ABSTRACT

Microprocessor is one of the compulsory courses in the Undergraduate Program of Telecommunication Engineering , Faculty of Electrical Engineering, Telkom University. In the Telecommunication Engineering Study Program, teaching of the microprocessor course is carried out in two ways, namely by means of face-to-face meetings between lecturers and students and following the practicum process in the microprocessor laboratory. These two ways are considered effective for learning things about the microprocessor. In order to increase the effectiveness of the microprocessor teaching and learning process, a teaching trainer will be designed that describes " Microprocessor Interconnection with I /O".

This trainer is expected to be able to help teachers to deliver material on the Microprocessor Interconnection with I/O visually so that it is also hoped that students can easily understand the Microprocessor Interconnection with I/O by studying through theory and also using visual aids. This teaching aid will be equipped with a module as a manual for use and also a Student Worksheet as exercises that will be carried out by the respondent after testing the props made.

This trainer uses 80C88 Microprocessor, DM74LS373N, 3- State Buffer SN74HC541, SN54HC138, DIP Switch, Push Button as Clock and LED. To get the research results, the trainer was tested by inviting several respondents to use it, where the respondent was given an assessment statement sheet and then the respondent filled out after testing the trainer of Microprocessor Interconnection with I/O. The assessment process on the props of this Final Project uses theassessment method Mean Opinion Score (MOS). The average obtained after the respondents tested was 84.8% which mean the trainer Microprosessor Interconnection with I/O is ready to use.

Keywords: *Trainer, Microprocessors, I /O.*