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Sommario/riassunto

Residue number systems (RNSs) and arithmetic are useful for several reasons. First, a great deal of computing now takes place in embedded processors, such as those found in mobile devices, for which high speed and low-power consumption are critical; the absence of carry propagation facilitates the realization of high-speed, low-power arithmetic. Second, computer chips are now getting to be so dense that full testing will no longer be possible; so fault tolerance and the general area of computational integrity have become more important. RNSs are extremely good for applications such as digital