

LM3354/5 Evaluation Board

National Semiconductor
 Application Note 1214
 Clinton Jensen
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Introduction

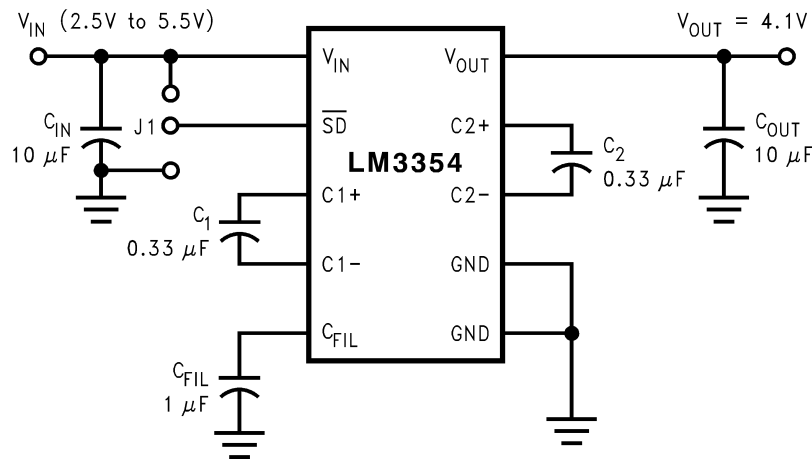
The LM3354 and LM3355 are switched capacitor DC/DC converters which utilize a number of different gains to achieve output regulation. The LM3354/5 evaluation board is programmed for an output of 4.1V, ideal for White or Blue LED applications. An LM3354 1.8V option is also available.

The LM3355 is capable of up to 50mA of output current while the LM3354 is capable of up to 90mA of output current. See the LM3354 datasheet for more information on driving LED's or for information on other standard voltage options of the LM3354. A bill of materials and a schematic follow:

TABLE 1. LM3354/5 Evaluation Board List of Components

Designator	Description	Manufacturer
U1	LM3354/5 DC/DC Converter	National Semiconductor
C _{IN}	10µF ceramic capacitor (X5R, 6.3V)	Taiyo Yuden
C _{OUT}	10µF ceramic capacitor (X5R, 6.3V)	Taiyo Yuden
C1	0.33µF ceramic capacitor (X7R, 16V)	Taiyo Yuden
C2	0.33µF ceramic capacitor (X7R, 16V)	Taiyo Yuden
C _{FIL}	1µF ceramic capacitor (X7R, 10V)	Taiyo Yuden

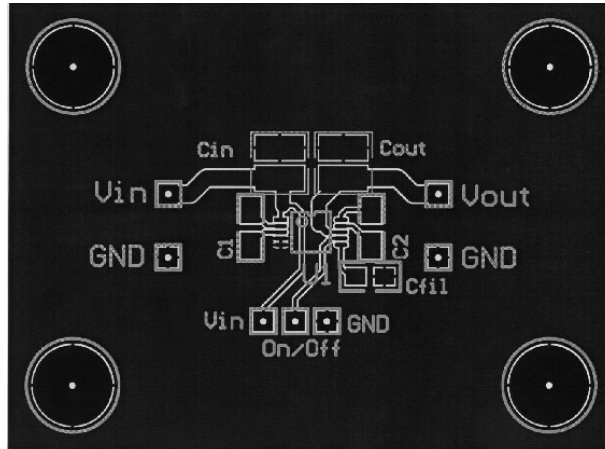
Typical Application Circuit



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FIGURE 1. Basic Buck/Boost Regulator

Typical Application Circuit (Continued)



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FIGURE 2. Typical Layout, Top View (magnification 1.5X)

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National Semiconductor Corporation
Americas
Email: support@nsc.com

www.national.com

National Semiconductor Europe

Fax: +49 (0) 180-530 85 86
Email: europe.support@nsc.com
Deutsch Tel: +49 (0) 69 9508 6208
English Tel: +44 (0) 870 24 0 2171
Français Tel: +33 (0) 1 41 91 8790

National Semiconductor Asia Pacific Customer Response Group

Tel: 65-2544466
Fax: 65-2504466
Email: ap.support@nsc.com

National Semiconductor Japan Ltd.

Tel: 81-3-5639-7560
Fax: 81-3-5639-7507