ABSTRACT

In the development of wireless communication (wireless), many have used it in various fields. There are many types of platforms that use wireless communication. Such as Bluetooth, ISP, Wimax, etc. Each has different features and their respective shortcomings. In this study using the Xbee communication module with the IEEE 802.15.4 protocol suitable for use in a room where the range of the IEEE 802.15.4 protocol is relatively small. This research will be applied to Kaitenzushi's sushi restaurant sales models that use conveyor belts to serve food. This system is built with the aim of facilitating the sending of plate data that is read by the TCS3200 color sensor to the device simultaneously and the data is sent using the Xbee communication module using the IEEE 802.15.4 protocol on an existing device on the consumer's desk to the cashier's computer. On the computer the cashier will display the total price of the plate that has been received from the tool on the consumer's desk in the GUI application.

Keywords : : Arduino Mega, Kaitenzushi, Color Sensor, Visual Studio, Xbee