An Improved Beam Position Monitor System for the **ELETTRA Linac and Transfer Line**, M. FERIANIS, M. BOSSI, A. MILOCCO, G. D'AURIA, C. ROSSI, Sincrotrone Trieste - The Transfer Line Beam Position Monitor system is briefly described and the measurement results are presented. A deep revision of the measurement software has led to an increase of the measuring speed while maintaining the same accuracy. This feature was necessary in order to utilize the BPMs for a slow feedback system. At the same time, low level data processing has been added in order to improve the measurement quality by reducing rms noise. A modified hardware structure is also presented which should further improve the measurement speed Preliminary data for this new and accuracy. arrangement are reported.