

ABSTRACT

Currently most boarding house do not have a receptionist's system that allows occupants to receive guests. in order to maintain the security, front doors that usually located far from the room is always locked in the circumstances. This will make the occupants open the door hardly for the guests. Therefore designed a a receptionist machine based on microcontroller. Some kind of technology that is growing fast and can be aplicatted in this devive are microcontroller. Microcontroller is a functional computer system contained on a chip

These devices are placed in every room in the boarding house.for guest whose placed outside, the tool is also placed in the front of the house. So the occupants of boarding house can directly communicate with guests by typing characters on the keypad which is available on each device. LCD is needed to show every word that is typed or received. Residents can also unlock the boarding gate with the unlock button that is on the device in the room.

Performance of the system in the microcontroller using serial communication features uart ttl mode on receptionist bell system for boarding houses based on microcontroller provide 100% success rate on cable length 110cm. Features uart serial communication with ttl mode on reception bell system has a 200cm cable length limit. Power which is needed when the system is turning on but did not do any interrupt is 0.7168 watts, whereas when there is a call (buzzer on) is 0.7758 watts, while the LED lights door locks indication the power required is 0.7709 watts and when the data transmitted power required is 0.7168 watts. The maximum baudrate that can be used in this system is 57.6 Kbit / s

Keywords: microcontrollers, *uart*, LCD