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## Development of a multi-axis Motion Controller in MicroTCA.4

*Thursday 8 September 2022 15:20 (3 minutes)*

DESY is developing a MicroTCA.4-based multi-axis motion controller: DAMC-MOTCTRL. This board is a contribution to the ecosystem, since it enables controlling motion in big experiments from within the MicroTCA crate. It is designed to move up to 48 stepper motors per card in parallel - which means each card replaces up to 6 VME cards. One major benefit is the possibility to aggregate multiple cards inside crate and across DESY campus. This allows to perform position-synchronous data acquisition. Using the MicroTCA features, this device can interact with virtually any other MicroTCA card and trigger user-programmable actions.

In this talk, the the design, it's current state and the latest developments will be presented.

### Summary

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