

Normal Computing startup presented the world's first thermodynamic chip for AI

Founded by the ex-employees of Google Brain, Google X and Palantir, the Normal Computing startup presented the world's first thermodynamic computing chip CN101. This chip uses the fundamental physical properties of silicon to increase the effectiveness of computing, especially in the field of AI and science.

Unlike the traditional CN101 chips, it uses natural vibrations, dispersion of energy and an inherent chip for calculations. According to the Normal Computing press release, this method can increase the effectiveness of some calculations by 1000 times. The architecture of the chip is based on the principles of carno (CARNOT cycles), when changes in the physical condition of the chip contribute to the search for solutions. Unlike ordinary chips, in which noise is either controlled or eliminated.

The first prototype demonstrated the possibility of performing useful calculations using noise, such as the inversion of the matrix and the sample of Gaussian important for AI.