ABSTRACT

Process control system consists of a set of electronic equipment capable of handling stability, accuracy, and eliminate harmful transition status in the production process. These controls include, microcontroller-based control devices, automated switches, and is a tool that is used to replace a series of relay circuits encountered in the conventional process control systems. Microcontroller works by entering the address input (input) as related through the sensor, then the process and take action as needed, which outputs a turn on or off (logic, 0 or 1, on or off).

The use of microcontrollers as a means of control for several automation systems have been widely used since the microcontroller can provide input commands that can be applied in the detection of the parking area. In this system there are 13 feet that can be used as input or output is the address where 2 feet of data that has been processed and is connected to the servo motor to adjust the degrees of rotation and leg connected to the input supply voltage of 5.5 Volts for the servo motor. While leg 3 is connected to the input on infrared sensors, an infrared sensor is blocked, then the motor will open 90 degrees, because it gives a signal to 2 feet so it gets a logic 1. By the time the car will be parked, the car will hit the switch which automatically press the switch connected to the microcontroller 6 feet so it will turn on the indicator light on the feet output13 previously connected the indicator light is lit, if at the time the parking area is full, the red indicator light will illuminate which indicates that the parking area is full.

Keywords: Microcontroller, infrared sensors, sensor tap, indicator lights, and a servo motor.