

## **Development of the AWAKE Stripline BPM electronics**

AWAKE (The Advanced Proton Driven Plasma Wakefield Acceleration Experiment at CERN) stripline BPMs are required to measure single electron bunch to a precision less than 10  $\mu\text{m}$  rms, for a minimum charge of 100 pC to 1 nC. This paper presents a unique AFE-Digital processing platform developed at TRIUMF (Canada) that could achieve such high performance. The simulation and design of the analog front end are reviewed, prototyping, bench testing, and electron beam testing at CALIFES (CERN) are also described.

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