MOTION CONTROLS USING EPICS AND GALIL CONTROLLERS

R. I. Farnsworth, ASCo, Clayton, Victoria

Abstract

A motion controller standard has been developed, Variant models of Galil motion controller were designed and are in use as the Australian Synchrotron. Controllers designed for small motors have integrated drive electronics, others for bigger motors utilize external drive electronics. An EPICS driver compatible with the range of Galil controllers was developed. The software driver uses the motor record and standard EPICS records to provide the interface. These provide additional features such as master/slave relationships, and gear ratio settings. The Galil driver's unique features include; "position maintenance" algorithms, compatible with Master/Slave relationships, unlike the motorRecord RTRY. Generic interfaces are provided so developers can provide solutions to future needs problems, whilst maintaining a complete EPICS interface to "custom" features. The driver allows swapping between a "primary" and a "secondary" encoder at run time .

CONTRIBUTION NOT RECEIVED

Industrial System in Exp./Acc. Physics controls