

Crosstalk Analysis for On-Chip Interconnects on Lossy Silicon Substrate

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ABSTRACT

The propose of this paper is to examine the effect of electromagnetic coupling to the transmission line on PCB and silicon substrate. Considering a quasi-TEM wave along a MTL(Multiconductor Transmission Line) consisting and solving the equation in frequency domain. By reference, we can take per unit length parameters RLGC. Then, we can find crosstalk on transmission line. Base on this model, the results are obtained and discussed.

Keywords : CMOS IC、quasi-TEM、MTL

Table of Contents

封面內頁 簽名頁 授權書	iii	中文摘要	iii
.	iv	英文摘要	v
.	vi	目錄	vii
.	ix	表目錄	xi
第一章 簡介 1 1-1 研究動機	1	1-2 文獻回顧	1
.	2	1-3 論文大綱	2
第二章 多導體傳輸線理論 3 2-1 簡	3	2-2 多導體傳輸線方程式	3
介	3	2-3 傳	3
輸線方程式之頻域解	9	2-4 高頻參數矩陣	11
2-5	11	2-5	11
終端條件	12	第三章 PCB板及矽基板上單位長度參數計算 14 3-1 簡介 . .	14
.	14	3-2 串音效應	14
3-2-1 串	14	3-2-2 串音引起的雜訊	15
音干擾分析	15	3-3	15
15 3-2-2	15	3-3	15
PCB板之單位長參數	16	3-4 矽基板之單位長參數	20
16 3-4	20	第四章 結果與討論 23 4-1 簡介	23
23 4-1	23	4-2 PCB結構的串音探討	23
.	23	4-3 矽基板結構的串音探討	34
23 4-3	34	第五章 結論 40 參考文獻 41	41

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