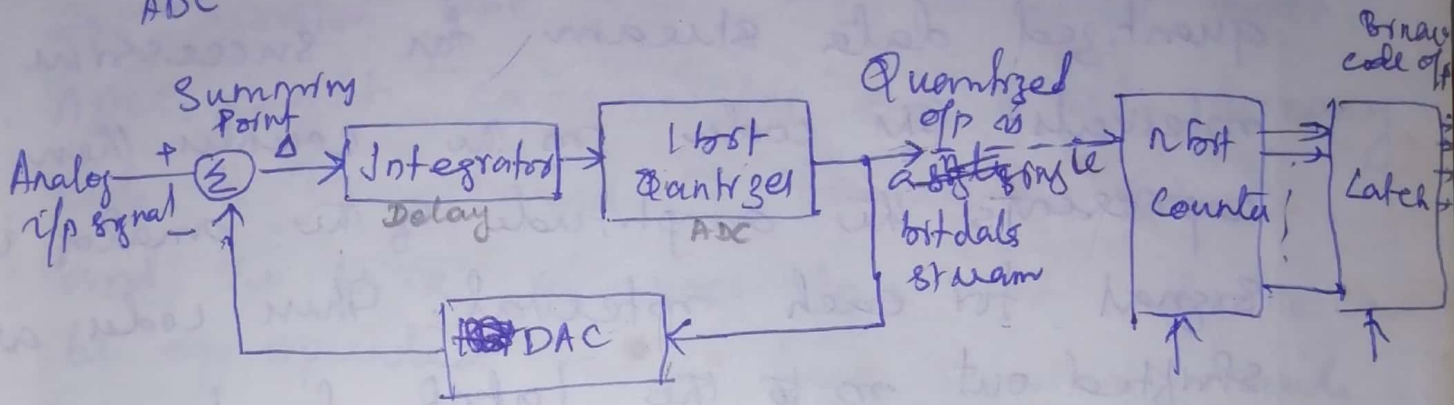# Functional Block diagram of a sigma-delta ADC

The analog i/p signal and the analog signal from the connected quantized bit stream from the DAC in the feedback loop are applied to the summation point.

The difference (Δ) signal out of the Σ is integrated, and the 1 bit ADC increases or decreases the no. of 1's depending on the difference signal. This action attempts to keep the quantized signal that is fed back equal to the incoming analog signal. The 1 bit quantizer is essentially a comparator followed by a latch.

To complete the sigma delta conversion process using one particular approach the single bit data stream connected to a series of binary codes

The counter counts this is in the quantized data stream for successive intervals. The code in the counter then represents the amplitude of the analog i/p signal for each interval. These codes are shifted out in to the latch for temporary storage

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