Quality Evaluation Electronics for CBM-TOF Super Module

Chao Li

University of Science and Technology of China

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Architecture of quality evaluation electronics

- **Time digitizer**
  - 10 TDC for 320-channel time digitizing
  - Each TDC has 32 electronic channels with TOT measurement

- **Readout modules**
  - TDC Readout Motherboard (TRM) for reading out multiple TDC
  - data readout module (DRM) for sending data to the DAQ system
Introduction

System Design

Implementation of the time digitizer

Implementation of readout modules

Time resolution of TDC: 15 ps (RMS)

Time resolution of MRPC: 60 ps (RMS)