

NEW

Generation of Physical Random numbers

Development technology of physical random numbers

Physical random numbers generation IC to which the small package making is done by the original random number generation theory is being developed. The FIPS standard and the full satisfactory ability is confirmed in the trial manufacture IC. The sample shipment of high-speed, high-quality physical random numbers generation IC is scheduled in the spring of 2003. Moreover, we develop applied product of physical random numbers are being developed.

What are physical random numbers?

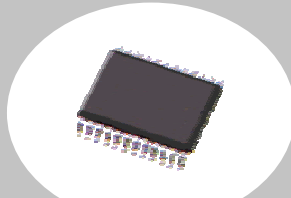
Random numbers are mainly divided into two categories, pseudorandom numbers and natural, true or physical random numbers. Pseudorandom numbers are mainly generated from lineal feedback shift registers (LFSR) with some initial setting value known as a seed. In pseudorandom numbers there is a possibility to occur the same set of numbers cyclically, and by knowing the initial seed the occurrences of random numbers can be forecasted. Physical random numbers are generated from a naturally occurring random phenomenon and numbers cannot be forecasted since there are neither periodicity nor same patterns.

Application areas and advantages of using physical random numbers

In present days random numbers are widely used in communication, finance and many other areas where security is mainly concerned. When physical random numbers are used, safety and information security of applied fields are greatly reinforced. Owing to low cost, high speed and high quality physical random number generators are not easy to obtain present day market, very few in present day market pseudorandom numbers are widely used.

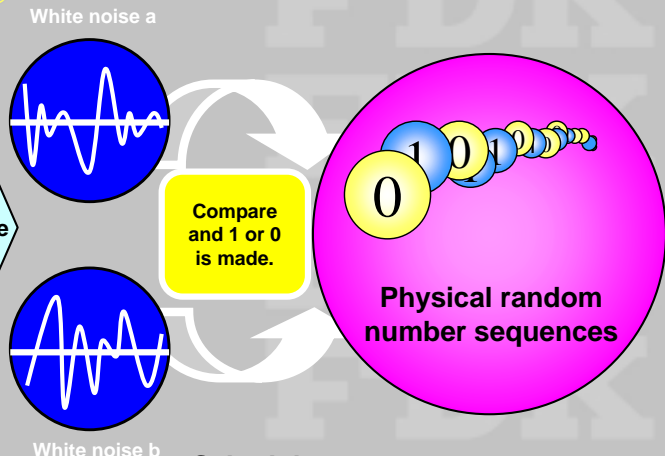
Physical random numbers generation IC

Micro, low-cost, high speed,
high quality, and safety



Now developing
Patent pending

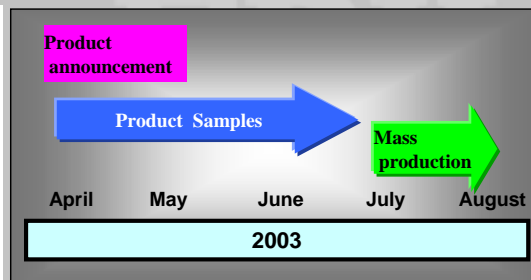
Basic image



Specifications

| | |
|-------------------|---------------------------------|
| Random source | Thermal noise in semiconductors |
| Generation speed | 250k bit / sec |
| Data output | 16 bit parallel / 1 bit serial |
| Quality | FIPS140 standard |
| Package | SSOP 24 pin , Pb free |
| Operating voltage | 3.3 V |

Schedule



Usage Communication, Finance, Security, and Game machine etc ...

The descriptions in this catalogue are subject to change without notice.