

Silicon Mitus

Evolution of Audio Technologies in Mobile Devices

Abstract:

As smathphone manufactures struggle in differentiating their products from competition, audio performance becomes more and more important in modern mobile devices. The era of MP3 players is coming to an end as the increase storage capability and available streaming bandwidth allow non compressed audio standards to be played back without deteriorating the audio quality. Both hardware and software need to adapt to these new High Quality audio file formats bringing unprecedented audio experience in portable devices, once only reserved to audiophile professional system. It is not unusual nowadays to have SNR in excess of 130dB with THD+N of more than 110dB in the headphone playback path. However the miniaturization of the audio component and the limited power available from the batteries poses relevant challenges in achieving such performances. The presentation will focus on such challenges demonstrating how sophisticated DSP and state-of the art digitally assisted analog design can help in achieving these targets with particular focus on audio playback and speaker linearization and protection..

Speakers:

Francesco Rezzi, *Michele Chiabrera*

The seminar will be Apr. 9, from 4:00 to 6:00 PM, in the Seminar Room Floor D.

