Development of EPICS Control System for the KOMAC 100-MeV Proton Linac

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The KOMAC (Korea Multi-purpose Accelerator Complex) linac has to serve high stability of proton beams for a long period of a few months. It is because the linac is used for continuous operation of the two beam lines for the 20-MeV and 100-MeV. In order to archive long stability of the linac proton beam, many kinds of control systems were built. The hardware employs several different architectures including VMEbus, PXI, PLC, and Linux computers. The control system is developed using EPICS (Experimental Physics and Industrial Control System) software framework at the control hardware. After the beam commissioning in January 2013, the KOMAC control system is operational for the linac and beam lines. This paper describes the software and hardware architecture of EPICS control systems for the KOMAC linac.

This work was supported by the Ministry of Science, ICT & Future Planning of the Korean Government