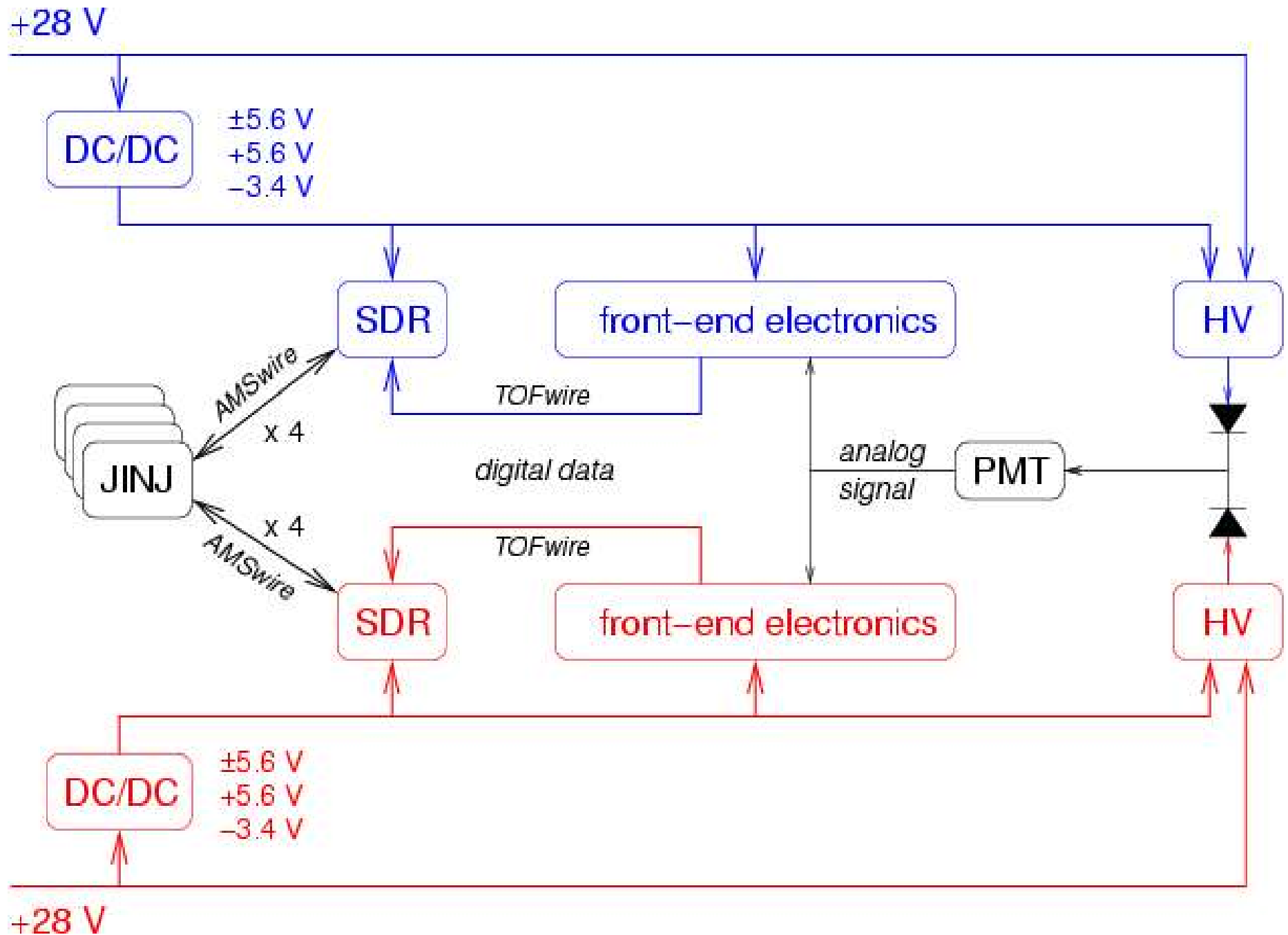


AMS-02 Technical Interchange Meeting
CERN, July 19-23, 2004

Status of the AMS-02 Scintillator Electronics

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AMS-02 scint. electronics in brief

- **SDR2**: interface between AMS-02 DAQ system and scintillator front-end electronics (+ slow control).
- **SPT2**: interface between AMS-02 trigger system and scintillator electronics.
- **SFET2**: front-end for time and anode charge measurement, TOF (good time resolution).
- **SFEA2**: front-end for time and anode charge measurement, ACC.
- **SFEC**: front-end for TOF dynode charge measurement (not redundant).

SFECs on TOF, other boards inside S-crates. PMT fed by **SHV**. LV from 2 types of DC/DC converters.

SDR2 status

- Software development on CDP in progress.
- Part of the logics modules are implemented on custom boards:
 - complete charge read-out;
 - complete time read-out.
- QM design to be finalized.

SPT2

- Functional scheme is complete.
- QM design to be finalized.
- As soon as the module will be available (autumn) Lin will be able to start programming the logics.

SFET2

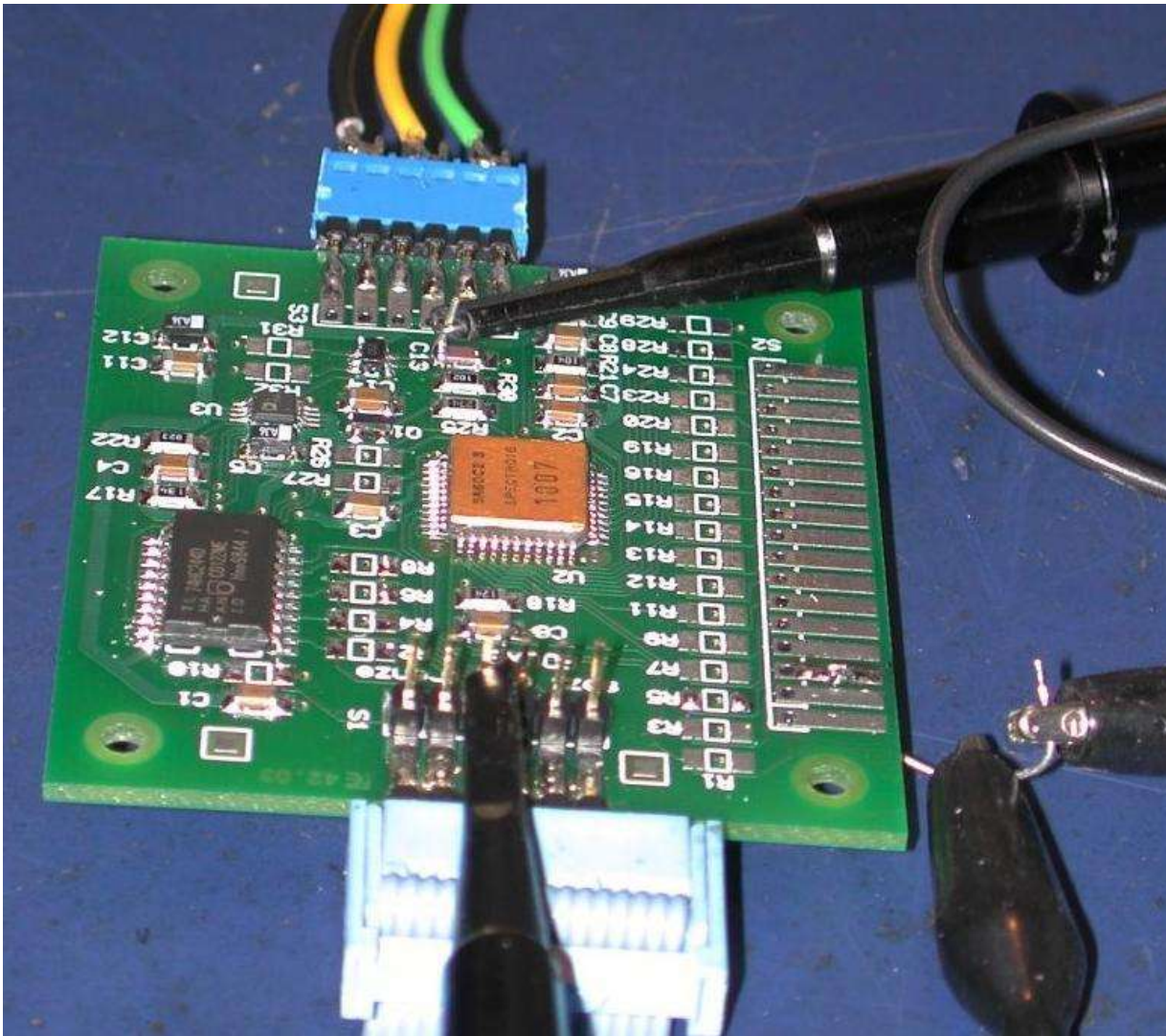
- Major redesign of SFET2 front-end in the last several months.
 - Only 4 input channels.
 - Fixed bugs.
 - Added SFEC-like charge measurement.
- QM to be finalized this summer.
- Interface with SDR2 equal to that of previous prototype. Protocol refinements are still possible.



SFEA2

- SFEA2 is waiting for SFET2:
 - different analog coupling (ACC signals are lower than TOF anodes);
 - simplification of time logics: only history channel (no time expansion);
 - logic signals directly going to JLV1x from front-panel;
 - 2 full TOF channels on board;
 - common charge read-out for TOF and ACC anodes.

SFEC



- QM in production.
- Software development on Altera OK. Porting on Actel with QM.
- FM+FS production by the end of 2004.

LV and HV

- QM of both DC/DC converters (S9074 and S9052) available for test.
 - Testing to be carried on in September.
 - FM+FS to be ordered by the end of 2004.
- QM of SHV to be delivered by CAEN.
 - Testing to be carried on by November.
 - FM+FS to be ordered by the end of 2004.