



1.0 Design Specifications

Inputs	Outputs #1
VinMin=10	Vout1=6.8
VinMax=30	Iout1=0.5

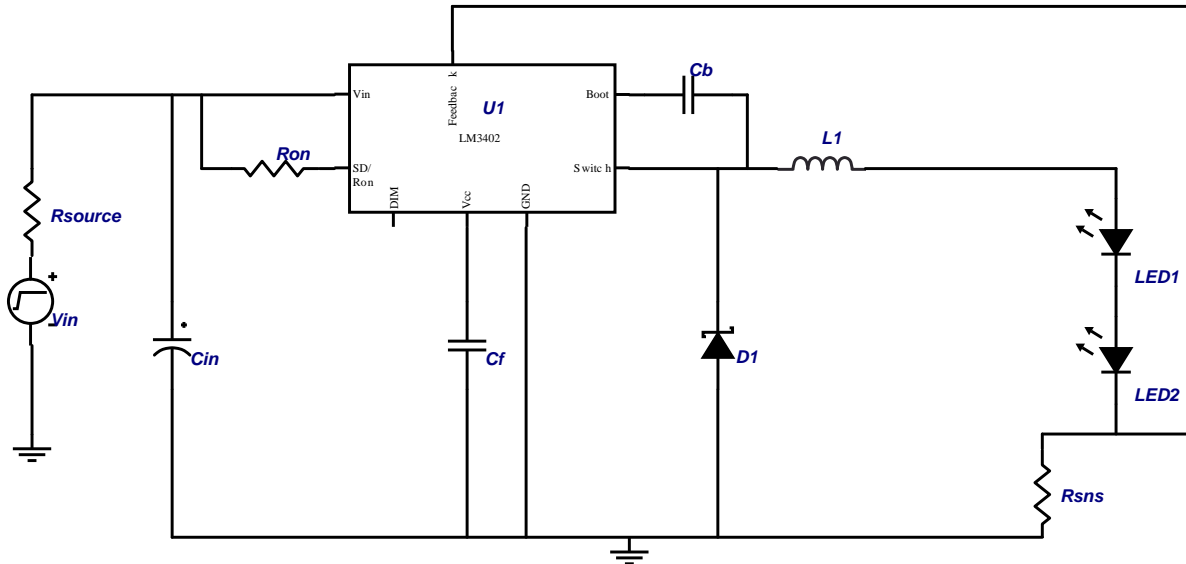
2.0 Design Description

These circuits are designed to drive a string of 2 InGaN LEDs or 3 AllnGaP LEDs in series (Vf total 6.6V) at a forward current of 470 mA to 500 mA with a peak-to-peak ripple current of 100

mA or less. The input is 10V to 30 and the switching frequency is 400 kHz \pm 10%.

This circuit is rated to withstand input voltage transients up to 40V.

3.0 Schematic



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FIGURE 1. Example Schematic Showing Connection for all Components.

4.0 Bill Of Materials

Part	Manufacturer	Part#	Attributes
Cb	Vishay	VJ0805Y103KXXAT	10n F
Cf	Vishay	VJ0805Y104KXXAT	100n F
Cin	TDK	C3225X7R1H225M	NumCaps=1, 2.2u F
D1	Central Semiconductor	CMSH1-40M	0.5 V
L1	TDK	SLF10145T-150	150u H, 0.47 Ohms
Ron	Vishay	CRCW0805F	xxxk Ohms
Rsns	Panasonic	ERJ6BQFR43V	0.43 Ohms
U1	National Semiconductor	LM3402	

Notes

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- | | |
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National Semiconductor Americas Customer Support Center
 Email: new.feedback@nsc.com
 Tel: 1-800-272-9959

National Semiconductor Europe Customer Support Center
 Fax: +49 (0) 180-530-85-86
 Email: europe.support@nsc.com
 Deutsch Tel: +49 (0) 69 9508 6208
 English Tel: +49 (0) 870 24 0 2171
 Français Tel: +33 (0) 1 41 91 8790

National Semiconductor Asia Pacific Customer Support Center
 Email: ap.support@nsc.com

National Semiconductor Japan Customer Support Center
 Fax: 81-3-5639-7507
 Email: jpn.feedback@nsc.com
 Tel: 81-3-5639-7560