

Single-Pass Monitoring of Beam Position at SOR-RING, Y. KAMIYA, T. KOSEKI, H. KUDO, H. TAKAKI, K. SHINOE, The Institute for Solid State Physics (ISSP), The University of Tokyo; T. HONDA, Photon Factory, KEK - Recent status of R&D of single-pass monitoring at ISSP, the University of Tokyo is reported. A third generation VUV and SX synchrotron radiation source, the VSX storage ring, is being designed at the University of Tokyo. The single-pass monitor is expected to play an important role for efficient commissioning and tuning of the ring. The R&D is being carried out at the 500 MeV electron storage ring, SOR-RING at ISSP. SOR-RING has four BPMs at triplet sections and three BPMs in the beam transport line between the injector synchrotron and the ring. The beam signals from four button electrodes at a BPM are fed to a digital oscilloscope which has four channels with four digitizers, and simultaneously recorded by real-time sampling. The detected waveforms of beam signal are then sent to a workstation, HP382, and the beam position is calculated there. The position resolution of a few hundred microns has been obtained. In this paper, the measurement of injection orbit of SOR-RING will be also described, and further, a few methods of beam-position calculation will be compared.