

## ABSTRACT

In this research describes about design of **"The Microcontroller Based Hand Washer and Dryer Tool"**. The hand-based washer module consist of hand sensor 1 that use infra red sensor activate pump containing soap. This dryer module activated by hand consist of hand sensor 2 use light sensor (LDR) to activate hand dryer..

Microcontroller is single chip computer which has capability to be programmed and used to control oriented task. A minimum control room make it is more effectively compared with using computer PC, it is due to microcontroller has equally architecture of 74 with a computer PC. Equipped with 4 ports - 8 bits as input or output..

This port from microcontroller are connected to series of soap pump, water pump, and hand dryer, sensor was in hand washer tool would be working and activate soap pump, and then followed the water come out. After that, it begin with the process of drying. This system consist of hand sensor 1 that hs function to monitor parts of hand dryer, while sensor 2 has function to monitor part of hand-washer. Output of microcontroller is used to contol soap pump, water pump and hand dryer.

Based on the result of testing conducted, hand-wsher tool and dryer tht use microcontroller T 89s51 could activate s expected wen hand of user abstacle infra red sensor and lighting sensor, it lead to mikrokontroller give signals to a series of soap pump drive, water pump and hand dryer.

Keyword : Microcontroller AT 89s51