

## 3D microwave modules for space applications

---

*P. Monfraix, P. Ulian, C. Drevon, S. George, A.C. Vera, C. Tronche, J.L. Cazaux, O. Llopis and J. Graffeuil. "3D microwave modules for space applications." 1998 MTT-S International Microwave Symposium Digest 98.3 (1998 Vol. III [MWSYM]): 1289-1292.*

This paper describes the design, manufacturing and measurement of 3D microwave modules. The vertical interconnection between stacked circuits is based on an shielded homogeneous coplanar line with a 90/spl deg/ vertical structure. The fabrication of these modules is in relation with the "MultiChip Module Vertical" technology, originally developed for digital applications. The electrical measurement in the Ku-band demonstrates very good results.

 [Return to main document.](#)