

**The Orbit Study on the SRRC 1.3 GeV Booster Synchrotron During Ramping,** Y.M. CHANG, J.P. CHIOU, C.S. FANN, K.T. HSU, S.Y. HSU, K.H. HWU, K.K. LIN, T.S. UENG, SRRC, Hsinchu, Taiwan - The turn-by-turn beam position and the closed orbit of electron beam of the SRRC booster synchrotron are measured during ramping from 50 MeV to 1.3 GeV. The beam position monitoring system has been completely modified such that the horizontal and the vertical beam positions can be obtained simultaneously. An HP VXI system combined with some custom made electronic devices are used to acquire and analyse the data. With this system we can study the nonlinear transverse beam dynamics. In this study the detailed transverse beam orbit and the phase space trajectory during ramping under normal operation condition and some specific conditions are investigated.