

## ABSTRACT

Point to point communication brings a crucial responsibility to antennas. In high performance point to point application where size, weight, cost, performance and ease of installation are very much required. To meet these requirements, microstrip antennas are preferred. The characteristic of microstrip antenna are low gain. These disadvantages can be solved by constructing many patch antennas in array configuration.

Linear array of six element rectangular microstrip antenna is linear array of patches, consist of six patch element based on series fed configuration. The aim of serial feed in order to get uniform current I. This antenna is design in ISM (*Industry, Scientific and Medical*) band 2400 MHz – 24835 MHz. These element are connected directly to microstrip line at their corner and inclined 45 degree.

To know performance of this antenna the measurement mechanism is needed. The measurement consist of radiation pattern, VSWR measurement, bandwith, and antenna gain. From measurement result, radiation pattern of this antenna is unidirectional, the bandwith with  $VSWR \leq 1.5$  limits was 94 MHz in frequency design and gain 8.62dBi.