### **NeuroQuantis 2.0: Core Architecture and Materials**

The NeuroQuantis 2.0 architecture is designed to integrate superconducting materials and enhance the AI core modules, paving the way for advanced computational capabilities. This document outlines the structural design, materials used, and a schematic diagram of the system.

# **Structural Design**

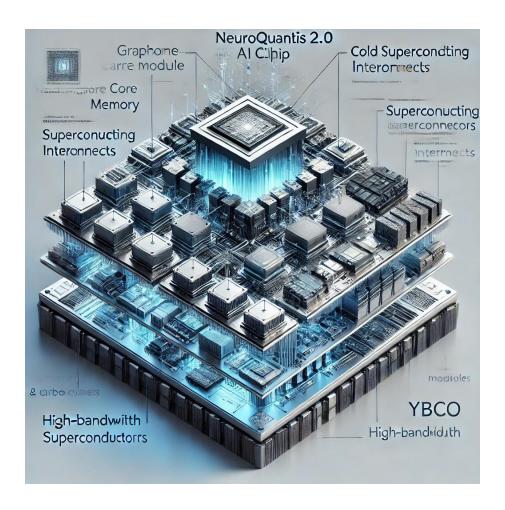
NeuroQuantis 2.0 adopts a modular structure that combines AI core modules with cold superconducting materials. The architecture ensures seamless integration of processing, storage, and communication units, optimized for both scalability and energy efficiency.

#### **Materials Used**

The primary materials used in the NeuroQuantis 2.0 architecture include:

- Cold superconductors for enhanced energy efficiency and performance.
- Advanced carbon nanotubes and graphene composites for structural integrity and thermal management.
- Non-linear optical materials to support AI-assisted optical communication modules. These materials ensure robustness, scalability, and compatibility with future upgrades.

# **Schematic Diagram**



Below is a detailed schematic representation of the NeuroQuantis 2.0 architecture, highlighting the integration of AI cores, superconducting pathways, and advanced materials.

![NeuroQuantis 2.0 Schematic Diagram](A\_detailed\_schematic\_concept\_of\_a\_NeuroQuantis\_2.0.png)

### Note

For a clearer understanding of the foundational concepts in NeuroQuantis 1.0, please refer to the NeuroQuantis 2.0 schematic, which builds upon and refines the core architecture.

NeuroQuantis chip architecture design

Copyright (C) [Ch], [20.12.2024]

This document is released according to the MIT Open Source Protocol. Anyone is free to use, copy, modify and distribute the content of this document, but the statement of this agreement must be retained.

The content of the MIT protocol:

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.