ABSTRACT

DSKcam is a smart camera system that is capable of working in real time with a high-performance DSP capabilities in the process image. DSKcam provide some applications, one of applications is can capture images in RGB and YUV format at VGA or QVGA resolution that is capable of producing quality digital images to 30 fps and inside there are also embedded TCP / IP Ethernet module based on the device WizNET W3100.

At this essay revealed a H.263 Embedded Streaming implemented on the LAN network. Embedded H.263 Streaming using TMS320C6416 DSP is set to use as a central process of processing video coding and integration processes on the network LAN. Protocol TCP IP plants in the TMS320C6416 DSP. TCP IP protocol that is used Transport Control Protocol (TCP), seta Internet Protocol (IP). In this research will analyze Embedded Streaming H.263 performance that implemented directly on the LAN network. Quality analysis is done on the network to provide background traffic and the number of additional observations to the client for the QOS parameters such as delay, jitter, and throughput. The quality of the streaming analysis results by using the parameter Mean Opinion Square (MOS) and the parameters Peak Signal to Noise Ratio (PSNR).

From the results of the observations made, Embedded H.263 as the streaming server is working properly. This is evidenced by the value QOS include delay, jitter, and throughput in accordance with the standards set. Quality video output of the system produced well and sharp. PSNR value obtained is quite good for the H.263 video format with QVGA resolution with value of MOS 3.6 and PSNR 30.22 dB.

Keywords : DSKcam ,*Embedded H.263 Streaming,* TCP/IP, DSP TMS320C6416