



## System And Method For Controlling Superconducting Qubits

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### The Invention

A system and method for controlling qubits to perform quantum computation is provided. In some aspects, the system includes at least one superconducting quantum processor comprising a multi-qubit architecture having coupled qubits that are described by an anharmonic energy spectrum. The system also includes a microwave source connected to the at least one superconducting quantum processor, and configured to provide a microwave irradiation to at least one of the coupled qubits in the multi-qubit architecture to perform a gate on the at least one of the coupled qubits. The system further includes a controller configured to direct the microwave source to provide the microwave irradiation to at least one of the coupled qubits in the multi-qubit architecture.

### Additional Information

#### For More Information About the Inventors

- [Maxim Vavilov](#)

#### Tech Fields

- [Information Technology.: Hardware](#)

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