

## Scaling Performance in MicroTCA.4

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In the past two decades, radio-frequency (RF) controls have improved by two orders in magnitude achieving meanwhile sub-10 fs phase stabilities and 0.01% amplitude precision. Advances are through improved field detection methods and extensive usage of digital signal processing on very powerful field programmable gate arrays (FPGAs). Still the dominant limitation are today's available ADCs. One general approach to overcome this is the brute-force parallelization of receivers, preferable in standards like MicroTCA.4. In this poster we present a proposal for channel parallelization in MicroTCA.4 and hybrid options between conventional and carrier suppression interferometer receivers to achieve sub-fs resolutions.

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