

The single-tone performance for an input frequency of 170 MHz and a sampling rate of 122.88 MSPS is shown in Figure 3. Two-tone performance is shown in Figure 4.

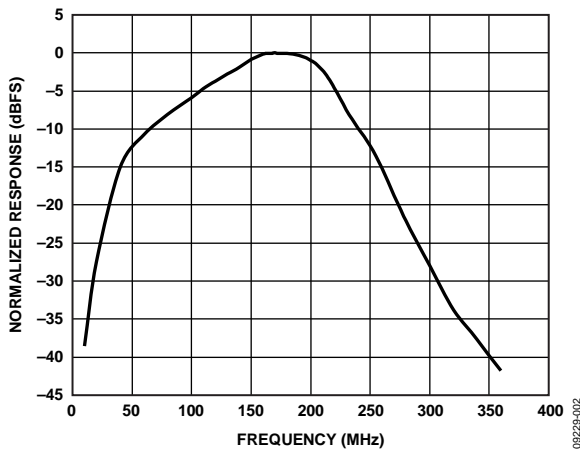


Figure 2. Normalized Frequency Response of the ADC Interface Shown in Figure 1

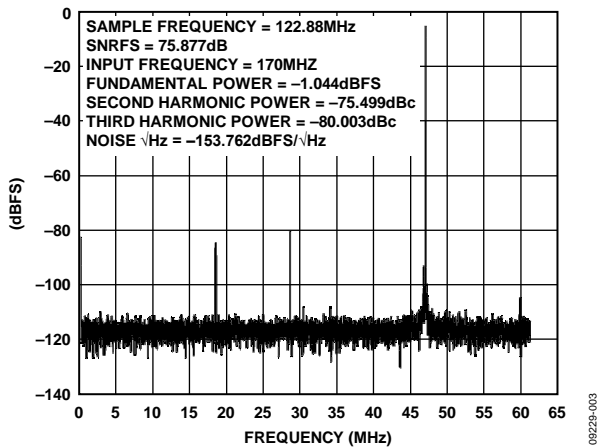


Figure 3. Measured Single-Tone Performance of the Circuit Shown in Figure 1 for an Input Frequency of 170MHz and Sampling Frequency of 122.88 MSPS

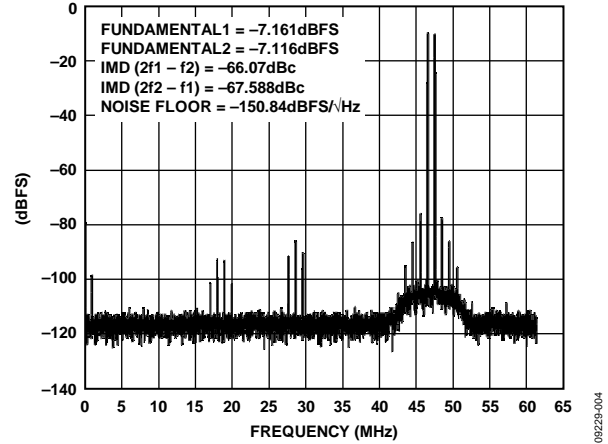


Figure 4. Measured Two-Tone Performance of the Circuit Shown in Figure 1 for Input Tones Centered at 170 MHz and a Sampling Rate of 122.88 MSPS

COMMON VARIATIONS

The application circuit described here can be modified for any IF frequency within the operating range of the [ADL5535/ADL5536](#) and the [AD9268](#). As an alternative to the [AD9268](#), the [AD9640](#), the [AD6657](#), or the [AD9644](#) can be used for the ADC in this application.

LEARN MORE

AN-742 Application Note, *Frequency Domain Response of Switched Capacitor ADCs*, Analog Devices.

AN-827 Application Note, *A Resonant Approach to Interfacing Amplifiers to Switched-Capacitor ADCs*, Analog Devices.

CN-0002 Circuit Note, *Using the AD8376 VGA to Drive Wide Bandwidth ADCs for High IF AC-Coupled Applications*, Analog Devices.

CN-0046 Circuit Note, *An Ultra Low Distortion Differential RF/IF Front-End for High Speed ADCs*, Analog Devices.

Kester, Walt. *High Speed System Applications*, Chapter 2 "Optimizing Data Converter Interfaces," Analog Devices, 2006.

MT-007 Tutorial, *Aperture Time, Aperture Jitter, Aperture Delay Time—Removing the Confusion*, Analog Devices.

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

MT-073 Tutorial, *High Speed Variable Gain Amplifiers (VGAs)*, Analog Devices.

MT-075 Tutorial, *Differential Drivers for High Speed ADCs Overview*, Analog Devices.

MT-101 Tutorial, *Decoupling Techniques*, Analog Devices.

Data Sheets and Evaluation Boards

ADL5535

ADL5536

AD9268

AD9268 Evaluation Board

REVISION HISTORY

10/10—Revision 0: Initial Version

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CN09229-0-10/10(0)



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