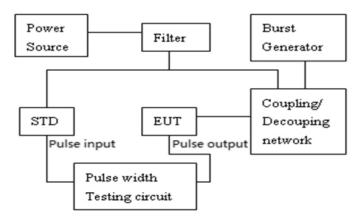
## **10EM095** A Method for Restraining Electromagnetic Interference of Electricity Meter by Means of Pulse Width Testing Circuit

Wenfang LIU<sup>82</sup>, ChongMin SONG<sup>82</sup>, Jun Zhao<sup>82</sup>, Feng SHAO<sup>82</sup>

This paper describes a method for restraining electromagnetic interference of electricity meter by means of pulse width testing circuit. The method is adopted to resolve the problems often occurred in the type approval test of ac energy meter that the error of the electricity meter under the test exceed the demand of the standard which is caused from the disturbance impulse coupling to the signal wires of the standard meter. The design of the impulse width testing circuit and the experiment setup are reported.



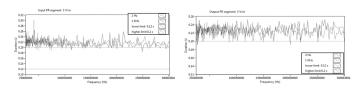
Electrical fast transient/burst immunity test setup

## **10EM147** Assessment of the immunity to radiated disturbances of an FPAA-based front-end device for ECG signal monitoring

Nicola Pasquino<sup>83</sup>, Dalila Salhi<sup>83</sup>

The paper is focused on the assessment of the functional immunity of an FPAA circuit configured to operate as a front-end element to be used in ECG signal conditioning, and on the investigation of the possible effects of electromagnetic disturbance on the parameters of the ECG signal, within a range of frequency from 250 MHz to 3 GHz. The research is carried out with a methodology which relies on typical ECG signal and frequency domain analysis.

Keywords: electromagnetic compatibility; electromagnetic interference; FPAA; immunity measurements; ECG; biomedical application.



PR interval on the in and out channels at 3 V/m electromagnetic field.