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## **Design of H-Shape X-band Application Electrically Small Antenna**

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**Abstract :** This paper presents a new small electrically antenna rectangular X- band micro-strip patch antenna loaded with material Rogers RT/duroid 5870 (tm). The present discussion focuses on small Electrically antenna which are electrically small compared to wave length the performance of electrically small antenna are closely related to their electrical size, the gain can be increased to maintain the efficiency of the radiator. Basically micro-strip Patch antennas have been used in satellite communications and for their good characteristics such as lightness, low cost, and so on. Here in the design H- shape folded dipole, which increase the band width of the antenna.

Keywords: electrically small antennas, X-band application, antenna, micro-strip patch, frequency antenna, feed, gain

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