ABSTRACT

VoIP is an application that allow to do communication between two or more parties with packet-switching method over Internet. Voip has some kind protocol that is used for the processing, that is SIP(Session Initiation Protocol) and H.323. SIP is a protocol that used for build, manage and terminate call session. For build a server VoIP then it required a computer that can operate the VoIP protocols and the applications. The cost of the electric power usage of course become one of the factors in the selection of specifications to build a server. Mini PC Raspberry Pi is a small computer with a simpler components. Mini PC Raspberry Pi is able to work like a computer in general but has lower performance because it is designed to carry a lighter processing activities. Based on test results, Mini PC Raspberry Pi is able to serve as a VoIP server with the CPU and RAM usage are not too high. In addition, when compared to a dekstop PC, Mini PC Raspberry Pi has lower power consumption. Which mean the purpose Mini PC Raspberry Pi is able to replace the desktop PC as a VoIP server in terms of comparative costs of electricity use of resources can be achieved.

Keyword : SIP, VoIP, Mini PC.