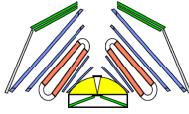


Slow Control System for the HADES RPC detector

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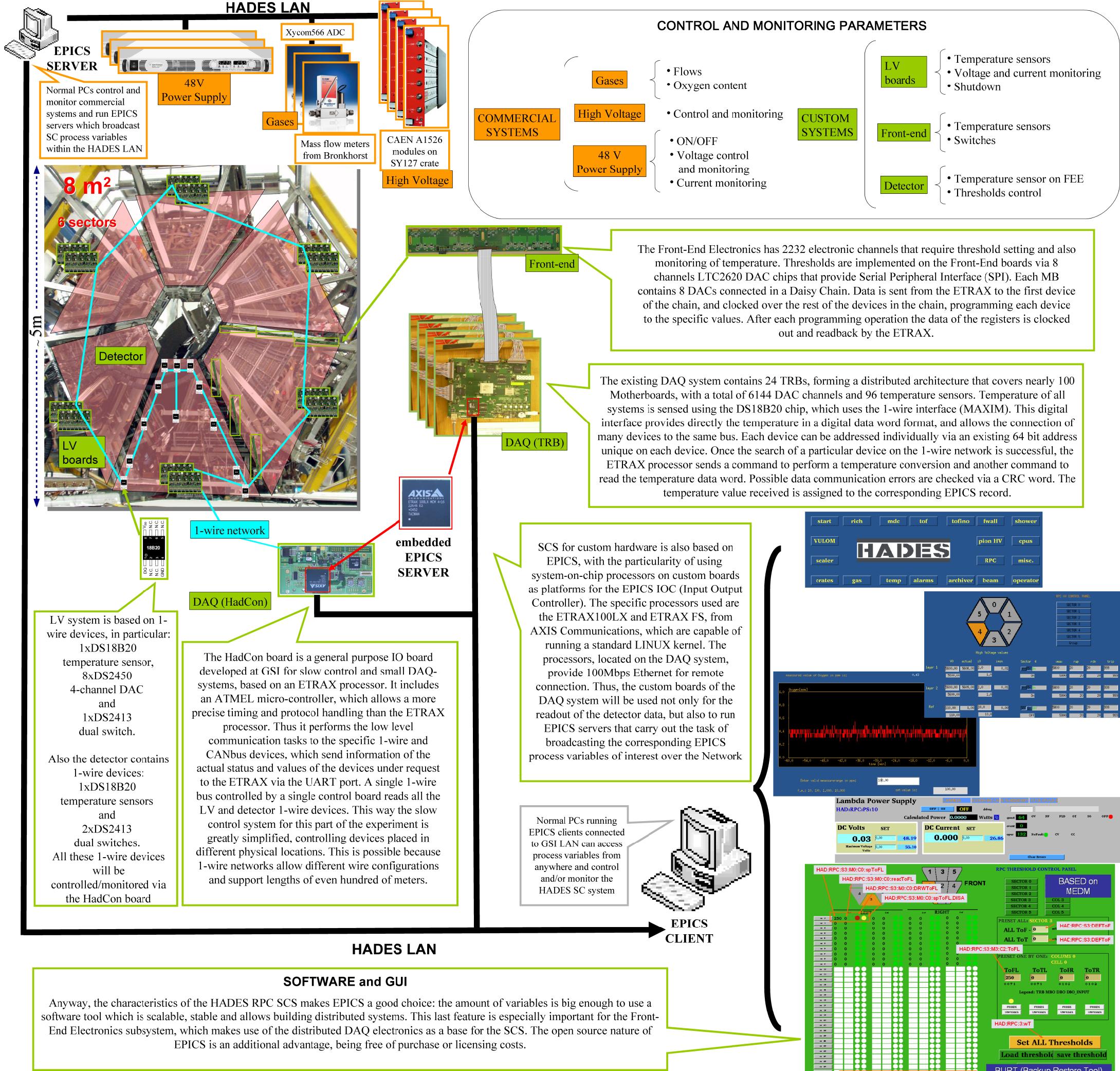
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The term slow control system (SCS) refers to a computer system that monitors and/or controls one or more processes. The processes in the case of the HADES RPC wall consist of different parameters that affect the operation conditions of either the electronics or the detector. These parameters can moreover be monitored for failure prevention and detection or can be directly controlled by a client computer. The control and monitoring System designed for the HADES RPC wall attends four different systems: Front-End Electronics, Low Voltage (LV) system, detector and gas system.



EPICS allows integration of many channels with a distributed architecture from many different systems: commercial and custom made. The use of EPICS has the advantages of being free of purchase or licensing costs, providing reliability even for applications that require the handling of large amount of variables, not requiring big hardware resources and being extremely adaptable.

The existing DAQ readout platform is used for part of the slow control (FEE), reducing the need of a dedicated hardware for this part of the SCS. A 1-wire network will be used for the LV and Detector SCS. The use of this bus simplifies the control and monitoring of devices physically separated and distributed all-over the detector system, requiring only the use of a single control board.