

# 551013276 and 551013277 Evaluation Boards for Dual Decompensated Operational Amplifiers (MSOP-8 and SOIC-8)

The 551013276 and 551013277 evaluation boards are designed to aid in the characterization of National Semiconductor's decompensated operational amplifiers.

- 551013276 – MSOP-8 package, for the LMV794MM, LMP7718MM, and LMP7708MM
- 551013277 – SOIC-8 package, for the LMV794MA and LMP7718MA

Although specifically designed for decompensated op amps, these evaluation boards can be used for any op amp in these packages with the same pinout.

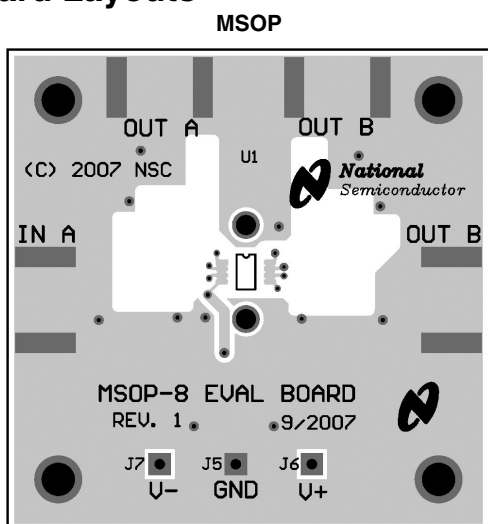
National Semiconductor  
Application Note 1738  
Mike Stout  
December 12, 2007



## Basic Operation

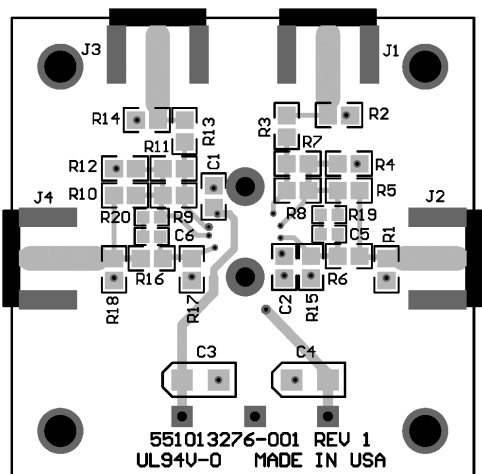
These evaluation boards can be used to set the op amps in non-inverting and inverting configurations. Compensation can be added to make the circuit stable. Please refer to the LMP7708, LMP7718, and LMV794 datasheets and application note AN-1604 "Decompensated Operational Amplifiers" for more information on selecting component values. The schematics and board layouts are shown below.

## Board Layouts



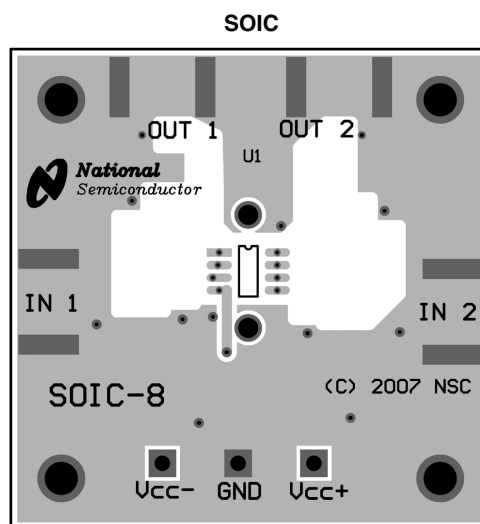
30041701

FIGURE 1. Top Layer



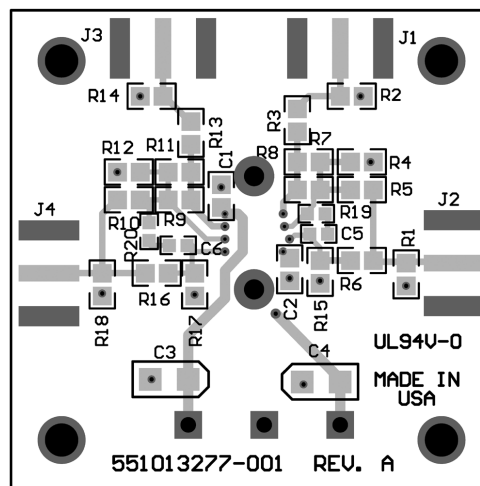
30041702

FIGURE 2. Bottom Layer



30041703

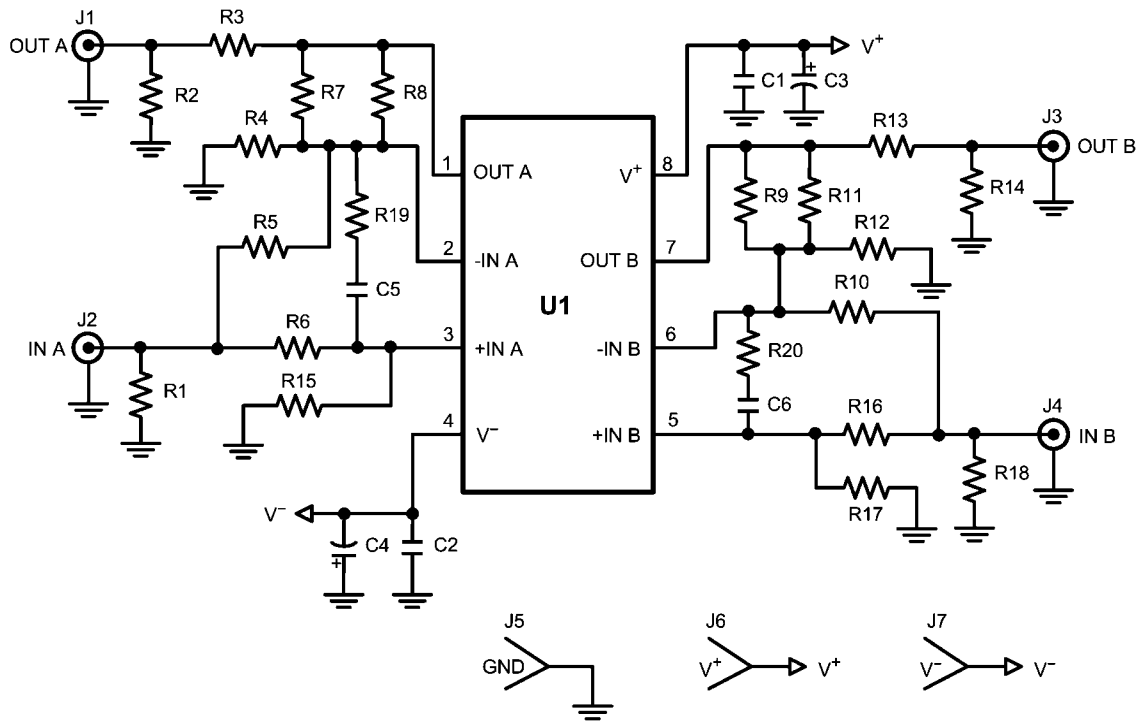
FIGURE 3. Top Layer



30041704

FIGURE 4. Bottom Layer

## Schematic



30041705

## Notes

## Notes

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Displays	<a href="http://www.national.com/displays">www.national.com/displays</a>	Green Compliance	<a href="http://www.national.com/quality/green">www.national.com/quality/green</a>
Ethernet	<a href="http://www.national.com/ethernet">www.national.com/ethernet</a>	Packaging	<a href="http://www.national.com/packaging">www.national.com/packaging</a>
Interface	<a href="http://www.national.com/interface">www.national.com/interface</a>	Quality and Reliability	<a href="http://www.national.com/quality">www.national.com/quality</a>
LVDS	<a href="http://www.national.com/lvds">www.national.com/lvds</a>	Reference Designs	<a href="http://www.national.com/refdesigns">www.national.com/refdesigns</a>
Power Management	<a href="http://www.national.com/power">www.national.com/power</a>	Feedback	<a href="http://www.national.com/feedback">www.national.com/feedback</a>
Switching Regulators	<a href="http://www.national.com/switchers">www.national.com/switchers</a>		
LDOs	<a href="http://www.national.com/ldo">www.national.com/ldo</a>		
LED Lighting	<a href="http://www.national.com/led">www.national.com/led</a>		
PowerWise	<a href="http://www.national.com/powerwise">www.national.com/powerwise</a>		
Serial Digital Interface (SDI)	<a href="http://www.national.com/sdi">www.national.com/sdi</a>		
Temperature Sensors	<a href="http://www.national.com/tempsensors">www.national.com/tempsensors</a>		
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