

矽基板上連接線之輻射分析

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摘要

本論文主要是討論矽基板上傳輸線之輻射效應，首先解得傳輸線上之電壓、電流值，將傳輸線切成極小線段，藉由Silvester映像理論求得映像電流，採以電偶型式作輻射，得到在頻域下輻射場值的轉換函數，利用傅立葉轉換將時域下信號源轉至頻域，與轉換函數作合成，並觀察改變信號源上升、下降時間的輻射場值變化，這些結果可作為設計者於電磁相容、電磁干擾上之參考。

關鍵詞：輻射；傳輸線

目錄

封面內頁 簽名頁 授權書.....	iii	中文摘要.....	iii
.....iv 英文摘要.....	iv	.....v 誌謝.....	v
.....vi 目錄.....	vi	.....vii 圖目錄.....	vii
.....ix 第一章 緒論 1.1研究動機與目的.....	ix	.....1 1.2大綱.....	1
.....2 第二章 單層基板雙導體微帶線傳輸線之輻射理論 2.1單層基板雙導體微帶線	2	.....3 2.2單層基板雙導體微帶線傳輸線單位長參數.....	3
傳輸線電壓、電流值.....	3	.....5 2.3 Silvester映像理論.....	5
.....6 2.4單層基板雙導體微帶線傳輸線之輻射場值.....	6	.....7 第三章 矽基板上多導體傳輸線之輻射理	7
論 3.1矽基板多導體傳輸線電壓、電流值.....	14	.....16 3.2矽基板多導體傳輸線單位參數.....	16
.....20 3.3矽基板傳輸線映像理論.....	20	.....24 第四章 結果與討論 4.1單層基板微帶線傳輸線輻射之結果分析.....	24
.....24 4.2矽基板多導體傳輸線上輻射場之結果分析.....	2527 4.3單一梯形波信號源.....	27
.....30 4.4週期性梯形波信號源.....	3042 5.2未來展望.....	42
.....42 5.2未來展望.....	4243 參考文獻.....	43
.....44	44		

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- 【1】 D. K. Cheng, Field and Wave Electromagnetics 2/e, Addison Wesley, 1996. 【2】 P. Silvester, " TEM wave properties of microstrip transmission lines ", Proc. IEE, Vol. 15, No. 1, January 1968, pp. 43-8 【3】 I-Ting Chiang, Matrix Approaches for Transient Analysis of Complex Transmission Line Circuits Using HWSD and SATD, A Summa Book, 2002. 【4】 C. S. Walker, Capacitance, Inductance, and Crosstalk Analysis, Artech House, 1990. 【5】 F. M. Tesche, M. V. Ianoz, T. Karlsson, EMC Analysis Methods and Computational Models, John Wiley & Sons Inc, Canada, 1997. 【6】 C. R. Paul, Analysis of Multiconductor Transmission Lines, John Wiley & Sons Inc, New York, 1994. 【7】 A. Weisshaar, Hai Lan, and A. Luoh " Accurate closed-form expressions for the frequency-dependent line parameters of on-chip interconnects on lossy silicon substrate, " IEEE Trans. Electromag. Compat. , Vol. 25, No. 2, pp. 228-296, May 2002. 【8】 Y. J. Yoon, B. Kim, " A new formula for effective dielectric constant in multi-dielectric layer microstrip structure ", IEEE Conference. Electrical Performance of Electronic Packaging. , 2000. 【9】 E. Hammerstad, O. Jensen, " Accurate Models for Microstrip Computer-Aided Design ", MTT-S International. Microwave Symposium Digest. , Vol. 80, May 1980. 【10】 S. C. Wong, G. Y. Lee, D. J. Ma " Mode-ling of Interconnect Capacitance, Delay, and Crosstalk in VLSI, " IEEE Trans. Semiconductor Manufacturing, Vol. 13, No. 1, pp. 108-111, February 2000 【11】 R.G. Kaires, " Radiated emissions from printed circuit board traces including the effect of vias, as a function of source, termination and board characteristics " , IEEE International Symposium, Vol. 2, pp. 24-28, Aug. 1998. 【12】 D.A. Hill, D.G. Camell, K.H. Cavcey, G.H. Koepke, " Radiated emissions and immunity of microstrip transmission lines: theory and reverberation chamber measurements " , IEEE Trans. Electromagnetic Compatibility. , Vol. 38, Issue: 2, May 1996. 【13】 C. R. Paul, Introduction to Electromagnetic Compatibility, John Wiley & Sons. Inc., 1992.