SOMPONG CHATSANGUTHAI: DEVELOPMENT OF A SMALL PROGRAMMABLE SE-QUENCE CONTROLLER. THESIS ADVISOR: ASSO. PROF. KRISADA VISAVA-TEERANON, M. ENG. 132 pp.

This thesis presents a development of a a small programmable sequence controller. The controller consists of a control unit and a programming console. The control unit utilizes 8085 microporcessor with 6 MHz system clock and provides 32 I/O which can be expanded to a maximum of 64 I/O for the input output signals. Ladder diagram method is used for the programming language and program can be entered to controller via the programming console. The controller can handle up to 1000 steps of ladder instruction and the average processing time of each basic instruction is 15.6 usec. The ladder interpreter employs auto increment technique which is fast enough for the processing of the ladder diagram. The system has been tested in actual machine control and proved to be working satisfactory.