

A STUDY ON AN ANTENNA STRUCTURE THAT COMBINES YAGI-UDA ARRAY CONCEPT AND MICROSTRIP PATCH ANTENNA

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ABSTRACT

This paper describes an antenna structure that combines Yagi-Uda array concept and Micro strip Patch Antenna. This may be used for mobile and satellite communication, global positioning system and radar applications. The comparative simulation study of an Omni-directional 4-element Yagi-Uda micro strip patch antenna has been done on HFSS software in C-band and X-band configurations, at a central frequency of 5.2 GHz and 10.2 GHz respectively. A maximum power gain of 35dB was obtained for C-band Antenna. Thus simulation results obtained from software implementation were studied and analyzed comprehensively.

KEYWORDS: Yagi Uda Array, Microstrip Patch Antenna, Fabrication, Hfss, C-Band, Vlsi