

# IBM's new mainframe is faster, encrypts everything, effectively hides the source code for the business

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***If you don't know:** Mainframes are computers that are used in large-scale businesses and organizations, to run important applications, handle large amounts of data such as population statistics, pepper statistics use, industry, transaction processing, . It can also be considered a server.*

Protecting data against the eyes of hacker or intelligence organizations is paramount but very difficult. IBM's new solution can help you in this fight. The new Z mainframe has a maximum memory of 32TB, 7 times the previous generation's encryption performance, keeping the data stored on the mainframe and moving through it completely encrypted.

The mainframe operates at a rate of up to 18 times the speed of the equivalent x86 system. It also has an anti-harassing system, which can detect attacks, quickly disable the decryption key. In that case, the data will be converted into an unreadable form until the key is safely restored.

IBM describes this as the 'most repositioning of mainframe technology' coding system for more than a decade, and can significantly improve the protection of advanced encryption in the world. It uses the new generation of mainframe CMOS technology with 10-core CPU, 14nm SOI (silicon-on-insulator) technology and runs at 5.2GHz, arguably the fastest processor.



### *IBM's new Z14 mainframe with strong encryption capabilities*

Although the statement is a bit big, it is not just a fantasy. IBM's system currently handles about 87% of all credit card transactions, so there are also safeguards for financial transactions and purchases. Not all big businesses regularly upgrade hardware so the new mainframe Z may take years before becoming more popular.

## **Highlights of Mainframe Z14**

1. Z14 is the next generation of IBM's CMOS technology.
2. The 10-core CPU, using silicon 14 nm insulating technology and running at 5.2GHz, is the fastest processor in the industry.
3. The Z14 has a 10% higher performance per core than the Z13, and has up to 170 configurable kernels, increasing the total capacity to 35% compared to the Z13.
4. Running Java workloads is 50% faster than X86 alternatives.
5. Access to FICON SAN has 10 times lower latency than Z13 with zHyperLink Express, which reduces application response time by half.
6. The Z13 can encode real time of all mobile phone transactions with up to 2.5 billion transactions per day. But the Z14 is still terrible and even more pitiful, it can encode nearly five numbers, equivalent to 12 billion transactions per day.

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