ABSTRACT

SWALLOW POPULATION COUNTER SYSTEM DESIGN BASED MICROCONTROLLER ATMEGA8535

By Johansyah

Currently, many citizens of Indonesia who were involved as entrepreneurs bird's nest. Difficulty of obtaining background information on the number of bird is in the swallow building and figured by how many results to be obtained when the bird nest harvesting time, hence designed a device that can provide information on the number of swallows are in the building

.

A model systems counter of the swallow that are in the swiftlet building in this final task essentially is an device with a microcontroller as a controller and connected with ultrasonic sensors who can scan incoming and outgoing swallow in prototype swallow buildings and RS232 serial cable for transfering daily data microcontroller to be processed by software to obtain information picture of the results will be obtained.

This final project simulates a swallow system is automatically calculate if it implemented could provide information to employers if the business is on the progress or decline. so that employers can take steps to make another efforts to make his bussines increase.

Key words: swallow bird , ultrasonic sensors, microcontroller ATMega8535 and RS232 serial cable.