

ATMEGA32 MICROCONTROLLER AS MEDIA TRAINER LEARNING SKILLS CLASS XI AUDIO VIDEO PROGRAM IN STATE SMK 3 YOGYAKARTA

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Abstrack

This study aims to (1) make design trainer ATmega32 microcontroller as a learning medium (2) determine the performance of the trainer microcontroller ATmega32 and (3) determine the feasibility trainer ATmega32 microcontroller as a learning medium for class XI at SMK 3 Yogyakarta.

This study uses Research and Development. Object of this study is the ATmega32 microcontroller module and trainer. Product development phase includes 1) planning and analysis 2) design, 3) implementation, 4) testing, 5) validation, and 6) testing usage. The method used in data collection include 1) testing and observation of performance, 2) the study questionnaire. The media validation study involving 3 experts and 3 expert learning materials and instructional media usage trials conducted by 32 students of SMK.

The results of this study are the product and the level of feasibility ATmega32 microcontroller trainer. Feasibility trainer ATmega32 microcontroller based on the due diligence that is, 1) the evaluation of the expert validation revealed a very decent media with 78.23% percentage value, 2) validation of matter experts expressed very decent with a percentage value 81.65%, and 3) test the feasibility of the users on the percentage of eligible students by 74%. At each stage of the evaluation made improvements based on feedback and suggestions / general comments given by the evaluators, so we get the final product trainer ATmega32 microcontroller.

Keyword : Trainer, Microcontroller ATmega32