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BPM and Global Feedback for Elettra 2.0

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Elettra is developing a modular eBPM system, based on pilot-tone technique for long-term stability compensation and self-calibration, and it is composed by the analog front end, the 4-channels 16-bit A/D FMC module and the digital carrier board. While the former two have been completely developed and verified, the latter is in testing phase.

In a first prototype the Verilog code for the eBPM processing scheme has been successfully built, now we are focusing on the overall Global Feedback System requirements.

In order to allocate enough computing resources, communication bandwidth, resolution and processing time, we need to plan carefully mandatory and auxiliary functionalities.

Our goal is to have an active discussion with high experienced people about the requirements of the BPM systems and the related Global Feedback in the next generation Synchrotrons.

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