

A hybrid neural network model for Active Noise Cancellation using TMS320C6713 DSK

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ABSTRACT

This paper discusses the implementation and performance analysis of varied neural network algorithms for Active Noise Cancellation (ANC) using TMS320C6713 processor. A hybrid neural network model exploring the feed-forward and feedback neural network models has been proposed. The proposed system is suitable for high frequency noise signal with lower SNR levels like cockpit noise embedded low frequency audio signals. The experimental results indicate that the proposed hybrid model provides a better and stable control signal, with an improvement in SNR for Active Noise Cancellation when compare to feed-forward and feedback neural models.