Value Sound Bar Reference Design Tests
TIDA-00089

The value sound bar reference design is a low cost complete solution for a stereo or 2.1 application. The design allows easy customization with the PCM3070 CODEC and the MSP430 microcontroller using a TPA3110D2 audio amplifier.

This design was tested for THD+N frequency response and FFT measurements. The following results used the provided 24V power supply with an 8 ohm load. The PCM3070 was loaded with a flat process flow, meaning that the output audio signal matched the input audio signal. All measurments were taken on a Audio Precision 2722.

Figure 1 shows the THD frequency response at 2.5W output power. The two respsonses represent analog and digital input.

On the following page, the FFT results are shown in figure 2 and figure 3. These results were taken using the same supply and load conditions.

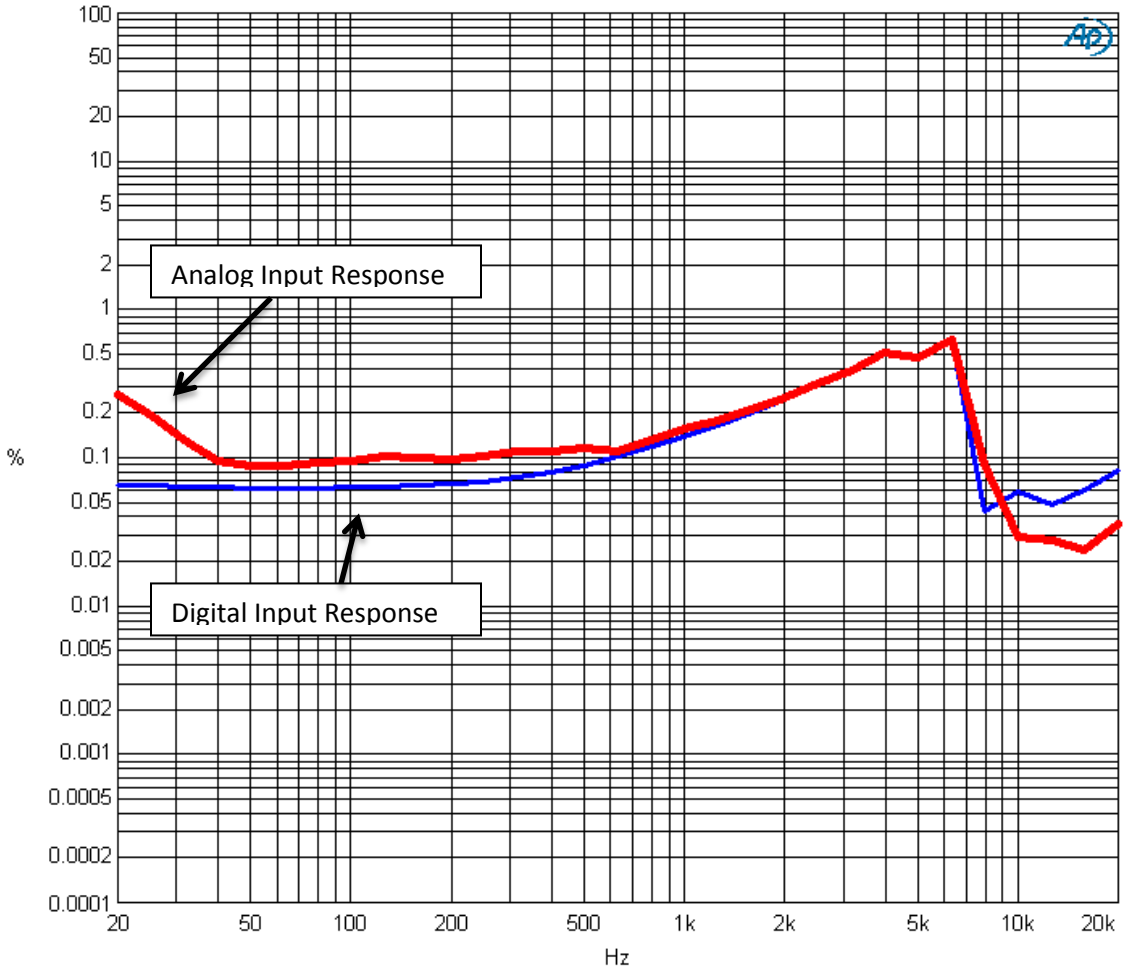

Figure 1 - THD vs. Frequency

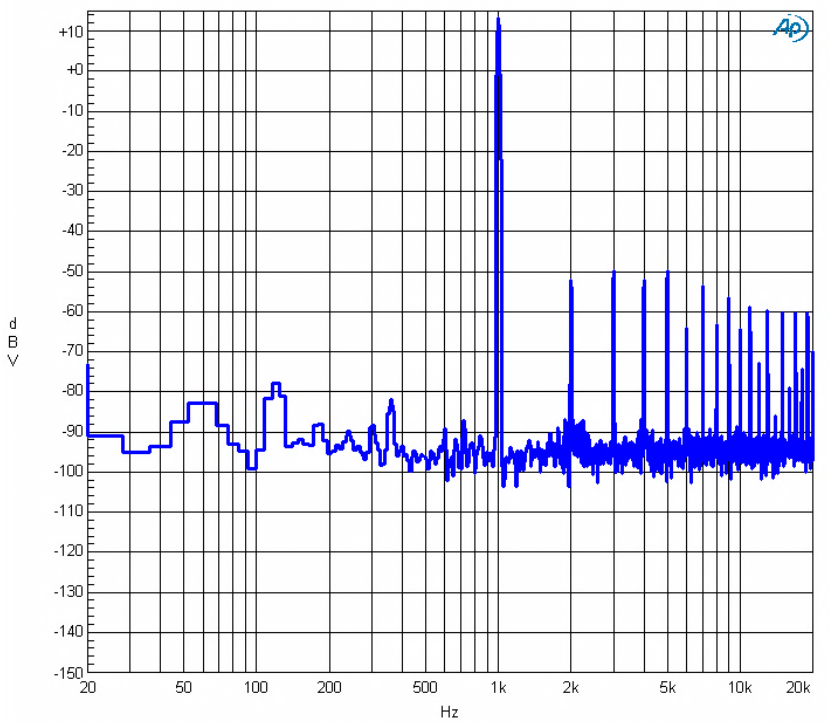

Figure 2 - Analog Input FFT

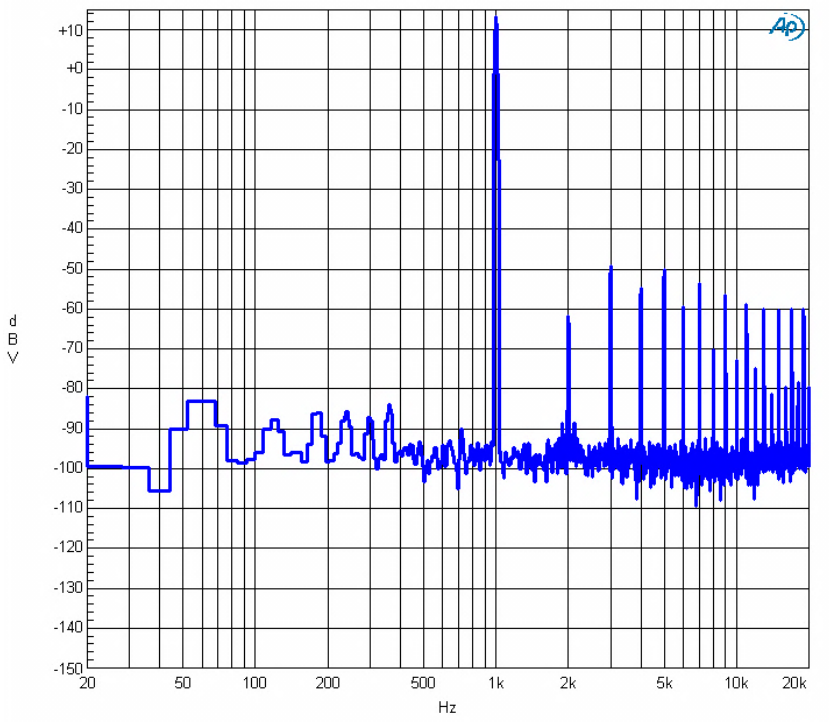

Figure 3 - Digital Input FFT

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