ABSTRACT

Programmable Logic Controller (PLC) is an device made to replacing mechanics relays that used for control system. PLC work by read status input, then it used for change output status dependent of PLC instructions. This instruction within form ladder diagram, it is callled *control aplication program.*

PLC operating system that based of ATMEL AT89S8252 microcontroller will made use C lenguage programming and *Small Device C Compiler* (SDCC) as compiller. Instruction that can executed by this operating system are combinasional, sekuensial, timer and counter.

PLC also can comunicated with other eksternal devices (Computer) use RS232 serial communication. This communication including downloading, uploading and monitoring PLC.