

LM2700 Evaluation Board

National Semiconductor
Application Note 1308
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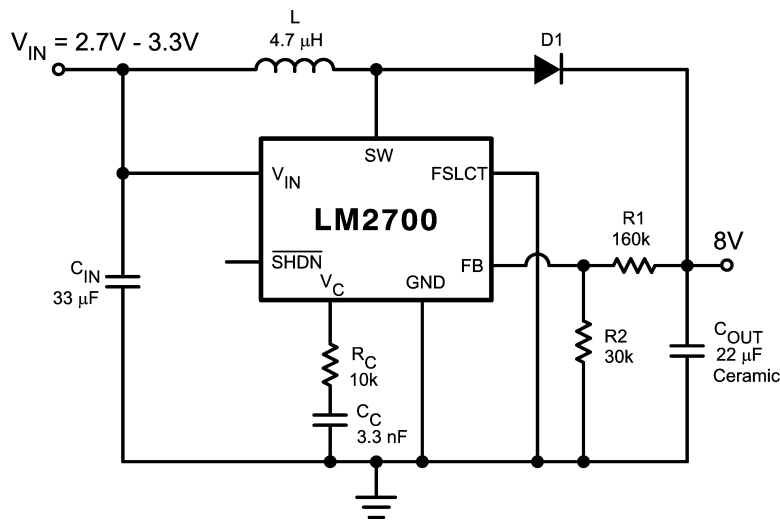
LM2700 Evaluation Board

Introduction

The LM2700 is a high current step-up DC/DC converter which can be used for TFT-LCD applications. The evaluation board is set up for 8V output from a single Li-Ion battery input. The switching frequency can be selected using the jumper on the FSLCT pin. The evaluation board is optimized

for 600 kHz operation but will remain stable for 1.25 MHz operation if desired. The LM2700 comes in both the TSSOP-14 and the LLP-14 packages. The TSSOP package was chosen for the evaluation board due to ease of use and replacement.

Schematic



20092701

Bill of Materials

Designator	Component	Manufacturer
U1	LM2700MT-ADJ, TSSOP-14	National Semiconductor
L	4.7 μH, DO3316P-472	Coilcraft
C _{IN1}	33 μF, 10V Tantalum 195D336X9010Z2T	Vishay
C _{IN2}	1 μF, Ceramic VJ0805Y105KXA	Vishay
C _{OUT}	22 μF Ceramic EMK325BJ226MM	Taiyo-Yuden
D1	20V, 3A Schottky MBRM320	ON Semiconductor
R _C	10k, 1206 Case, CRCW12061002F	Vishay
C _C	3.3 nF, 1206 Case, VJ1206Y332KXA	Vishay
R ₁	162k, 1206 Case, CRCW12061623F	Vishay
R ₂	30.1k, 1206 Case, CRCW12063012F	Vishay
C _{C2}	Blank, 1206 Size Pad from V _C to GND	

AN-1308

Notes

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