

# **Progress for HLS Turn-By-Turn System**

J.H.Wang, J.H.Liu, B.G.Sun, W.M.Li, Z.P.Liu, P.Lu  
NSRL, University of Science and Technology of China, Hefei, Anhui 230029,  
P.R.China

## **Abstract**

During the Phasell project of NSRL, a turn by turn beam position monitor system is proposed for storage ring diagnostics which engage log-ratio electronics circuit to characterize machine properties of the updated HLS storage ring. The log-ratio processors working at 204MHz are applied to detect the varying position at two points of the ring for studying the nonlinear beam dynamics. In this paper we will present the design performance of electronics system in details and excite system of betatron oscillation. And primary experiment result of the log-ratio BPM system will also been mentioned in the paper.