

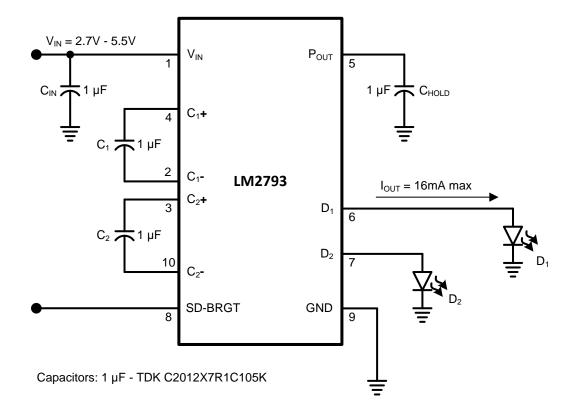
AN-1278 LM2793 Evaluation Board

1 Introduction

The LM2793 Evaluation Board may be used to test and evaluate a typical LM2793 application circuit. The layout includes extra large pads for all capacitors and White LEDs (D_1, D_2) to simplify the changing of external components and accommodate different case sizes. The layout of the board is recommended as a guide for end-use board design.

This Board has been pre-configured to deliver 16mA to both constant current outputs when SD-BRGT is connected to V_{IN} . Alternatively, LED Current can be adjusted by applying an analog voltage or Pulse-Width Modulated signal to the SD-BRGT pin. For more detail on the LM2793 features and specifications, please refer to LM2793 Low Noise White LED Constant Current Supply with Dual Function Brightness Control (SNVS228).

2 Evaluation Board Schematic



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3 Components

3.1 Integrated Circuit

l	Part #	Package Mark I.D.	Package	Dimensions	Current Option
	LM2793	L2793	WSON10 (NGY0010A)	$(L \times W \times H)$ 3.0mm \times 3.0mm \times 0.8mm	16mA

3.2 Capacitors

Capacitor Symbol	Value	Case Size U.S. (Metric)	Height	Temperature Characteristic	Mfr.	Part #
C _{IN}	1.0µF, 10V	0805 (2012)	1.25mm	X7R	TDK	C2012X7R1A105K
C ₁	1.0µF, 10V	0805 (2012)	1.25mm	X7R	TDK	C2012X7R1A105K
C ₂	1.0µF, 10V	0805 (2012)	1.25mm	X7R	TDK	C2012X7R1A105K
C _{HOLD}	1.0µF, 10V	0805 (2012)	1.25mm	X7R	TDK	C2012X7R1A105K

3.3 Miscellaneous

LED Symbol	LED Forward Voltage	Case Size	Height	Temperature Range	Mfr.	Part #
D_1, D_2	3.6V	2.1mm × 1.3mm	1.2mm	-40°C to + 100°C	OSRAM	LW M67C



www.ti.com Board Layers

4 Board Layers

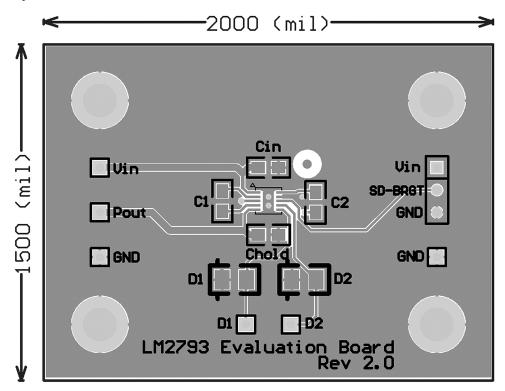


Figure 1. Top Layer, Top View

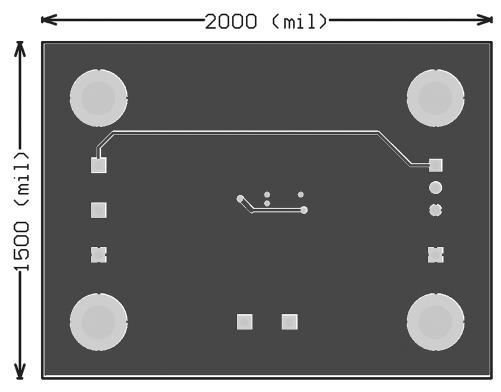


Figure 2. Bottom Layer, Top View (unmirrored)

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