The New Beam Position Monitoring System
Architecture, Algorithms, and Interface

Jeffrey R. Moffitt

The Department of Physics, The College of Wooster
Wooster, Ohio, 44691

Abstract

With the addition of several new hardware components such as a Digital Signal Processor, the new Beam Position Monitoring system will be able to offer a wider range of functionality than the old system. However, this new hardware requires a certain amount of software to provide these new abilities. The aim of this project was to develop the C algorithms, memory and control architecture, and the FORTRAN interface that will direct the hardware in providing this new functionality. To date preliminary versions of each of these have been completed.