

## 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 $\mu$ 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<sub>REF</sub> 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

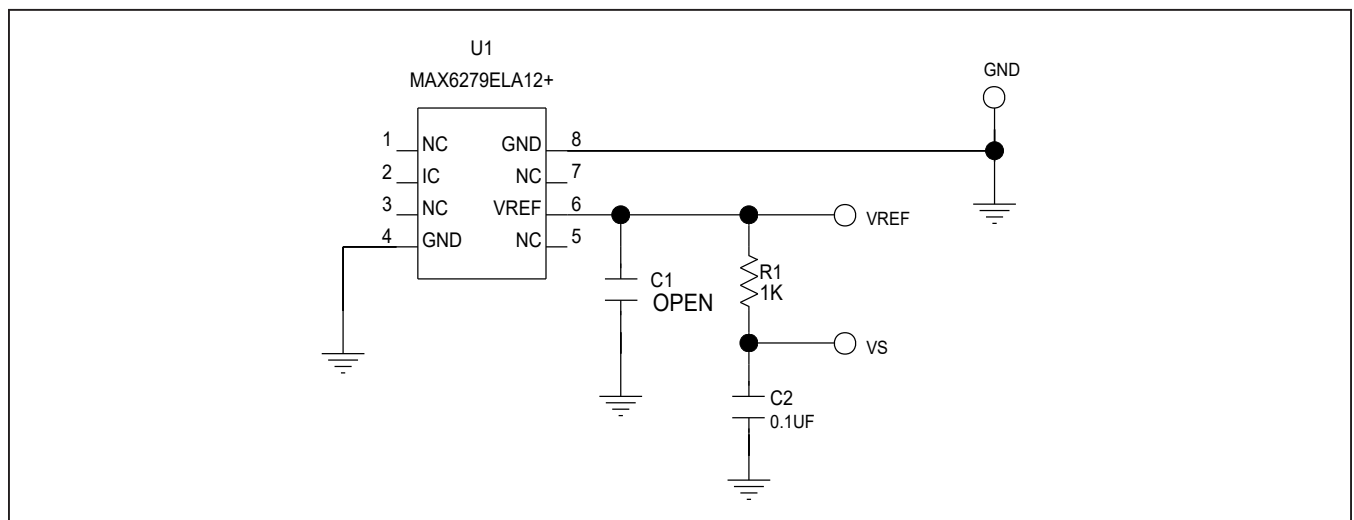
PART	TYPE
MAX6279EVKIT#	EV Kit

#Denotes RoHS compliant.

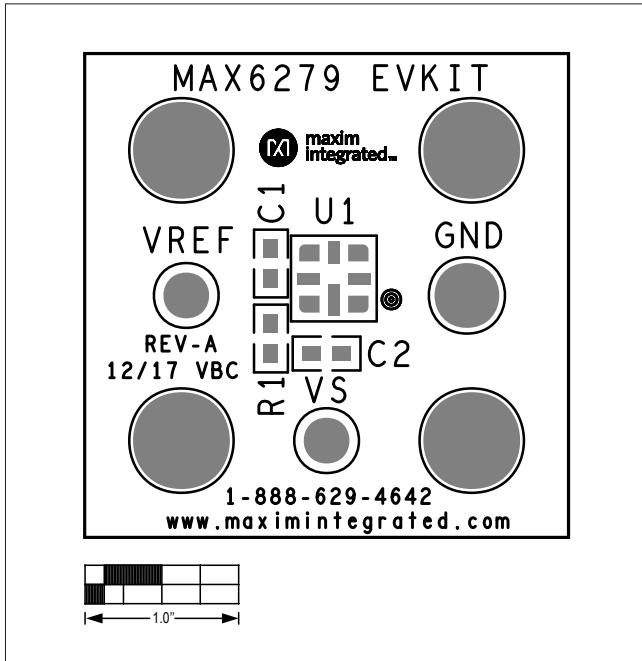
### MAX6279 EV Kit Bill of Materials

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					

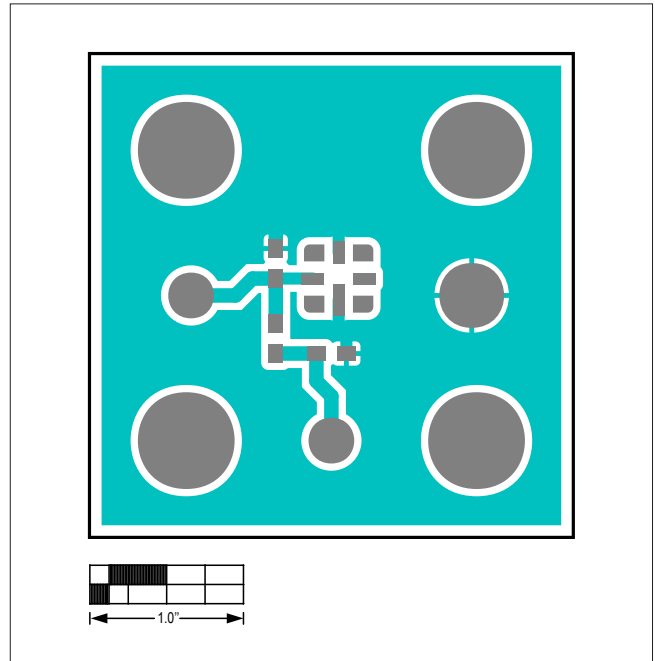
### MAX6279 EV Kit Schematic



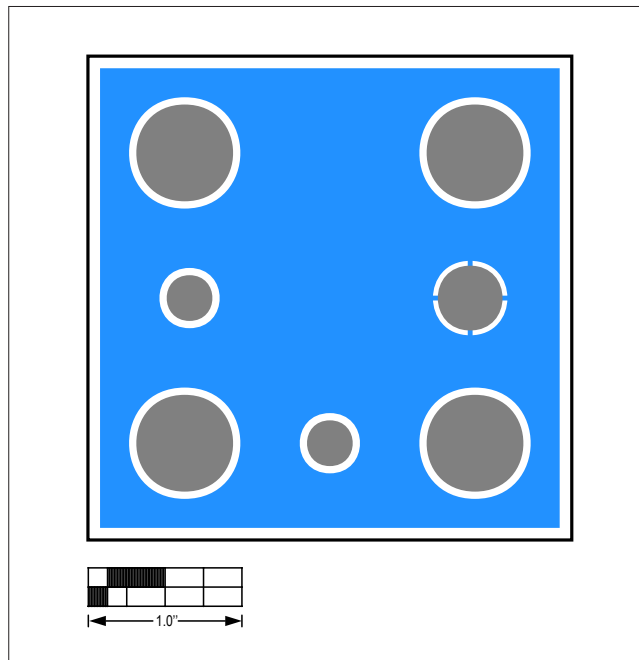
MAX6279 EV Kit PCB Layout Diagrams



MAX6279 EV PCB—Top Silkscreen



MAX6279 EV PCB—Top Layer



MAX6279 EV PCB—Bottom Layer