

Product Brief

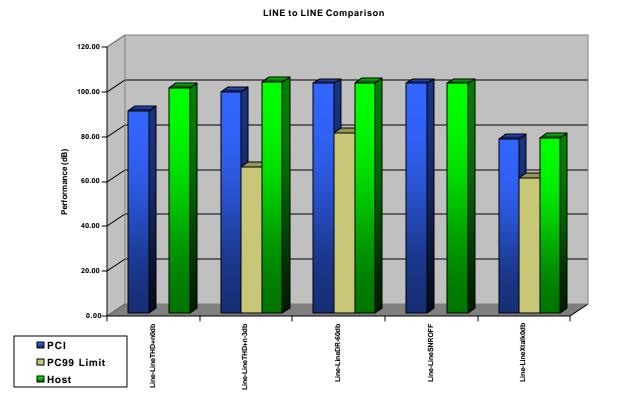
STAC9721 Host Audio Performance Comparison

Introduction

SigmaTel is pleased to report that its host based audio drivers perform as well as some of today's best audio sound cards. The SigmaTel line of AC'97 codecs are unmatched in the market for overall audio performance, and this level of performance can now be extended to SigmaTel's soft audio drivers. Standard audio performance has been measured using an Audio Precision tester. The results of those tests are included in this report. Additional data typical of PCI sound card performance has also been included for comparison. For those measurements where PC99 minimum performance standards apply, the PC99 limits have been included as well. In all cases, the SigmaTel host audio driver performance greatly exceeds the minimum requirements of PC99.

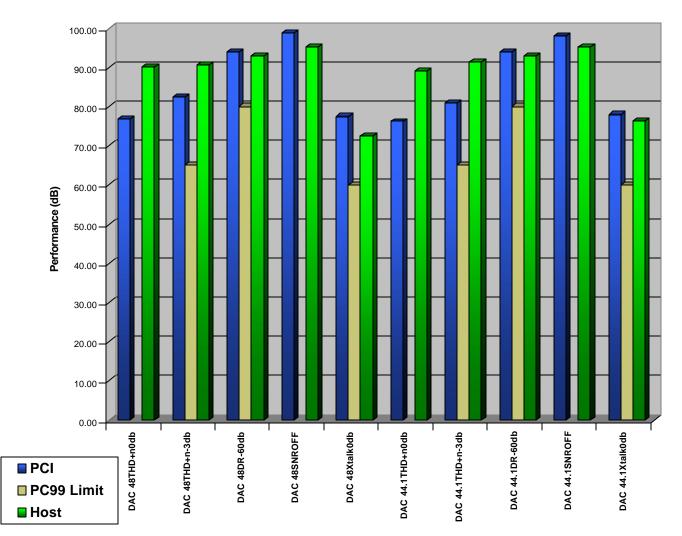
LINE to LINE PERFORMANCE

The LINE to LINE performance tests are a measure of the overall quality of the codec input and output amplifiers, as well as the mixer operation. The DAC and ADC are not operational during LINE to LINE operation. The host audio LINE to LINE performance exceeds 100dB at nearly all input signal strengths.



DAC PLAYBACK PERFORMANCE

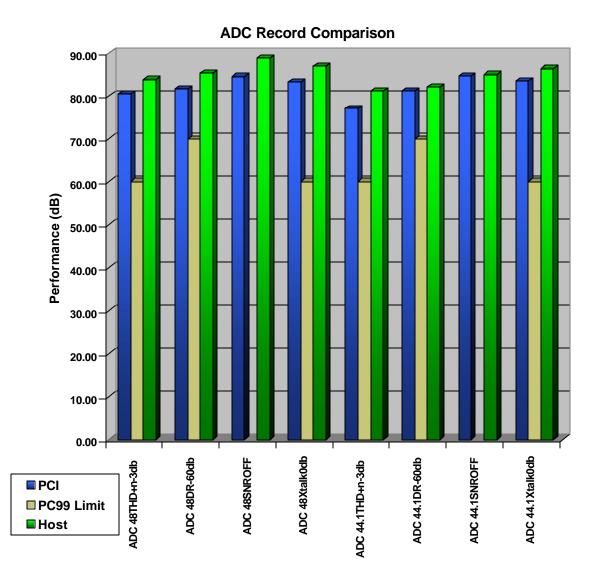
The DAC PLAYBACK performance tests are a measure of the overall quality of the codec DAC and output amplifiers, as well as the mixer operation. The ADC is not operational during DAC PLAYBACK operation. Both the 48kHz and 44.1kHz host audio playback rates exhibit exceptional performance, well in excess of competitive solutions and the PC99 minimum requirements.



DAC Playback Comparison

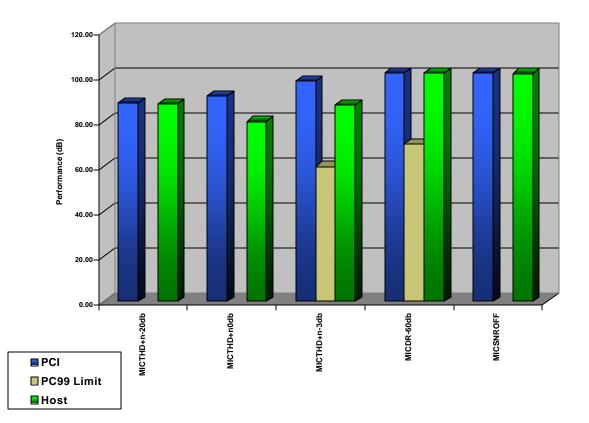
ADC RECORD PERFORMANCE

The ADC RECORD performance tests are a measure of the overall quality of the codec ADC and input amplifiers/multiplexer. The DAC is not operational during ADC RECORD operation. Both the 48kHz and 44.1kHz host audio record sample rates exhibit exceptional performance equal or better than high-performance PCI sound cards. The SigmaTel codec plus driver combination delivers audio quality well in excess of competitive solutions and the PC99 minimum requirements.



MICROPHONE PERFORMANCE

The MICROPHONE performance tests are a measure of the overall quality of the codec ADC, microphone input amplifiers and multiplexer. The DAC is not operational during MICROPHONE operation. Both the 48kHz and 44.1kHz host audio record sample rates exhibit exceptional performance, well in excess of competitive solutions and the PC99 minimum requirements.



Microphone Comparison