

General Description

The MAX6279 evaluation kit (EV kit) provides a proven design to evaluate the MAX6279 ceramic shunt voltage reference. The output voltage is set at 1.2V.

The EV kit comes installed with a MAX6279ELA12+ in 8-pin ceramic leadless chip carrier (LCC) package.

Features

- Wide Operating Current Range: 60 μ A to 15mA
- Proven PCB Layout
- Fully Assembled and Tested

Ordering Information appears at end of data sheet.

Quick Start

Required Equipment

- MAX6279 EV kit
- +5V DC power supply
- Voltmeter

Procedure

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

- 1) Set the DC power supply to +5V. Connect the positive terminal to the VS test point and the negative terminal to GND test point.
- 2) Connect the voltmeter between V_{REF} and GND test point.
- 3) Turn on the DC power supply.
- 4) Verify that the voltmeter displays 1.225V.

MAX6279 EV Kit Photo



General Description of Hardware

The MAX6279 EV kit demonstrates the MAX6279, a precision, two-terminal shunt mode, bandgap voltage reference in a small 8-pin LCC package. The EV kit requires a source greater than 1.225V at the VS test point and an operating current between 60µA and 15mA. Use the equation below to stay within range where R1= 1kΩ, VS = applied voltage at the VS test point, VREF = 1.2V, and ILOAD is the load at the VREF pin.

$$I_{SHUNT} = \frac{V_S - V_{REF}}{R1} - I_{LOAD}$$

Ordering Information

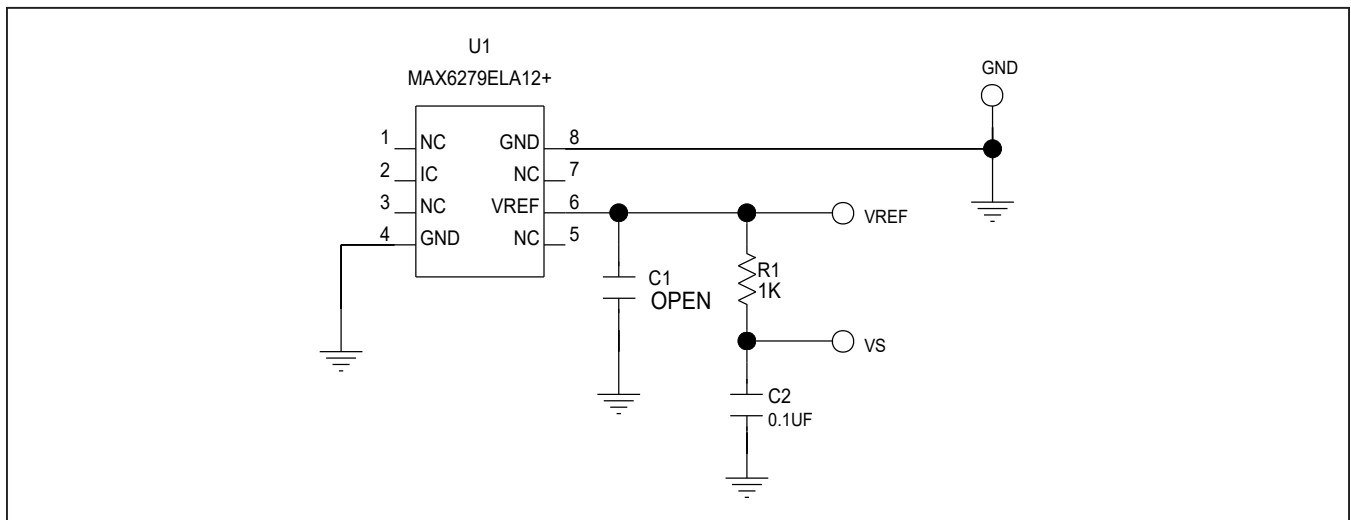
PART	TYPE
MAX6279EVKIT#	EV Kit

#Denotes RoHS compliant.

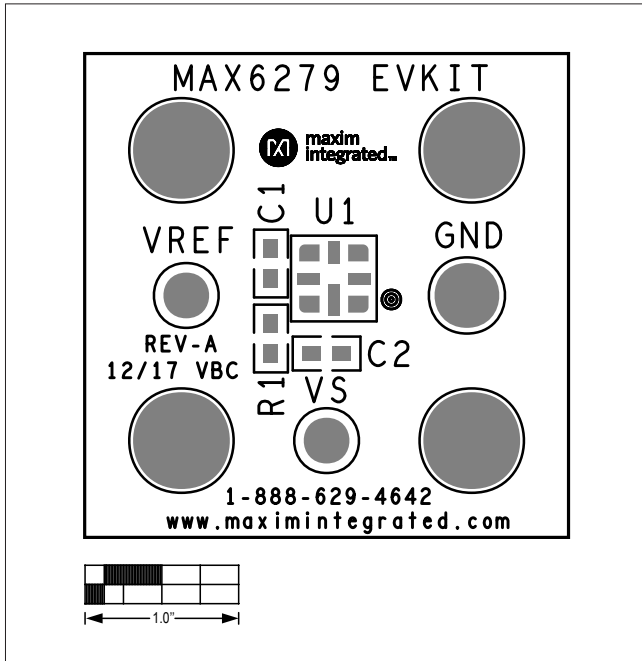
MAX6279 EV Kit Bill of Materials

ITEM	REF_DES		QTY	MFG PART #	MANUFACTURER	VALUE	DESCRIPTION
1	C2		1	C1608X7R1E104K080AA	TDK	0.1µF	CAPACITOR; SMT (0603); CERAMIC CHIP; 0.1µF; 25V; TOL = 10%; MODEL = C SERIES; TG = -55°C TO +125°C; TC = X7R
2	GND		1	5011	KEYSTONE	N/A	TEST POINT; PIN DIA = 0.125IN; TOTAL LENGTH=0.445IN; BOARD HOLE = 0.063IN; BLACK; PHOSPHOR BRONZE WIRE SILVER PLATE FINISH;
3	R1		1	CRCW06031K00FK; ERJ-3EKF1001V	VISHAY DALE; PANASONIC	1K	RESISTOR; 0603; 1K; 1%; 100PPM; 0.10W; THICK FILM
4	U1		1	MAX6279ELA12+	MAXIM	MAX6279ELA12+	EVKIT PART-IC; RF38 DIE; PACKAGE CODE: L8-1; PACKAGE OUTLINE DRAWING: 21-100203; PACKAGE LAND PATTERN: 90-10085
5	VS, VREF		2	5010	KEYSTONE	N/A	TESTPOINT WITH 1.80MM HOLE DIA, RED, MULTIPURPOSE;
6	PCB		1	MAX6279	MAXIM	PCB	PCB:MAX6279
7	C1	DNP	0	N/A	N/A	OPEN	PACKAGE OUTLINE 0603 NON-POLAR CAPACITOR
TOTAL			7				

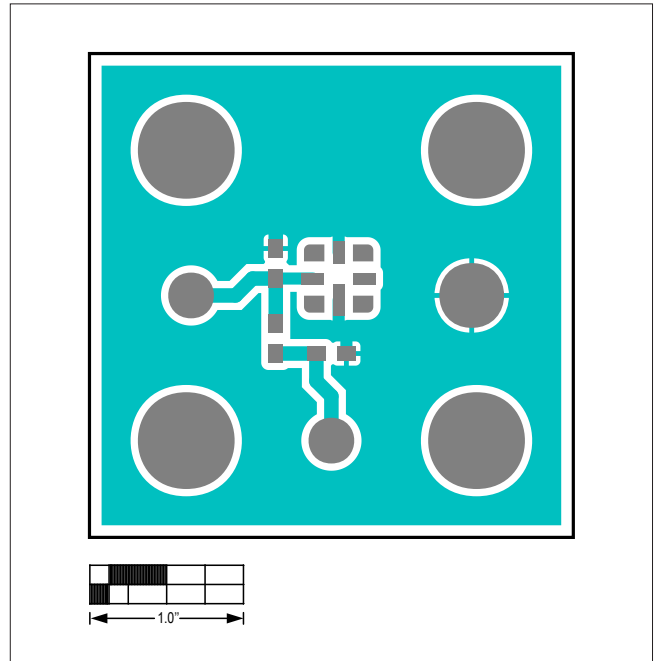
MAX6279 EV Kit Schematic



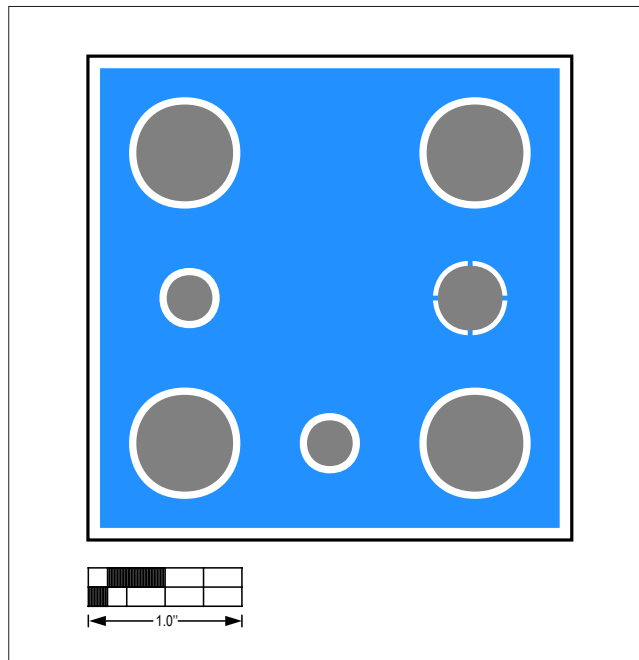
MAX6279 EV Kit PCB Layout Diagrams



MAX6279 EV PCB—Top Silkscreen



MAX6279 EV PCB—Top Layer



MAX6279 EV PCB—Bottom Layer

Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	10/18	Initial release	—

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