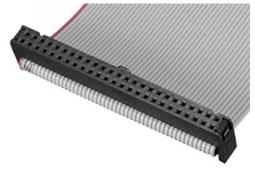
Bubbler project updates

Soeren Prell ISU KLM group meeting June 24, 2022

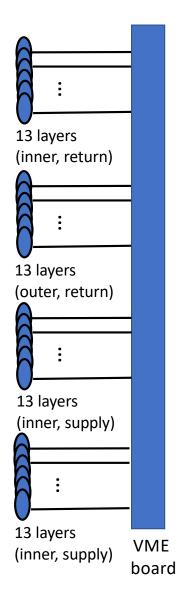
Updates

- Confirmed that work related to the bubbler project is eligible for Belle II authorship qualification
- Different types of cables and connectors were used between sensor circuit boards and VME crate end
 - Will determine what types with full inventory check after IR access is changed to FREE mode
 - Identified one type of connector
 - Will order break-out board
 - 1st test of the procuring bureaucracy at KEK



Envisioned bubbler cabling scheme

- Bubbler panels are separated from VME crates by several meters of (old) ribbon cables
 - Cables may not be uniform, too short, and/or too old and may need to be replaced
- VME crates will communicate with SC via ethernet cables



52 channels per half octant

x2 halves (FW and BW)x8 octants (VME crates for 2 octants are in the same place, e.g. 0&7, 1&2, etc.)

= 832 channels total

Option of placing r/o board near bubbler

- Could put r/o board right next to the bubbler panels
 - Avoids putting in new long ribbon cables on the detector (hard to access, reduces potential of damaging other cables)
 - Need 110V near bubbler panel (should be there)
 - Need +5V PS near bubbler panel (-12 V was used for analog multiplexers on the old r/o board; do we also need -12 V?)
 - Need to crate/frame to put 4 r/o boards + PS near bubbler panel
 - This could be a space issue in some locations
 - Need to lay ethernet cables from bubbler panel locations to EHut