

# Design and Simulation of Phased Array Antenna for 40o Beam Steering at 2.4 GHz

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## Abstract

In this paper a 1x4 array patch antenna designed for (2.4 GHz) frequency. The microstrip line feed technique was used for feeding antenna and a four-way Wilkinson Power Divider designed and simulated for splitting signals to radiating elements. Phase shifter based on switched line technique applied to steer beam to 40 degree. The substrate that used in this paper as dielectric was FR4 of dielectric constant 4.6 and thickness 1.6mm. Design and simulation process were done by Advanced Design System software (ADS 2017).

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