

MicroTCA.4 based single cavity regulation including piezo controls

Thursday 10 December 2015 12:00 (15 minutes)

We want to summarize the single cavity regulation with MTCA.4 electronics. Presented solution is based on the one MTCA.4 crate integrating both RF field control and piezo tuner control systems. The RF field control electronics consists of RTM for cavity probes sensing and high voltage power source driving, AMC for fast data processing and digital feedback operation. The piezo control system has been setup with high voltage RTM Piezo driver and low cost AMC based FMC carrier. The communication between both control systems is performed using low latency link over the AMC backplane with data throughput up to the 3.125 Gbps. First results from CW operation of the RF field controller and the cavity active resonance control with the piezo tuners are demonstrated and briefly discussed.

Primary authors: Dr PRZYGODA, Konrad (DESY); Mr RYBANIEC, Radoslaw (DESY)

Co-author: Dr HOLGER, Schlarb (DESY)

Presenter: Mr RYBANIEC, Radoslaw (DESY)

Session Classification: Session 6