

RPM Meter dan Fuel Gauge Digital Pada Sepeda Motor

Berbasis ATMEGA 16

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ABSTRACT

RPM Meter dan Fuel Gauge Digital Pada Sepeda Motor Berbasis Atmega 16 is a tool that is used to measure the amount of fuel in the tank, the distance that can be reached with the rest of the fuel contained in the tank, as well as measuring the spin machine. RPM Meter and Digital Gauge Large fuel as an alternative made with the aim to facilitate the reading of the amount of fuel, mileage and the rest of the engine on the motorcycle.

Designing *RPM Meter dan Fuel Gauge Digital Pada Sepeda Motor Berbasis Atmega 16* is composed of hardware and software. Hardware designed using ISIS software help Proteus7.5, software is integrated with Code Vision AVR software and used for initial analysis (debugger) before making of product. ISIS Proteus 7.5 also used as a circuit design to PCB design, consisting of (1) Sensor float in the fuel tank (2) Minimum System Atmega 16, Interrupt Interrupt 2 is used as readers change the logic condition on INT2 PIN (3) LCD Display 16 x 4 as a display of measurement results. While the form of software programs in C programming language is written using the lunakCode Vision AVR, which consists of (1) main courses (2) hardware initialization program (3) The definition of the processor, using Atmega 16 (4) Investment function (5) Definition Timer and Interrupt Portmode, by setting timers needed, etc. (6) Declaration of variables and (7) The main function.

The test results as the RPM meter gauge engine rpm, obtained range from 0 to 9000 rpm, has a measurement error of 3.5%. Large fuel gauge test results as a measure of the amount of fuel and the remaining mileage obtained results range from 0 to dengan3 liter, 5 liter with a measurement error of 3.9%. From the test results, the performance of *RPM Meter dan Fuel Gauge Digital Pada Sepeda Motor Berbasis Atmega 16* was as expected.

Keywords: RPM meter, Large fuel Gauge