K	RESISTOR; 0805; 61.9K OHM; 1%; 100PPM; 0.125W; THICK FILM
15	R7	1	PV37W504C01B00	MURATA	500K	RESISTOR; THROUGH-HOLE-RADIAL LEAD; 500K OHM; 10%; 150PPM; 0.25W; MOLDER CERAMIC OVER METAL FILM
16	TP1, TP3-TP5, TP12	5	5000	KEYSTONE	N/A	TEST POINT; PIN DIA=0.1IN; TOTAL LENGTH=0.3IN; BOARD HOLE=0.04IN; RED; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;
17	TP2, TP6, TP10, TP13	4	5001	KEYSTONE	N/A	TEST POINT; PIN DIA=0.1IN; TOTAL LENGTH=0.3IN; BOARD HOLE=0.04IN; BLACK; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;
18	TP7-TP9, TP11	4	5002	KEYSTONE	N/A	TEST POINT; PIN DIA=0.1IN; TOTAL LENGTH=0.3IN; BOARD HOLE=0.04IN; WHITE; PHOSPHOR BRONZE WIRE SILVER;
19	U1	1	MAX20336ENT+	MAXIM	MAX20336ENT+	EVKIT PART - IC; ULTRA-SMALL; LOW-RON; BEYOND-THE-RAILS DPST ANALOG SWITCH; PACKAGE OUTLINE NUMBER: 21-100308; PACKAGE CODE: N60K1+1
20	U2	1	MAX8880EUT+	MAXIM	MAX8880EUT+	IC; VREG; ULTRA-LOW-IQ LOW-DROPOUT LINEAR REGULATOR WITH POK; SOT23-6
21	PCB	1	MAX20336	MAXIM	PCB	PCB:MAX20336
TOTAL		41				

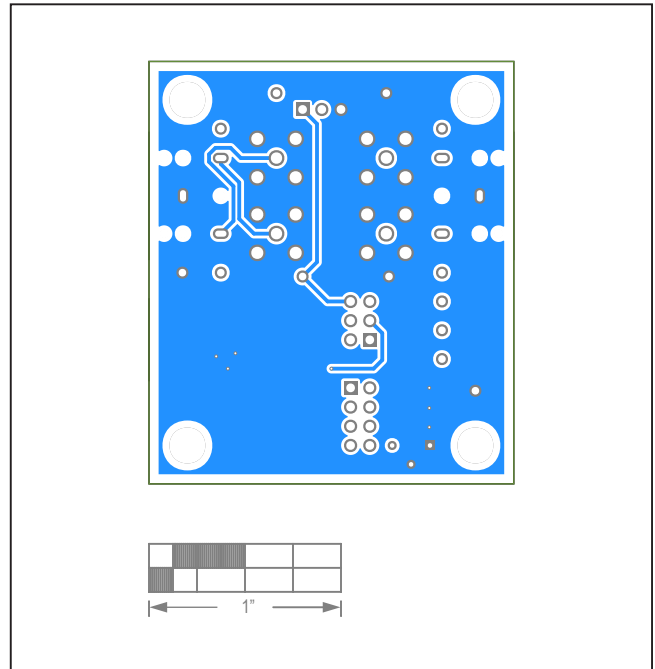
MAX20336 EV Kit Schematic



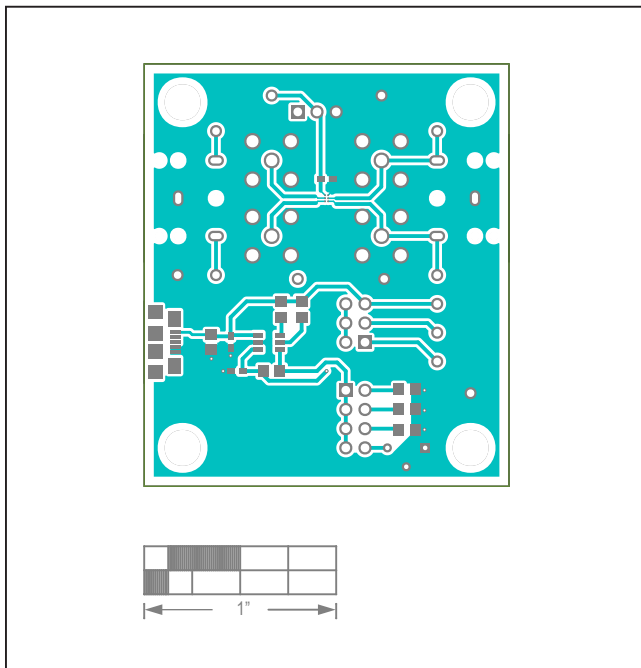
### MAX20336 EV Kit PCB Layout



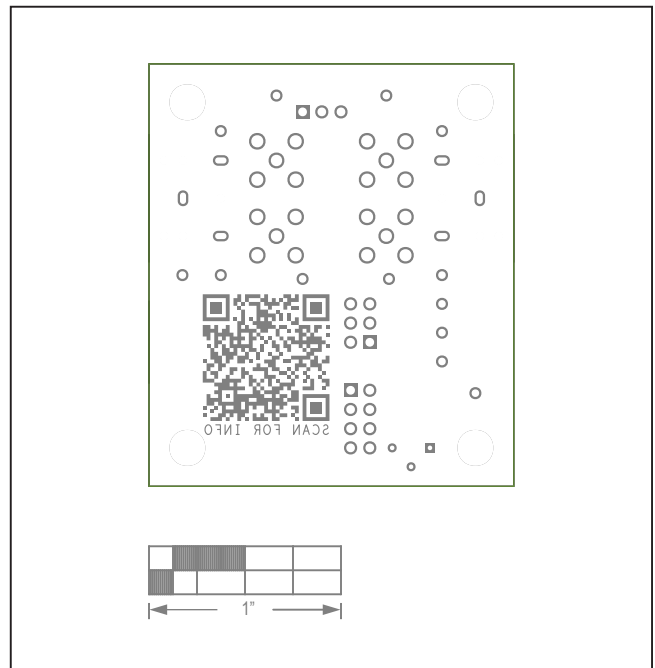
Silk Top



Bottom



Top



Silk Bottom

## Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	1/19	Initial release	—
1	12/20	Updated the title	1–5
2	1/21	Updated the title	1–5

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