Mu2e calorimeter - Signal chain overview

- 2700 readout channels w/ fully custom readout chain (from SiPM to DAQ)
- 10 electronics crates/disk (280 boards total)
- SiPM cooling to -10 °C

- **2700 Read-Out Units**
  - Two fully independent readout channels per cry
  - 2 large-area UV-extended SiPM
  - **2 Front-End Electronics (FEE) boards**
    - SiPM amplification and shaping
    - Digitally controlled SiPM monitoring and biasing

- **140 Mezzanine Boards (MB)**
  - Slow-control distribution
  - FEE power distribution
  - ARM-microprocessor based

- **140 custom digitiser boards (DIRAC)**
  - Signal digitisation @ 200 Msps w/ 12-bit flash ADC
  - Digitisation to allow good signal reconstruction despite the high expected pileup
  - *PolarFire* rad-hard FPGA
  - VTRX 10 Gbps optical link to Detector Control System
  - DIRAC v3 prototype ready