

3.2 A 375mW Quadrature Bandpass $\Delta\Sigma$ ADC with 90dB DR and 8.5MHz BW at 44MHz

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A CT quadrature bandpass ADC is designed for a multi-standard television receiver. When clocked at 264MHz, the ADC achieves 90dB of total DR over an 8.5MHz BW centered at 44MHz. The 4th-order 4b ADC uses a modified feedforward topology and includes 12dB of AGC. The 2.5mm² chip consumes 375mW in a 0.18 μ m CMOS process.