

MTCA Platform

Wednesday 6 December 2023 17:00 (15 minutes)

Atom Computing continues to expand its usage of the MicroTCA platform to control its next generation of quantum computers. In this talk, we will present a brief overview of Atom Computing and how we are using MicroTCA to implement the control system for our neutral atom based quantum computer.

We will then touch upon our experience using MicroTCA as we have expanded the usage of our control system to more quantum computers. As our computers and teams span across many sites, we discuss our development and installation timeline and our experience with remote maintenance and uptime.

Additionally, we will discuss how we use the MicroTCA platform to enable certain applications within our current control system. We then conclude with some thoughts on the requirements for our next generation control system and how the MicroTCA platform may be used to enable these features.

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