

Reference

- [1] T.v. Kerssenbrock and P. Heide, “Novel 77GHz Flip-chip Sensor Modules for Automotive Radar Applications,” 1999 IEEE International Microwave Symposium, pp.289-292, Anaheim, CA, June 1999
- [2] K. Takahashi, S. Fujita, H. Yabuki, T. Yoshida, Y. Ikeda, H. Sakai, “Development of K-band front-end devices for broadband wireless communication systems using millimeter-wave flip-chip IC technology,” 1998 IEICE Trans. Electron., vol. E81-C, pp. 827-833.
- [3] G.Baumann, H. Richter, A.Baumgartner, D. Ferling and R.Heilig, ”55 GHz front-end with flip chip and wire bond interconnects from GaAs MMIC’s to a planar patch antenna”, 1995 Int. Micorowave Symp. Digest, Vo1.3, pp1639-1642
- [4] T. Gems, W. Haydl, H. Masslex, J. Rudiger, "Millimeter wave performance of chip interconnections using wire bond and flip chip", 1996 IEEE MTT-S Symposium, San Francisco, CA, vol. 1, pp. 247-250.
- [5] T. Krems, W.H. Haydl, H. Massler and J. Rudiger, “Advantages of Flip Chip Technology in Millimeter-wave Packaging,” 1997 IEEE Intemational Microwave Symposium, pp.987-990, Denver, CO, June 1997
- [6] G. Baumann, H. Richter, A. Baumgärtner, D. Ferling, and R. Heilig, “51GHz front-end with flip-chip and wire bond interconnections from GaAs MMIC’s to a planar patch antenna,” in *IEEE MTT-S Int. Micorowave Symp. Dig.*, vol. 3, 1995, pp. 1639–1642.
- [7] S.Aoki, H.Someta, S.Yokokawa, K.Ono, T.Hirose and Y.Ohashi, "A Flip Chip Bonding Technology Using Gold Pillars For Millimeter-Wave Applications," IEEE MTT-S Digest, pp.731-734, 1997
- [8] K. Boustedt, "GHz flip chip - an overview". 1998 Electronic Components and Technology Conference", Seattle, WA, pp. 1280-1285.

- [9] R. Sturdivant, "Reducing the effects of the mounting substrate on the performance of GaAs MMIC flip-chips," in *Proc. 1995 IEEE MTT-S Symp.*, vol. 3, Orlando, FL, 1995, pp. 1591–1594.
- [10] T. Hirose *et al.*, "A flip-chip MMIC design with coplanar waveguide transmission line in the W-band," *IEEE Trans. Microwave Theory Tech.*, vol. 46, pp. 2276–2282, Dec. 1998.
- [11] N. Iwasaki, F. Ishitsuka, K. Kato, "High performance flip chip technique for wide-band modules", 1996 Proceedings of Electrical Performance of Electronic Packaging, Napa, CA, pp. 207-209.
- [12] H. Jin *et al.*, "Rigorous field theory analysis of flipped chip interconnect in MMIC's using FTDTLM method," in *IEEE MTT-S Symp. Dig.*, Sand Diego, CA, May 1994, pp. 1711–1714.
- [13] J. Heyen, J. Schroeder, A. F. Jacob: Low Cost Flip-Chip Alternatives for Millimeter Wave Applications. *IEEE MTT-S Int. Microwave Symp. Dig.*, Seattle, WA, June 2002, pp. 2205-2208.
- [14] H. H. M. Ghouz and E. EL-Sharawy, "An accurate equivalent circuit model of flip chip and via interconnects," *IEEE Trans. Microwave Theory Tech.*, vol. 44, pp. 2543–2554, Dec. 1996.
- [15] Staiculescu, D., Sutono, A., Laskar, J., "Wideband Scalable Electrical Model for Microwave/mmWave Flip chip interconnects," *IEEE Trans. Microwave Theory Techn.*, vol. 24 (2001), pp. 225-259.
- [16] W. Heinrich, A. Jenasch, G. Baumann, "Millimeter-wave characteristics of flip chip interconnects for multichip modules", *IEEE Trans. Microwave Theory Tech*, vol. 46.110.12, December 1998, pp. 2264-2268.
- [17] A. Tessmann,W. H. Haydl, T. v.Kerssenbrock, P. Heide, and S.Kudszus, "Suppression of parasitic substrate modes in flip-chip packaged coplanar W-band amplifier MMICs," in 2001 *IEEE MTT-S Int. Microwave Symp. Dig.*, May 2001, pp. 543–546.
- [18] T. Gems, W. Haydl, H. Masslex, J. Rudiger, "Millimeter wave performance

of chip interconnections using wire bond and flip chip", 1996 IEEE MIT-S Symposium, San Francisco, CA, vol. 1, pp. 247-250.

[19] Y. Arai, M. Sato, H. T. Yamada, T. Hamada, K. Nagai and H. I. Fujishxo, "60GHz Flip-Chip Assembled MIC Design Considering Chip-Substrate Effect," in 1997 IEEE MTT-S Int. Microwave Symp.Dig., Denver, CO, pp.447-450, June, 1997.

[20] Y.L. Wong, L. Patrison, Linton, and D. Patrison, "Flip chip interconnect analysis at millimetre wave frequencies," High Frequency Postgraduate Student Colloquium, pp.82-87, 1999.

[21] J. Rudnicki, J. P. Starski, "Vertical interconnection for flip chip connection", 14th International Conference on Microwaves, Radar and Wireless Communications, Poland, Gdansk, May 2002

[22] K. Maruhashi, M. Ito, H. Kusamitsu, Y. Morishita, K. Ohata, "RF Performance of a 77GHz Monolithic CPW Amplifier with Flip-Chip Interconnections", 1998 IEEE Int. Microwave Symposium Digest, Vol. 2, pp. 1095-1098.

[23] A. Jentzsch and W. Heinrich, "Theory and measurement of flip-chip interconnects for frequencies up to 100 GHz," IEEE Trans. Microwave Theory Tech., vol. 49, pp. 871–877, May 2001.

[24] D. Staiculescu, J. Laskar, and J. Mather, "Design rule development for microwave flip-chip applications," IEEE Trans. Microw. Theory Tech., vol. 48, no. 9, pp. 1476–1481, Sep. 2000.

[25] Rana Pratap, Daniela Staciulescu Stephane Pinel, Joy Laskar, Gary May, "Modeling and Sensitivity Analysis of Circuit Parameters for Flip Chip Interconnects Using Neural Networks", Accepted at Transactions on Advanced Packaging.

[26] Baumann G, Muller E, Buchali F,et al. Evaluation of glob top and underfill encapsulated active and passive structure for millimeter microwave application[A]. Proc of 27th European Microwave Conference[C].Berlin,1997,26-31.

- [27] Z. Feng, W. Zhang, S. Bingzhi, K. G. Gupta, Y. C. Lee, "Rf and Mechanical Characterization of Flip-Chip Interconnects in CPW Circuits with Underfill," IEEE Trans. Microwave Theory Tech., vo1.46, pp. 2269-2275, Dec. 1998.
- [28] H. H. M. Ghous and E. El-Ahawry, "Finite-difference time-domain analysis of flip-chip interconnects with staggered bumps," IEEE Trans. Microwave Theory Tech., vol. 44, pp. 960-963, June 1996.
- [29] C. L. Wang and R. B. Wu, "Locally matching design for flip-chip transition," in Proc. Asia-Pacific Microwave Conf., 2001, pp. 547–549.
- [30] K. H. Uang, K. C. Chen, S. W Lu, H. T Hu and S. H. Huang, "The Reliability Performance of Low Cost Bumping on Aluminum and Copper Wafer", IEEE Electronics packaging Technoha Conference, p.292-296, 2000.
- [31] Lorenz H, Paratte L, Luthier R, de Rooij N F and Renaud Ph "Low cost technology for multilayer electroplated parts using laminated dry film resist," Proc. Eurosensors IX & Transducers 95 (Stockholm, 1995)

