

## Quantum Computer becomes Realizable by IC tech at Now. 2026/1/17, 18

Quantum bits the Troublesome are Replaceable by Ordinal LS-IC Circuits the feasible.

Modern IC circuit technology can produce 1 million-bit quantum bits!!!

### ①Qubit String Function

In quantum computers, a qubit string functions are both as data (numerical data = 10,000,000 bits) and as an address (index = 64 bits) that indicates the location of the data.

### ②The maximum vector data volume required is ~1 million bits.

**Requirement conclusion:** The data representation vector dimension is 4096 components (large-scale generative AI (LLM, etc.)), so to fill this entire space with trial-and-error data, **the maximum vector data volume required is ~1 million bits.**

The current maximum is around 100, so realizing quantum bits is hopeless.

**Maximum value:**  $2^{12}$  bits per a component x 4096 components

$$= 2^{24} = 1.6777 \times 10^7 = 17 \text{ Mbit}$$

0,1	0,1	0,1	0,1	0,1	$2^{24}$ parallel random generation flip-flop	0,1	0,1
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By  $2^{24}$  parallel circuits and clock frequency f=16.7MHz, a search can be completed/1 sec.  
Is it possible to create a  $2^{24}$  parallel flip-flop circuit that randomly generates 0, 1 using IC technology?

Summary by Google AI:

③Using modern integrated circuit (IC) technology, particularly CMOS technology, it is technically possible to create a true random number generator (TRNG) with one million parallel flip-flop (FF) circuits that generate random 0 and 1. High-throughput TRNGs combining tens to thousands of cells have already been implemented in FPGAs and ASICs, and **integration on a one-million scale** is within the realistic range given the integration density of CMOS.

## APPENDIX1 :

Visible actuality of awful Quantum Superposition in two slit diffraction by an electron.

*Richard P. Feynman, once commented that "anyone who claims to understand quantum mechanics is a liar."*

**A single electron passing through two slits creates interference fringes on rear screen by many times trial..**

(1)The **physical vacuum** is a space filled with **vacuum-polarized dipoles** that are instantaneously and perpetually created and annihilated from and into nothing vacuum..

(2)The **dipoles form a chain**, through which a single electron **instantaneously tunnels**.

- i      
- ii     
- iii    
- iv     

(3)The result is instantaneous transport as one end annihilates and the other is created, resulting in the electron randomly being in more than one place at the same time. Not just two slits, but multiple slits create fringes in **many times trial(statistic)**.

(4)Although a single, invisible, non-interacting process is **actually**

**simultaneous, parallel, and random,**

(5)but, the key goal of CPU **output**(interaction by an observing) is

**one at a time**. Then many trials is to reveal the coherent probability.

(6)These fact should be **realizable** with electronic circuits; parallel operation and random generation technology the available.→②

(7)Author entirely expect the tragedy turn to a big hope.

AI could become hard worker slave of us producing **goods and income-holidays** and also selfless leader(testing by us all) producing **best leading** of our life in the Chaotic World.

\*AI at now learning the Holy Scriptures is easy,Google AI told.

## APPENDIX2: Visualizing on Quantum Superposition Actuality in Particle Position.

*The theory of quantum bits was published in 1981 (2025 Novel Prize), and although 35 years have passed, the practical scale is still far from being realized.*

**CAUTION:** ①<②>are not authorized by **the established academy**. Then your honest and neat understanding ① would reveal the hidden truth.

Particle position observable is a typical in quantum superposition state. Especially note such superpositional physical variable(=**observable**) is not **conservative**(time independent) one such as state energy, spin momentum, ...etc.

① Awful Reality of The Real Number “0” due to “**Gödel Incompleteness Theorem**(1931)”. Axiomatic system including *Natural Number Theory(NNT)* has undetermined proposition.

You never can tell the Maximum Number=M in NNT, then

**Real Number Zero “0”=1/M** is also **undetermined**, that is, It is nothing and non-nothing.

② Awful Reality of **Size “0” of Elementary Particles** in well established Standard QFT.

Quantum Gauge Field Theory(QFT,QGD) has nothing error in the experiments.

Summary of **Quantum Gravitational Dynamics(QGD)**(1993～1995).

\*In 1993/10 USA,SSC(elementary particle test device) construction was cancelled.

Elementary Particle Theory had been completed by Einstein,Utiyama,Faddev & Popov.

<http://www.777true.net/img006-Quantum-Gravity-Dynamics-the-summary.pdf>

<http://www.777true.net/img008-Quick-Guide-to-Quantum-Gravitational-Dynamics.pdf>

\*So called super-string theory never can tell reality of Elementary Particles.

③ Awful Reality of size “0” of elementary particles in **chaotic quantum vacuum filed(QVF)**.

QVF is so to say a boiling stew pan with **many bubbles** created and annihilated.

QVF's reality is filled with dipole field of vacuum polarization of elementary particle and the anti-particle pairs creation and annihilation in  $\Delta t=0, \Delta E=\infty$  the quantum chaos field.

Those dipoles perpetually can create and annihilate **dipole chains** by zero life time,

Thus you can see the usefulness of real number “0” s indeterministic nature.

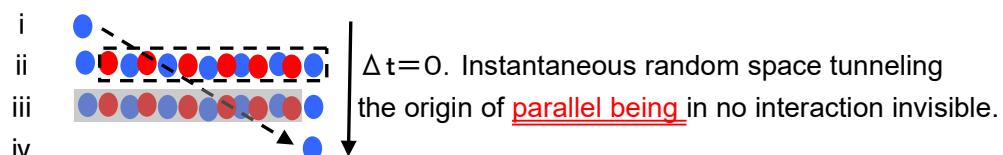
④ **Instantaneous space tunnelings through random dipole chain**

An elementary particle is so to say a bubble with life time zero at a point time and space.

However, not locally, it has also finite life time by **instantaneous space tunnelings** through random **dipole chain**. → elementary particle has no continuous trajectory,.

→ **quantum Brownian discontinuous motion**. → **Parallel Being**<quantum superposition>

→ wave function  $|\Psi(x,t)|^2$ ’s **statistical interpretation** on particle position=x at time=t in many times observing.



## ⑥Micro Quantum Action by Statistical Macro IC circuit one.

In history of computer development, they attempted stochastic CPU by Monte Carlo method. Now the betting city is turned so called Quantum bits **the very vulnerable**. Quantum bits should be turned ordinal IC circuit with random technology the established.

The key point is that whatever the quantum state is, it will be **a sing input at a time**.

The statistical accumulation of **many times inputs** leads to the CPU's conclusion output.

Note:a quantum parallelism is fact in **invisible single non observing state**=shot gun state. but, the visible real result is derived in many times accumulation of **random single bullet**.

Note:A random single bullet is not only by qubits the vulnerable, but also by **Random Generating IC Circuits the very Reliable**.

**Quantum Random Parallelism** is revealed by **many times trial=statistic**.

The essential task should be viewed from AI CPU side, but not quantum bits.

chaotic quantum vacuum filed→**quantum randomness**

→ $|\Psi(x,t)|^2$ 's **statistical interpretation** in many times observing. .

quantum randomness→this is replaceable by random generating circuits action

**instant space tunnelings**→parallel being→**quantum superposition reality the invisible**.

→coherent **parallelism** actuality is to be revealed in many times trial.

parallelism actuality→this is replaceable by random circuits **in many times process action**