

A CMOS Oversampling Bandpass Cascaded D/A Converter with Digital FIR and Current-Mode Semi-Digital Filtering

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Abstract — An oversampling bandpass cascaded digital-to-analog converter, including digital FIR and analog semi-digital filtering to reduce out of band quantization noise, has been integrated in 0.25- μm CMOS technology. The converter has 83 dB of dynamic range for a 6.25-MHz signal band centered at 50-MHz and suppresses out-of-band quantization noise by 40 dB.