

ABSTRACT

This paper describe the design and implementation of multi beam antenna array using active beam forming network for wireless local area networks (WLAN) operating at 2.4 GHz band frequency. In this paper, four beam patterns generated by incorporated a rectangular patch antenna array with active beam forming network using switch line phase shifter. The radiation patterns measurement of multibeam antenna using active beam forming is compared with passive beam forming network using butler matrix. It shows that the multibeam antenna can be produced using this active beam forming network by switching the RF diode towards the required phase shift of the circuit. The comparison between active and passive beamforming have been made and discuss.