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ABSTRACT OF THE DISCLOSURE

A parallel analog-to-digital converter having reference-voltage generating means dividing the fundamental reference voltage into exponential reference voltages according to an exponential scale, and further dividing each voltage between two consecutive exponential reference voltages into a plurality of individual reference voltages. As a result, the individual reference voltages have a nonlinear (exponential) characteristic that as the amplitude of an analog input voltage increases, the increment of the individual reference voltages becomes larger exponentially, thus greatly reducing the number of comparators.

