



Part IV: Four Patches Antenna Array

Four Patches Antenna Array is combined by four Single Microstrip Patch Antennas and a Parallel Feeding Network which is shown in the Fig.11.

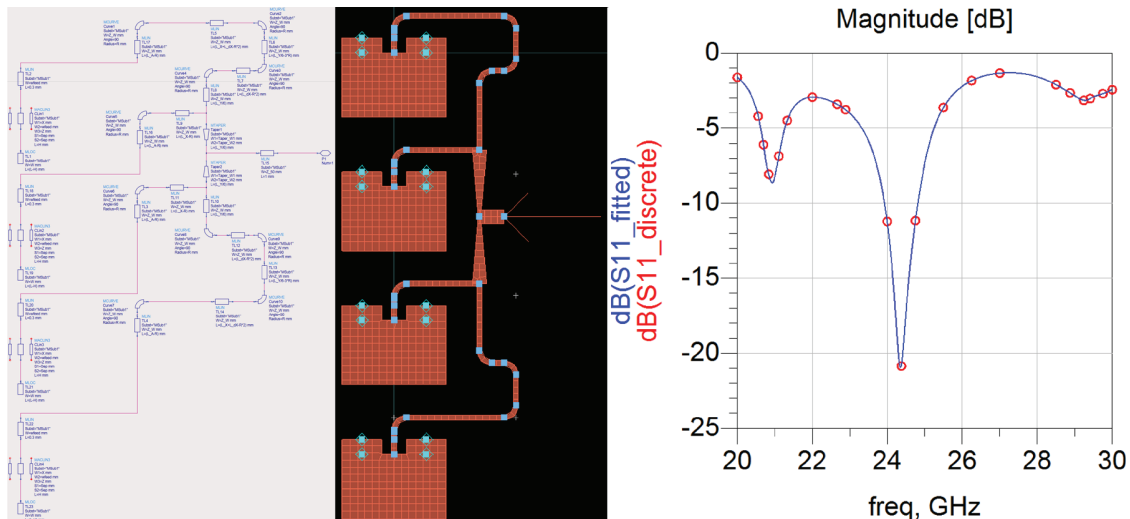


Fig.11: The model and simulation result

This antenna array achieved maximum gain of 10.851 dBi, and Radiation efficiency of 76.926%, theoretically.

Part V: Reference

- [1] Microstrip Patch Antenna Calculator. Retrieved Aug 12, 2020, from <https://www.pasternack.com/t-calculator-microstrip-ant.aspx>
- [2] Neil Hao, Appendix A, Infineon BGT24LTR11N16 24Ghz Radar MMIC Impedance Matching, Retrieved Aug 12, 2020, from <http://uniteng.com/index.php/2020/04/24/infineon-bgt24ltr11n16-24ghz-radar-mmic-impedance-matching/>
- [3] Microstrip Antenna - Feeding Methods, Retrieved Aug 12, 2020, from <http://www.antenna-theory.com/antennas/patches/patch3.php>
- [4] Schematic driven Patch Antenna Design, Retrieved Aug 12, 2020, from <https://youtu.be/kaUYW1Uuu2A>