

OVERSAMPLING WITH ANALOG AND DIGITAL FILTERING

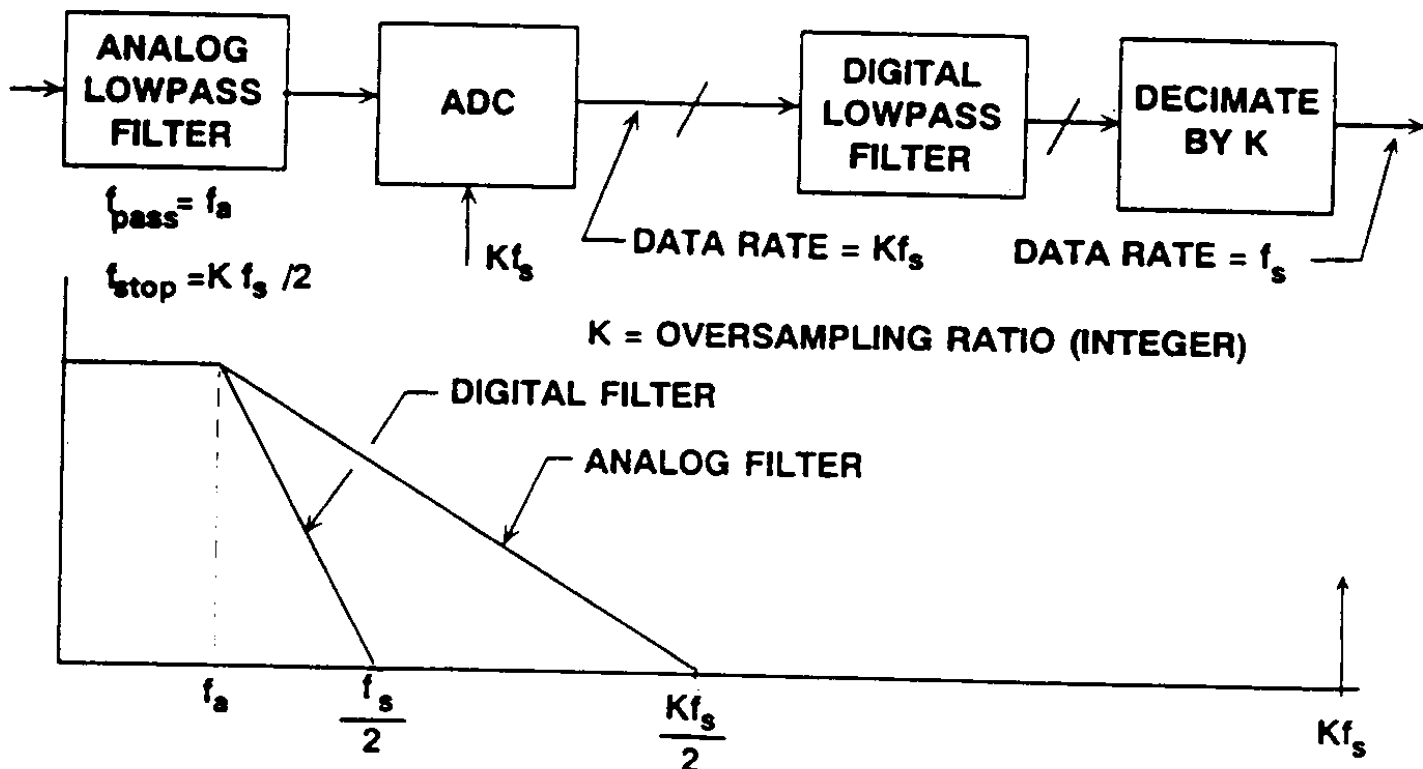


Figure 3.12

signed which have linear phase characteristics. Since the bandwidth has been reduced to $f_s / 2$ by the digital antialiasing filter, the data coming out of the digital filter actually contains redundant information, and there is no need to look at every sample. In fact, it is only necessary to look at every K th sample. This process is called *decimation*.