

DISTRIBUTED MONITORING SYSTEM FOR EPICS IOC HEALTH.

D. Dale, TRIUMF; D. Bishop, TRIUMF; S. Devereaux, TRIUMF; H. Hui, TRIUMF; R. Keitel, TRIUMF

A microprocessor-based IOC VME crate monitoring system has been developed for the TRIUMF/ISAC Radioactive Beam Facility control system. Distributed monitoring modules reside in the IOC VME crates and broadcast their address and status on a single CANbus Fibre Optic loop. Each module builds a map of all the monitor statuses that can be read via the VME backplane by the local IOC. The module is capable of monitoring crate parameters including voltages, temperature, fan speed, airflow etc. EPICS writeable watchdog registers allow detection of software problems. When requested by a CANbus command the module will generate a VMEbus sysreset.