

Bunch-by-Bunch Intensity, Position Monitor for the Taiwan Light Source, C.S. CHEN, JENNY CHEN, K.T. HSU, C.H. KUO, K.K. LIN, SRRC - A data acquisition system to acquire beam signal with bunch-by-bunch and turn-by-turn capabilities have been implemented recently. The system composed RF processing circuitry, 500 MS/sec digitizer, memory, and software applications. The RF processing electronics are use to extract intensity, transverse oscillation as well as longitudinal oscillation. A 500 MS/sec transient digitizer and memory can acquire beam signal bunch-by-bunch and turn-by-turn. The control interface assists the data acquisition and raw data manipulation. The intensity monitoring function acquires intensity of individual bunch. Real-time filling pattern are available at console computer for observation, injection control and various applications. Resolution is increase by appropriate average. Transverse beam oscillation and longitudinal oscillation can also record by the transient digitizer for time-domain observation of coupled-bunch oscillation. Performance and application of this bunch-by-bunch intensity, position monitor will describe on this reports.