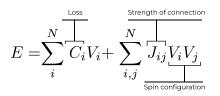
Dirac 1 1st Generation QUBIT Entropy Quantum Computer

Summary

Dirac-1 is a portable, low power, and room temperature qubit entropy quantum computer (EQC). Dirac-1 solves problems of Objective Function Minimization and Maximization for **binary optimization** by finding the ground state of a complex system with many inter-correlated variables.

These problems correspond to minimizing or maximizing the expected return of the objective function:



where Vi is the value of each variable, Ci is the linear coefficient of each variable, which is a real number that can be positive, negative, or zero, Jij is the coupling coefficient of two variables, which can be any real number

Specifications

Туре	Qubit (superposition of 0 and 1)
Maximum size of variables	N = 11,000
Connectivity	All-to-all
Operating Temperature	25 °C / 77 °F (room temperature)
Power Consumption	<80 W
Physical size	Contained in a 3U rack-mountable unit
Order of correlation	Any types of second-order correlations, where interactions between qubits can be repulsive (positive correlation) or attractive (negative correlation)

