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REVISION HISTORY

11/2017—Rev. A to Rev. B

Document Title Changed from CN0042 to AN-1502.....	Universal
Changes to Circuit Description Section	3
Changes to References Section	3

09/2009—Rev. 0 to Rev. A

Updated Format.....	Universal
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10/2008—Revision 0: Initial Version

The [AD8021](#) high performance voltage feedback op amp is an ideal choice as a single-ended input buffer/driver for the [AD7366/AD7367](#) due to its high performance, high speed, low noise, and low distortion performance. Figure 1 shows the configuration of the [AD7366/AD7367](#) with the [AD8021](#) in a single-ended configuration. The [AD8021](#) needs an external compensating NP0 type capacitor (C_{COMP}), as indicated in Figure 1. The [AD8021](#) is connected in the noninverting mode with a gain of 2. The [AD7366/AD7367](#) programmable bipolar input voltage ranges (referenced to the input of the [AD8021](#)) are ± 5 V and ± 2.5 V.

The circuit must be constructed on a multilayer printed circuit board (PCB) with a large area ground plane. Proper layout, grounding, and decoupling techniques must be used to achieve optimum performance (see the [MT-031 Tutorial](#), the [MT-101 Tutorial](#), and the [EVAL-AD7366/EVAL-AD7367](#) evaluation board layout).

COMMON VARIATIONS

The [AD8022](#) is a suitable replacement for the [AD8021](#) in high frequency applications where a dual version is required. For lower frequency applications, recommended op amps are the [AD797](#), [AD845](#), and [AD8610](#).

REFERENCES

[MT-031 Tutorial](#), *Grounding Data Converters and Solving the Mystery of "AGND" and "DGND."* Analog Devices.

[MT-036 Tutorial](#), *Op Amp Output Phase-Reversal and Input Over-Voltage Protection.* Analog Devices.

[MT-101 Tutorial](#), *Decoupling Techniques.* Analog Devices.