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Upgrade of low-level RF system for J-PARC linac RFQ-TS

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The radio-frequency quadrupole test stand (RFQ-TS) was prepared for conditioning the spare RFQ in the J-PARC Linac. Additionally, the RFQ-TS is used for the development of accelerator components and the acquisition of beam parameters. The digital feedback system of the Low-Level RF (LLRF) in the RFQ-TS was previously using the discontinued cPCI system, which had been in use for 20 years since its development. In order to continue improvements of the RFQ-TS and to allow for future development, the system has been upgraded to use μ TCA.4-based system, which can be developed further. In this presentation, we will report the details of the upgrade, as well as the feedback and feedforward adjustments.

Footnotes

Paper preparation format

LaTeX

Region represented

Asia

Funding Agency

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