TABLE 1–PEAK-TO-PEAK LIMITS

Crest factor	Crest factor in bits	Occurrences of exceeding peaks (%)
2.6	2.38	1
3.3	2.72	0.1
3.9	2.96	0.01
4.4	3.14	0.001
4.9	3.29	0.0001

Note: Peak-to-peak noise volts in a signal equal noise volts (rms)×2×crest factor. The peak-to-peak noise bits equal the noise in bits (rms) − crest factor in bits. From the selected crest factor, you can predict the probability of an occurrence that exceeds defined peak-to-peak limits.

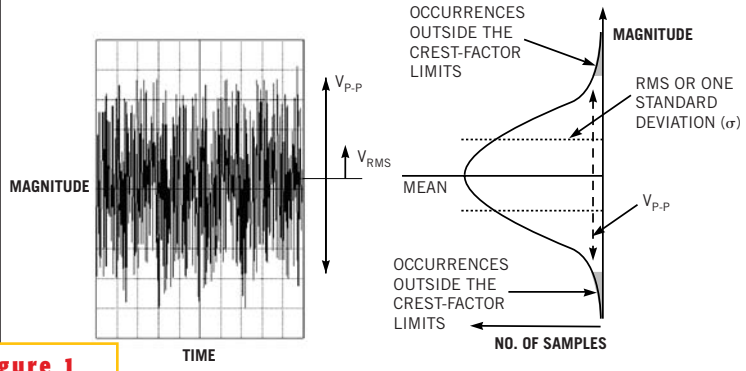

Figure 1

The standard deviation (rms) of several samples (greater than 1024) of a dc signal is enough data to describe the system's future performance (Table 1).